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#### HEALTH PHYSICS DIVISION

## THE FLUID DYNAMICS OF A SPHERICAL PARTICLE: Tabulation of Settling Velocity, Reynolds Number, Drag Coefficient, Relaxation Time and Acceleration-Distance in Air and Water\*

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|         |                  | and the second |
|---------|------------------|--|
| А, В, С | C, Q, A', B', C' | constants  |
|         | A. D.            | acceleration distance  |
|         | d                | particle diameter  |
|         | D                | container diameter   |
| l       | F                | force  |
| :       | g                | acceleration due to gravity  |
| ł       | k                | Boltzmann's constant   |
|         | K                | slip correction factor   |
| I       | m                | mass   |
|         | N                | molecules per unit volume  |
| · 1     | P                | pressure   |
| 1       | Re               | Reynolds number  |
|         | S                | cross section area   |
|         | S. D.            | stop-distance  |
|         | Т                | absolute temperature   |
|         | v                | mean molecular speed   |
| -       | v <sup>a</sup>   | mean square molecular velocity   |
| ١       | V <sub>s</sub>   | settling velocity  |
| ١       | Vœ               | terminal settling velocity in an infinite medium   |
|         | n .              | viscosity  |
|         | λ                | molecular mean free path   |
| f       | °g               | density of air   |
| (       | °p               | density of particle  |
| ſ       | ٩ <sub>m</sub>   | density of fluid medium  |
|         | <del>τ</del>     | relaxation time  |
| 2       | ψ                | drag coefficient   |
|         |                  |  |

### LIST OF SYMBOLS

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## THE FLUID DYNAMICS OF A SPHERICAL PARTICLE: Tabulation of Settling Velocity, Reynolds Number, Drag Coefficient, Relaxation Time and Acceleration-Distance in Air and Water

B. R. Fish and W. H. Wilkie

#### ABSTRACT

Various fluid dynamical parameters are calculated for spherical particles falling freely in air and in water. Tabulations include settling velocity, drag coefficient and Reynolds number for particles from 1 to 1000 microns in diameter and having a buoyancy-corrected density of 1 to 12 grams per cubic centimeter.

#### INTRODUCTION

There are many areas of experimental and theoretical investigation related to inhalation of particles, aerosol physics, environmental pollution, and micrometerology which involve deposition of particulates under the influence of inertial forces. Frequently, the researcher or engineer must spend a considerable amount of time calculating various fluid dynamical parameters associated with particle settling or impaction. It is the purpose of this report to provide several of the more useful parameters in tabular and graphical form for spherical particles with densities from 1 to 12 grams cm<sup>-3</sup> and diameters of 1 to 1000 microns falling freely in air at 20°C and 760 mm Hg and in water at 20°C. In addition, curves are given which can be used to determine stop-distance for a sphere acted upon by fluid dynamical forces only.

#### REYNOLDS NUMBER AND DRAG COEFFICIENT

An isolated rigid sphere moving freely through an infinite viscous medium under the influence of a constant force presents a deceptively simple model. Unfortunately, the theoretical description of the relation between the resistance of the medium and the velocity is exceedingly complex. Simplifying assumptions may be made resulting in relations such as Stokes" law which are applicable in a restricted range of velocities to experimental situations satisfying certain conditions concerning the properties of the particle and the medium. While modifications and corrections may be applied to Stokes' law which extend the range of this type expression, in general a frankly empirical approach is more useful for the region of higher Reynolds number.<sup>(1)</sup> For practical purposes the investigator must rely on empirical relations based on experimental data to obtain the fluid dynamical parameters applicable to his particular interest.

It has been found useful to express data relating fluid resistance and particle velocity as a logarithmic plot of a dimensionless drag coefficient and Reynolds number. The Reynolds number of a particle of diameter d moving with a velocity V in a medium having a viscosity  $\eta$  and a density  $\rho_m$  is defined by

$$Re_{p} = \frac{d\rho_{m}V}{\eta} .$$
 (1)

The Reynolds number is a unique function of velocity in a given flow system and is proportional to the ratio of inertial forces to viscous forces.

The moving particle experiences a force  $F_m$  caused by the resistance of the medium in the form of skin friction and pressure differentials. The force is a complex function of the velocity, density and size of the particle, and the viscosity and density of the medium. The mathematical relations may be simplified by the organization of the parameters and variables into the smallest number of significant, dimensionless groups using the Buckingham Pi Theorem. <sup>(2)</sup> In this manner the dimensionless group containing the fluid resistance may be defined as the drag coefficient,

$$\psi = \frac{8F_{\rm m}}{\pi \rho_{\rm m} d^2 V^2} \,. \tag{2}$$

Rearranging, we obtain

$$F_{m} = \psi \frac{\rho_{m} V^{2}}{2} S. \qquad (3)$$

Thus, the drag coefficient may be interpreted as a variable coefficient which is used to multiply the product of the kinetic energy per unit volume of the medium moving

past the particle  $\frac{1}{2} \rho_m V^2$  and the cross section area S of the particle to obtain the fluid resistance.

In the case of a sphere falling freely through a stagnant medium of infinite extent under the influence of gravity, the fluid resistance at the terminal velocity is equal to the inertial force on the sphere,

$$F_{m} = (m - m') g;$$
 (4)

where m is the mass of the sphere, m' is the mass of the displaced medium, and g is the acceleration due to gravity. By substitution of equation (4) in (2) and solving for  $\psi$ , the experimenter has a means of obtaining the drag coefficient after measuring the settling velocity,

$$\psi = \frac{4d(\rho_p - \rho_m)g}{3\rho_m V_s^2}.$$
 (5)

The Reynolds number is calculated from known parameters, and one can then plot drag coefficient as a function of Reynolds number. This convention allows the direct comparison of the data of different experiments, since a single curve must be obtained for all combinations of fluids and spheres. The curve cannot be used to obtain the settling velocity directly, because this parameter occurs in both  $\psi$  and Re. In order to overcome this difficulty, equation (5) may be multiplied by the square of the Reynolds number to obtain the dimensionless group

$$\psi \operatorname{Re}^{2} = \frac{4d_{s}^{3}\rho_{m}(\rho_{p} - \rho_{m})g}{3n^{2}}, \qquad (6)$$

which involves only the mass of the sphere and properties of the medium. If Re is expressed as a function of  $\psi Re^2$ , then for any given value of equation (6) the Reynolds number and, hence, the velocity is available. Davies<sup>(3)</sup> recognized the need for a relation from which an explicit solution for terminal velocity could be obtained and, using this approach, derived two expressions which together span the range of Reynolds numbers from 0 to  $10^4$ :

$$Re = \frac{\psi Re^{2}}{24} - 2.3363 \times 10^{-4} (\psi Re^{2})^{2} + 2.0154 \times 10^{-6} (\psi Re^{2})^{3} - 6.9105 \times 10^{-9} (\psi Re^{2})^{4},$$
(7)

for Re < 4; and

$$\log Re = -1.29536 + 0.986 (\log \psi Re^{2}) - 0.046677 (\log \psi Re^{2})^{2} + 0.0011235 (\log \psi Re^{2})^{3},$$
(8)

for  $3 < \text{Re} < 10^4$ , where the logarithms are to the base 10 (see Figs. 1 and 2). The constants for these polynomials were obtained by fitting the expressions to critically selected data using the method of least squares. For equation (7), Davies used data of Moller, <sup>(4)</sup> Schmiedel, <sup>(5)</sup> Liebster, <sup>(6)</sup> and Arnold<sup>(7)</sup> in the range 0.0507  $\leq$  Re  $\leq$ 4.16. Equation (7) tends to Stokes' law for small Re. For the derivation of equation (8), the data of Liebster,<sup>(6)</sup> Davies,<sup>(8)</sup> Wieselsberger,<sup>(9, 10)</sup> and Lunnon<sup>(11)</sup> were used in the range 2.3 < Re < 10,890. Equation (7) may be applied below the Stokes, or hydrodynamic, region if suitable corrections are made for the effect of slip. This effect, first described by Cunningham, <sup>(12)</sup> becomes apparent when the particle radius is comparable to the mean free path of the molecules of the medium, and the medium can no longer be regarded as continuous. The particle then "slips" between molecular collisions and falls at a rate faster than predicted by hydrodynamic theory. A successful theoretical treatment of this effect has not been demonstrated, and one must rely on empirical relations for this correction. As usually defined the slip correction is a multiplicative factor ( $\geq$  1) which is applied as in equations (17), (18), (19), and (22) to modify the parameters derived from Stokes' law in the sense of decreasing the effective drag force.

Knudsen and Weber<sup>(13)</sup> developed the following expression for the slip correction which agrees satisfactorily with experimental data:

$$K = 1 + A \frac{\lambda}{d} + B \frac{\lambda}{d} \exp(-C \frac{d}{\lambda}), \qquad (9)$$

where  $\lambda$  is the molecular mean free path, d is the diameter of the sphere, and A, B, and C are constants. If Millikan's data<sup>(14)</sup> are taken to provide the most reliable basis<sup>(15)</sup> for determining these coefficients, the values for A, B, and C are 2.492, 0.84, and 0.433, respectively, using the accepted definition of the mean free path, developed independently by Chapman and Enskog,<sup>(16)</sup>

$$\lambda = \frac{\eta}{0.499 \,\rho_{\rm g} \overline{\rm v}} \tag{10}$$

where  $\overline{v}$  is the mean molecular speed. From kinetic theory the pressure is given by

$$P = \frac{Nm\sqrt{2}}{3} = NkT, \qquad (11)$$

where N is the number of molecules per unit volume, m is the mass per molecule,  $\overline{v^2}$  is the mean square molecular velocity, k is Boltzmann's constant, and T is the absolute temperature.

After substituting

$$\overline{v} = \frac{8 \,\mathrm{kT}}{\pi \,\mathrm{m}}^{\frac{1}{2}} \tag{12}$$

in equation (10), the product of pressure and mean free path is seen to be

$$P\lambda = QT^{\frac{1}{2}}\eta, \qquad (13)$$

where Q is a constant depending on the units used. In the CGS system of units, with P expressed in mm Hg,

$$P\lambda = 1.594 T^{\frac{1}{2}} \eta.$$
 (14)

This relation assumes that the pressure follows the ideal gas law which, in general, is not the case. A more precise approach requires a correction for this discrepancy, for example, by use of the virial expansion; (17) however, equation (13) is adequate for use in calculation of the slip correction. Davies (3) used this approach in deriving an expression for the slip correction which may be useful for experiments in air. It follows from equations (9) and (13) that

$$K = 1 + \frac{1}{Pd} [A' + B' exp(C' Pd)]$$
 (15)

where the constants A', B', and C' depend on the temperature. If the accepted definition, equation (10), of mean free path is used, the correction factor for air at  $20^{\circ}$ C is

$$K = 1 + \frac{10^{-3}}{Pd} [12.44 + 4.19 \exp(-86.8 Pd)], \qquad (16)$$

for P in mm Hg and d in cm.

In this report, equation (7) is used for the calculation of Reynolds number below 4.0. The calculations for air include slip corrections for diameters below 30 microns. At 15 microns diameter, the correction is 1%, and at 1 micron diameter, it is 14%. It is not necessary to apply this correction to the data for sedimentation in water, because the diameters of the spheres are much larger than the mean free path of the water molecules.

#### SETTLING VELOCITY AND RELAXATION TIME

The settling velocity follows directly from the definition of Reynolds number, equation (1). In the Stokes region, Re < 0.1, the settling velocity may be obtained directly by equating Stokes' law for fluid resistance

$$F_{m} = \frac{3\pi n dV}{K}$$
(17)

with the inertial force given by equation (4) and solving for the velocity; thus,

$$V_{s} = \frac{d^{2}(\rho_{p} - \rho_{m})K}{18 \eta} = g\tau$$
(18)

where

$$\tau = \frac{d^2(\rho_p - \rho_m)K}{18 \eta}.$$
 (19)

The relaxation time  $\tau$  is useful in the simplification of the equations of nonlinear motion of particles. In the case of a particle starting at rest at time zero, the

velocity will differ from the terminal velocity by 1/e at time  $\tau$ . As the Reynolds number increases and inertial forces begin to predominate, the conditions on which Stokes' derivation is based are violated, and the resistance force is no longer a linear function of velocity but varies in a nonlinear manner with both velocity and particle size. Equation (19) no longer holds, and the relaxation time must be obtained directly from the settling velocity by dividing by g. The tabulated values for  $\tau$  are computed using equation (18). (See Figs. 3 and 5.)

#### ACCELERATION-DISTANCE

Another parameter of practical interest is the acceleration-distance which is the distance traveled by a particle while accelerating from zero velocity to a specified velocity, hence, from a Reynolds number of 0 to some final value  $Re_f$ . The relation between the distance covered and the velocity of a particle as derived by Fuchs<sup>(18)</sup> is

A.D. = 
$$\frac{4d(\rho_p - \rho_m)}{3\rho_m} \int_0^{\text{Ref}} \frac{\text{RedRe}}{X - \psi \text{Re}^2},$$
 (20)

where

$$X = \frac{4g(\rho_{p} - \rho_{m}) \rho_{m} d^{3}}{3\eta^{2}}.$$
 (21)

In deriving this relation, it is assumed that the drag coefficient for the particle accelerating through a given velocity increment  $\Delta V$  at V is equal to the drag coefficient for the same particle moving steadily at velocity V. Hughes and Gilliland<sup>(19)</sup> discussed the effect in the light of the few existing experiments relating to it and concluded that an accelerational drag does exist. This means that the tabulated values of the acceleration-distance calculated using equation (20) may underestimate slightly the true values in the case of a sphere starting from rest. Fuchs<sup>(20)</sup> also considered this effect and concluded that for Reynolds numbers below a few hundred, the errors associated with the accelerational drag are probably negligible.

Evaluation of equation (20) was accomplished using a numerical-integration subroutine, based on a 16-point Gaussian quadrature, written for the Oak Ridge National Laboratory CDC-1604A computer. <sup>(21)</sup> It was necessary to calculate the integrand and, hence, the drag coefficient for any given Reynolds number below the upper limit. For values of Re < 0.4, the drag coefficient was calculated using Oseen's formula corrected for slip,

$$\psi = \frac{1}{K} \frac{24}{Re} + 4.5 . \qquad (22)$$

For 0.4 < Re < 1000, the drag coefficient was calculated using a polynomial obtained by a least squares fit of log  $\psi$  as a function of log Re,

$$\log \psi = 1.43 - 0.902 (\log \text{Re}) + 0.115 (\log \text{Re})^2 - 0.0115 (\log \text{Re})^3 + 0.00271 (\log \text{Re})^4.$$
(23)

Values of  $\psi$  from equation (23) are within 0.5% of those calculated using equations (7) and (8).

It can be shown that at the terminal velocity, the denominator of the integrand in equation (20) is zero. This does not affect the numerical integration procedure provided that  $\psi Re^2 < X$ . This condition is violated for Re very near the end point due to the oscillation of the fitted expression for  $\psi$  (equation (23)) about  $\psi = \frac{X}{Re}$ . Therefore, the acceleration-distance, listed as 0.98 DIST in the tables, corresponds to the distance traveled by the particle in accelerating from rest to 98% of its terminal velocity. (See Figs. 4 and 6.)

#### STOP-DISTANCE

In a derivation similar to that for equation (20), Fuchs<sup>(22)</sup> obtains the expression for the stop-distance in the absence of external forces,

S.D. = 
$$\frac{4d(\rho_p - \rho_m)}{3\rho_m} \int_0^{\text{Re}_i} \frac{d\text{Re}}{\psi\text{Re}}$$
. (24)

This distance is related to the probability of impaction onto a surface which is deflecting an airstream in which particles are entrained. For this condition the initial velocity of the particles is known (initial Reynolds number  $Re_i$ ), and one must calculate the distance traveled against fluid resistance alone while decelerating to zero velocity. The experiments of Ingebo<sup>(23)</sup> indicate that the drag coefficient experienced by particles undergoing deceleration is lower than in conditions of

constant velocity. For this condition, the drag coefficient may be related  $^{(24)}$  to Reynolds number by

$$\psi = 27 \text{ Re}^{-0.84},$$
 (25)

for 6 < Re < 400. According to Ingebo, the decelerational drag coefficient is appreciably lower than the drag coefficient at constant velocity, the ratio being approximately a factor of 5 at Re = 600. Figure 7 shows a plot of INTEGRAL =  $\int_{0}^{\text{Re}_{i}}$  as a function of Re. The integral was evaluated using an expression derived from Oseen's formula

$$F_{\rm m} = -3\pi \eta dV (1 + \frac{3}{16} Re),$$
 (26)

to obtain

$$\int_{0}^{\text{Re}_{i}} = \frac{1}{4.5} \ln (1 + 0.1875 \text{ Re}_{i})$$
(27)

for values of Re < 0.4 and using equation (25) for values of Re > 0.4. The stopdistance of a sphere of diameter d and density  $\rho_p$  moving with an initial velocity corresponding to a Reynolds number Re; in a medium of density  $\rho_m$  may be obtained by multiplying the value of the ordinate at Re by  $d(\rho_p - \rho_m)/\rho_m$ .

#### DISCUSSION

Experimental investigations rarely satisfy ideal conditions, and errors may arise from many sources such as particle imperfections, deformation during transit, agglomeration, electroviscous effects, wall effects, and concentration effects; and the importance of these factors should be determined during experimental design and analyses. The discussions of Orr<sup>(25,26)</sup> Lapple, <sup>(27)</sup> Fuchs, <sup>(1)</sup> Davies, <sup>(28)</sup> and Strauss<sup>(35)</sup> provide useful guides for the experimenter.

In general, wall effects should be considered whenever the diameter of the particle exceeds several percent of the vessel diameter. Orr<sup>(29)</sup> gives a correction for rigid spheres settling in a cylindrical container expressed as the ratio of the observed terminal settling velocity to the terminal settling velocity in an infinite medium,

$$\frac{V_{s}}{V_{\infty}} = \left[1 - \left(\frac{d}{D}\right)^{z}\right] \left[1 - \frac{1}{2}\left(\frac{d}{D}\right)^{z}\right]^{\frac{3}{2}}$$
(28)

where d is the diameter of the sphere and D is the diameter of the container. When the concentration of particles is high, the interactions are such that all the particles move at the same rate regardless of diameter. This effect may be neglected where the volumetric concentration of particles is below 0. 1%. (30) Electroviscous effects may usually be neglected whenever the medium is an electrolyte of ionic strength greater than 0.1 normal. (31)

In order to estimate the errors which might be reflected by the values tabulated in this report, a comparison is made between the values of  $\psi$  as a function of Re using Davies' relations for Re and the curves of Lapple and Shepherd <sup>(32)</sup> and Klyachko.<sup>(33)</sup> Lapple obtained his curve by plotting the averaged values of the combined data of seventeen experimenters in the range  $0.1 \le \text{Re} \le 3 \times 10^6$ . Klyachko's curve, defined by

$$\psi = \frac{24}{\text{Re}} + \frac{4}{\sqrt[3]{\text{Re}}}, \qquad (29)$$

is included in the comparison, because, according to Fuchs,  $^{(34)}$  it is the most successful of the empirical relations proposed by various authors from the standpoint of accuracy and simplicity in the range 3 < Re < 400. Davies' relations, however, are the only ones derived quantitatively from critically selected data using clearly defined mathematical methods. Figure 1 indicates the overall agreement of the curves of Lapple and Davies. It may be observed that Klyachko's curve deviates less than 4% from Davies' values in the range 0.1 < Re < 600.

Orr's mathematical expression is shown for comparison, since it may be useful due to its simplicity where a rough estimate of drag coefficient is desired. Lapple's curve is consistently lower than that of Davies. The largest discrepancies of 2 to 3% occur in the range  $10 < \text{Re} < 10^2$ , and the curves in this range are replotted on a larger scale along with Klyachko's curve in Fig. 2.

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Considering the apparent agreement between the various sources of data, it is expected that the errors associated with the values tabulated in this report are less than 2% with the possible exception of the relaxation times and stop-distances for Reynolds numbers above several hundred. In this region the tabulated values are too low for conditions of acceleration; however, this discrepancy probably does not exceed about 10% at  $Re = 10^3$ ; consequently, the listed values may be useful in many applications.

Table 1 gives the air data, and Table 2 gives the water data.

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Fig. 3 Settling Velocity of Spheres, Densities I – 12 grams cm<sup>-3</sup>, in Air as a Function of Diameter.

10**4** ORNL-DWG. 67-13494 10<sup>3</sup> 10<sup>2</sup> P = 1210 P=10 ACCELERATION DISTANCE (cm), AIR P= 8 P=6 ŧ = 4 10-1  $\rho =$ ۰0<sup>2</sup> ١0<sup>3</sup> ١Ō<sup>4</sup> 105 ۱Ō<sup>6</sup> 10-7 108 103 10<sup>2</sup> 10 DIAMETER (microns)





Fig. 5 Settling Velocity of Spheres, Densities 2–13 grams cm<sup>-3</sup> in Water as a Function of Diameter.



Fig. 6 Acceleration-Distance of Spheres, Densities 2 – 13 grams cm<sup>-3</sup>, in Water as a Function of Diameter.



Fig. 7 Decelerational Stop-Distance as a Function of Reynolds Number.

### Table I

Settling Velocity, Reynolds Number, Drag Coefficient, Relaxation Time and Acceleration-Distance as a Function of Diameter for Rigid Spheres Falling Freely in Air.

Air Data

| Temperature | 20° C  |
|-------------|--|
| Pressure    | 760 mm Hg  |
| Viscosity   | .1.83 × 10 <sup>-4</sup> poise                   |
| Density     | .1.205 x 10 <sup>-3</sup> grams cm <sup>-3</sup> |

Particle Parameters

| Diametermicrons (110 <sup>3</sup> )<br>Velocitycm sec <sup>-1</sup> |
|---|
| Renondimensional  |
| Drag Coef nondimensional  |
| Relaxation Time sec   |
| .98 Dist cm   |
| Density grams cm <sup>-3</sup> (112)                                |

| DIAMETER               | VELOCITY                 | RE                                  | DRAG CUEF                | RELAX TIME                   | ,98 DIST                 |
|------------------------|--------------------------|-------------------------------------|--------------------------|------------------------------|--------------------------|
| 1.000#+00              | 3,020, -03               | 1,992==06                           | 1,166,+07                | 3,086==06                    | 2.84   #= 08             |
| 1.100#+00              | 3,650,+03                | 2,648,=06                           | 8,800 <b>#</b> +06       | 3,728,m=06                   | 4,1560-08                |
| 1.200*+00              | 4.3420=03                | 3.434.=06                           | 6.803=+06                | 4.431.0-06                   | 5.0810=08                |
|                        | 5,094±=03<br>5,094±=03   | 4,35   # 7 (6                       | 5,30/#+06                | り± 95∞=00                    | 8.094.∞08                |
|                        |                          |                                     | 4.307##80                |                              | 1.000000007              |
| 1.000**00              | 0,771,8≂1)3<br>7.699=n3. | 0,0000+00<br>8.111+=06              | 3.21(#*.00<br>3.809+n4   | 7.851.=06                    | 1 4 3 3 4 7 17           |
| 1.700±+00              | 8,680 mm n 3             | 9.723 <b>n</b> =16                  | 2.421.07                 | 8.858                        | 2.361mmm7                |
| 1,8nnx+nn              | 9,733m+n3                | 1.154                               | 2.143.+16                | 9,92506                      | 2.965#=07                |
| 1.900*+00              | 1.084 02                 | 1.356m= 15                          | 1.741.+16                | 1.105.005                    | 3,679+* n7               |
| ×+000*+00              | 1,20102                  | 58   <u>n</u> = 05                  | 1,493 <b>∞+</b> 06       | 1.224 <u>.</u>               | 4.5150007                |
| 5.100*+00              | ,323 <b>∞</b> ≠02        | •830 <b>∞</b> ≖05                   | 1.292++06                | • 349 <b>∞</b> ≖ 05          | 5.485× 07                |
| 2.200*+00              | 1.452. = 02              | 2.103 <b>#</b> ∎05                  | 1.125=+06                | ,48 <sub>0×</sub> =05        | 6.004007                 |
| 2.300**00              | 1,580,=02                | 2,402,505                           | 9,851++05                | <u> </u> ,6 7∞=05            | 7.885.07                 |
| 2,400=+00              | 1. / 20 = 02             | 2. / 28. 9. 05                      | 8,078,05                 | •/6  <b>∞</b> ≢ <u>0</u> 5   | 9, 345° ° 07             |
| 2+200#+00              | 1.8/30=02                | - 3,083≥=05<br>- 3,467== 05         | 7.084#+05<br>6.830=+=5   | + ¥   0# * 05                | 1.100**06                |
|                        | 2: 1834= 02              | 3.882mm 05                          | 6 1090± (5               | 2.207.205                    | 1.2000 00                |
| 2.800**00              | 2.348. + 02              | 4.328±n5                            | 5,481,m+05               | 2.394                        | •475+∞10<br> •/29#▼#6    |
| 2.900+00               | 2.518.02                 | 4.8 <sub>0</sub> 8 <sub>0</sub> =05 | 4.930 <b>±</b> +n5       | 2.568 05                     | 1.988##06                |
| 3. nnnx+ nn            | 2.694 02                 | 5,322m - 05                         | 4.46   <b>*</b> 15       | 2,747 n5                     | 2• 276# 7 n6             |
| S. 100±+00             | 2.876 02                 | 5.87 1. 05                          | 4. 145±+15               | 2.933 (15                    | 2. 5940 - 16             |
| 3.200=+00              | 3,064=02                 | 6,456.=05                           | 3,680=+05                | 3,125,=05                    | 2.945=06                 |
| 3.300=+00              | 3,258,02                 | 7, 079∞= 05                         | 3.357=+05                | 3, 322= 05                   | 3• <b>ა</b> 3 ე⊭ ≖ ე6    |
| 5.400×+00              | 3,458 p = 02             | /,/42== 05                          | 3, 0 <sup>7</sup> l»+ 05 | 3, 526, = 05                 | 3. 15  == 06             |
| 3.200=+00              | 3,004.02                 | 8,444,05                            | 2,8 0,0,+05              | <u>კ,/კიღოეთ</u><br>შეცნი ინ | 4.2110006                |
| 3,000±+00              | $3, 0/9_{10} + 0/2$      | ブ・ 5/m=()つ<br>ローロファーのト              | 2,2075+02                | 3,752,705                    | 4./12#*00                |
| -3.800 <u>-</u> +00    | 4, 3, 7, -02             | 1,080,004                           | 2,3026705                | 4, 1/4# = U2<br>4, 403 = 05  | 2.220## [0<br>5.346###06 |
| 3.900+00               | 4.547                    | 1. 168±=04                          | 2.200#*05                | 4.637.**                     | 6. 484mm 06              |
| 4.000x+00              | 4.783. • n2              | 1.260. 04                           | 2.890m+05                | 4.877 <sub>m</sub> = 15      | 7. 1740 = 16             |
| 4,100=+00              | 5, 124= 12               | 1,356= 14                           | 1.755 <b>±</b> +15       | 5. 123= 05                   | 7. y   6 m = n6          |
| 4,200++00              | 5,272,02                 | 1.458 <u>.</u> =04                  | 1.033 <b>.</b> +05       | 5.376. 05                    | 8./15==06                |
| 4.300++00              | 5,525 - 02               | 1,5640 - 04                         | 1.5230+05                | 5,634, = 05                  | 9. 57 3 . 7 06           |
| 4.400=+00              | 5,785 <u>,</u> =02       | 1.676=04                            | 1.421.+05                | 5,899                        | l• u49∞• 05              |
| 4,500x+00              | 6,050=02                 | •793 <b>⊭</b> •04                   | 1.329+05                 | 6.170.05                     | 1. 148 05                |
| 4.600=+00              | 6,322p+02                | 1,7150*04                           | 1.242 + 05               | 0;440 <b>∌</b> ≢ []⊅         | 1.2530.05                |
| 4./00=+00              | 0,097 <u>#</u> =02       | 2:0420=04                           | 1,10/#+112               | 0,/29,000<br>7               | (), 305# <b>=</b> 05     |
| 4 900±400              |                          | 2 3 14 = 04                         |                          | 7.313.=05                    | 1+4054705                |
| 2,000++00              | 7.467                    | 2.458.*04                           |                          | 7,614                        | 1. /47 = 05              |
| -+UUU#+UU<br>5.1nn++nn | 7,768_+n2                | 2.6n9.m.n4                          | $9_{1}42_{m}+n4$         | 7.9214#05                    | 1.89                     |
| 5.200x+00              | 8. 175 12                | 2,765.=04                           | 8.620.+14                | 8.234.= 05                   | 2. 43.0715               |
| 2.3n0±+nn              | 8,388,*02                | 2.927. 04                           | 8,149=+14                | 8,554=05                     | 2.205=05                 |
| 5,400++00              | 8,707,+02                | 3.096=04                            | 7,700=+04                | 8,879_= 05                   | 2.576==05                |
| 2.500+00               | 9.032.02                 | 3,2710=04                           | 7.2940+04                | 9,210=05                     | 2. 556= 05               |

| DIAMETER   | AFFOCILA   | RE   | DRAG CUEF   | RELAX TIME   | ,98 DIST  |
|--|--|--|---|--|---|
| 5.600x+00<br>5.700x+00<br>5.800x+00<br>5.900x+00<br>6.000x+00  | 9,363,=02<br>9,700,=02<br>1,004,=01<br>1,039,=01<br>1,075,=01  | 3,452,0=04<br>3,64   m=04<br>3,835,0=04<br>4,037,0=04<br>4,245,0=04  | 6.9  »+04<br>6.555×+04<br>6.223×+04<br>5.9 3×+04<br>5.623×+04   | 9,548,0=05<br>9,89,0=05<br>1,024,0=04<br>1,06,0=04<br>1,096,0=04   | 2. / 47» = 05<br>2. / 48 = 05<br>3. 159 = 05<br>3. 38 2 = 05<br>3. 6 17 = 05                      |
| $6 \cdot 100 \pm 100$<br>$6 \cdot 200 \pm 100$<br>$6 \cdot 300 \pm 100$<br>$6 \cdot 400 \pm 100$<br>$6 \cdot 500 \pm 100$  | 1 • 1   1 = * 0  <br>  •   47 = * 0  <br>  •   85 = * 0  <br>  • 222 = * 0  <br>  • 26   = * 0   | 4,684pr04<br>4,684pr04<br>4,914r04<br>5,151r04<br>5,397r04   | $5 \cdot 5 = 5 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 +$   | $  \cdot   3 3 = 04$<br>$  \cdot   7 0 = 04$<br>$  \cdot 2 08 = 04$<br>$  \cdot 247 = 04$<br>$  \cdot 286 = 04$  | 3.004==03<br>4.123=05<br>4.394==05<br>4.679==05<br>4.978==05                                      |
| 6,800#+00<br>6,800#+00<br>6,800#+00<br>7,000#+00   | • 3 0 0 ≠ 0  <br>  • 34 0 ≠ 0  <br>  • 38 0 ≠ 0  <br>  • 42 1 ≠ 0  <br>  • 462 ≠ 0   | 5,649,*04<br>5,910=04<br>6,178,*04<br>6,454,*04<br>6,739=04  | 4,22°»+04<br>4,042»+04<br>3,866»+04<br>3,701»+04<br>3,545»+04   | [, 320 = 04], 366 = 04], 407 = 04], 449 = 04], 449 = 04], 49 = 04]   | 5.29<br>5.0<br>5.76<br>5.76<br>5.76<br>5.76<br>5.76<br>5.76<br>5.76<br>5.76                       |
| /.100x+00<br>/.200x+00<br>/.300x+00<br>/.400x+00<br>/.500x+00  | ,50 <sup>4</sup> ±=0 <br> .547±=0 <br> .590±=0 <br> .634±=0 <br> .678±=0   | 7,031=04<br>7,333=04<br>7,642=04<br>7,960=04<br>8,287=04   | 3,398,+04<br>3,259,+04<br>3,127,+04<br>3,002,+04<br>2,884,+04   | . 534 = 04<br> . 577 = 04<br> . 62   = 04<br> . 666 = 04<br> . 7   1 = 04  | 7. 08 00 + 05<br>7. 486 0 + 05<br>7. 4 1 0 + 05<br>8. 5 1 + 05<br>8. 5 1 + 05                     |
| 7.00x+00<br>7.700x+00<br>7.800x+00<br>7.900x+00<br>8.000x+00   | 1,723=01<br>1,769=01<br>1,815=01<br>1,862=01<br>1,862=01   | 8,9230=04<br>8,9675=04<br>9,3215=04<br>9,684==04<br>1.006==03  | 2.772±+04<br>2.665±+04<br>2.564±+04<br>2.468±+04<br>2.377±+04   | , /5/m=04<br> , 8 <sub>0</sub> 4m=04<br> , 898m=04<br> , 898m=04<br> , 947m=04   | 9.289=05<br>9.786=05<br>1.030=04<br>1.084=04<br>1.140=04  |
| $\begin{array}{c} 0 & 1 & 0 & 0 \\ 0 & 2 & 0 & 0 \\ 0 & 2 & 0 & 0 \\ 0 & 3 & 0 & 0 \\ 0 & 4 & 0 & 0 \\ 0 & 4 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0$  | $ \begin{array}{c} 1,957 = 0 \\ 2,055 = 0 \\ 2,055 = 0 \\ 2,104 = 0 \\ 2,155 = 0 \\ 2,155 = 0 \\ \end{array} $   | [, 044∞° 03<br>[, 083∞° 03<br>[, 123∞° 03<br>[, 164∞° 03<br>[, 206∞° 03  | 2.2910+04<br>2.2080+04<br>2.1290+04<br>2.0540+04<br>1.9830+04   | $\begin{array}{c} (,996_{10} + []4\\ 2 \cdot 045_{10} + 04\\ 2 \cdot 095_{10} + 04\\ 2 \cdot 146_{10} + 04\\ 2 \cdot 197_{10} + 04\\ 2 \cdot 197_{10} + 04\end{array}$ | (. 198  |
| 6.600=+00<br>6.700=+00<br>6.800=+00<br>6.800=+00<br>9.000=+00<br>9.000=+00   | 2, 200 = 01<br>2, 257 = 01<br>2, 309 = 01<br>2, 362 = 01<br>2, 415 = 01<br>2, 469 = 01   | ,249 ± m 03<br> ,29 3 ± 03<br> ,338 ± 03<br> ,38 4 ± 03<br> ,43   ± m 03   | $  \cdot 9   5 + 04$<br>$  \cdot 6 49 + 04$<br>$  \cdot 787 + 04$<br>$  \cdot 726 + 04$<br>$  \cdot 67   + 04$<br>$  \cdot 67 + 04$ | 2. $249_{0} = 04$<br>2. $3(2_{0} = 04)$<br>2. $355_{0} = 04$<br>2. $409_{0} = 04$<br>2. $463_{0} = 04$<br>2. $518_{0} = 04$  | . 52   5 m () 4<br> . 59 3 5 m () 4<br> . 66 7 5 m () 4<br> . 7 4 4 5 m () 4<br> . 7 2 4 5 m () 4 |
| $\begin{array}{c} 9 & 200 \\ 9 & 200 \\ 9 & 300 \\ 9 & 300 \\ 9 & 400 \\ 9 & 400 \\ 9 & 500 \\$ | 2 + 3 + 3 + 3 + 0 + 2 + 5 + 5 + 2 + 0 + 2 + 5 + 5 + 9 + 0 + 2 + 5 + 5 + 9 + 0 + 2 + 6 + 1 + 0 + 0 + 2 + 6 + 1 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 8 + 9 + 0 + 2 + 7 + 10 + 2 + 7 + 10 + 2 + 7 + 10 + 2 + 7 + 10 + 2 + 10 + 10 | $1, 529_{\mu} = 03$<br>$1, 579_{\mu} = 03$<br>$1, 631_{\mu} = 03$<br>$1, 683_{\mu} = 03$<br>$1, 683_{\mu} = 03$<br>$1, 737_{\mu} = 03$ | $1 \cdot 565 + 04$<br>$1 \cdot 565 + 04$<br>$1 \cdot 515 + 04$<br>$1 \cdot 467 + 04$<br>$1 \cdot 421 + 04$<br>$1 \cdot 377 + 04$    | $2 \cdot 5 - 5 = 0 + 2 \cdot 5 - 5 - 5 = 0 + 2 \cdot 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5$  | 1. 9 10. 104<br>1. 9 100 04<br>2. 1790 04<br>2. 1690 04<br>2. 2630 04<br>2. 3590 04               |
| 9.700x+00       9.800x+00       9.900x+00       1.000x+01       1.100x+01  | 2,805±701<br>2,863±701<br>2,922±701<br>2,981±701<br>2,981±701<br>3,605±701   | 1,792=03<br>1,648=03<br>1,905=03<br>1,963=03<br>1,963=03<br>2,612=00   | $\begin{array}{c} 335 + 04 \\ -295 + 04 \\ -295 + 04 \\ -256 + 04 \\ -219 + 04 \\ -219 + 04 \\ -3164 + 03 \end{array}$              | $2,86]_{\mu}=042,920_{\mu}=042,980_{\mu}=043,040_{\mu}=043,678_{\mu}=04$   | 2,459=04<br>2,562=04<br>2,667=04<br>2,77=04<br>4,061=04   |

 $\sum$ 

| DIAMETER             | VELOCITY                  | RE                                   | DRAG CUEF                  | RELAX TIME         | .98 DIST        |
|----------------------|---------------------------|--------------------------------------|----------------------------|--------------------|-----------------|
| 1.200=+01            | 4.291m=01                 | 3,39003                              | 7,063 <b>m+0</b> 3         | 4,376 <u>p</u> *04 | 5./47=04        |
| 1.300=+01            | 5,035,-01                 | 4,310=03                             | 5,558 <u>m</u> +ŋ3         | 5,134.04           | 7.4100-04       |
| 1.400=+01            | 5,838 <u>.</u> -01        | 5,381,03                             | 4,453=+03                  | 5,953 <u>s</u> =04 | 1.063==03       |
| 1.500++01            | 6,700=01                  | 6,617#*03                            | 3.622.+03                  | 6,832 <b>,</b> -04 | 1.400=03        |
| 1.000+01             | 0+01 +01                  | 8.029=03                             | 2,980m+03                  | 7.7710-04          | 1.011=03        |
| 1.700++01            | 8,6010-01                 | 9,628=03                             | 2,491=+03                  | 8,771=04           | 2.307==03       |
| 1,800=+01            | 9.639.01                  | 1.143.=02                            | 2.100=+03                  | 9,830 04           | 2.898==03       |
| 1.900=+01            | i•074∞+00                 | 1.343. 02                            | 1.787.+03                  | l+095n≖03          | 3.595**03       |
| 2•000×+01            | 1,189,+00                 | 1.566.02                             | ,5 <u>3</u> 3 <b>∎</b> +03 | ,2 3 <b>=</b> 03   | 4.412=03        |
| 2.100+01             | 1.311.00                  | 1,812m=02                            | 1,325=+03                  | , <u>337</u> ∎∎03  | 5.360**03       |
| 2+200++01            | 1+438 <u>+</u> 00         | 2,083.*02                            | 1.154×03                   | •466 <b>m</b> =∐3  | 6,453=*03       |
| 2.300*+01            | 00+م1571                  | 2,379∍≈02                            | •0 .  <b>»</b> +03         | ,6⊡2∞≖∩3           | 7.106==03       |
| 2.400**01            | 1,710=+00                 | 2.702**02                            | 8,903∍+02                  | 1,743,03           | 9.132**03       |
| 2.500++01            | 1.854.+00                 | <b>3,</b> 052∎≞02                    | 7,885×02                   | 1,8910-03          | l•j75≥≖02       |
| 2,600*+01            | 2.00 <sup>4</sup> .+00    | 3.432.02                             | 7.017 <b>*</b> *02         | 2,044,0=03         | 1.257=02        |
| 2.700**01            | 2,160=+00                 | 3.841=02                             | 6.273=+02                  | 2,203=03           | 1.46 # 02       |
| 2.000#+01            | 2.322#+00                 | 4.281.02                             | 5,632=+02                  | 2,368,-03          | 1.089==02       |
| 2.900+01             | 2,489±+00                 | 4,7530=02                            | 5,076a+02                  | 2,538,03           | 1.743=02        |
| 3,000x+01            | 2,662,+00                 | <b>2,258</b> ⊭™02                    | 4,592++02                  | 2.14.03            | 2.224= 02       |
| 3.100x+01            | 2.840.+00                 | 5.798.02                             | 4, 168=+02                 | 2,896,=03          | 2.535**02       |
| 3,200=+01            | 3+024+00                  | 0,372==02                            | 3./95.+02                  | 3,084,,*03         | 2,878=02        |
| 3.300=+01            | 3,213+00                  | 6,982=02                             | 3.460.+02                  | 3,277.s=03         | 3.254=02        |
| 3.400x+01            | 3,40°±+00                 | /.026.#02                            | 3.180.+02                  | 3,474 <b>p</b> ≢03 | 3.065##02       |
| 3.200=+01            | 3,00°±+00                 | 0,0  =?(2                            | 2,720=+02                  | 3,0/8±*03          | 4.115==02       |
| 3.000x+01            | 3, a   ∠ <sub>p</sub> +00 | <b>9</b> , <b>0</b> ,3 <b>2</b> ,∎02 | 2,057,0+02                 | 3,08/##03          | 4.004=02        |
| 3, / 00x + 01        | 4.0240+00                 | 9.799.802                            | 2.4820+02                  | 4,102,00           | 2.130= 02       |
| 3.000±+01            | 4,230,+00                 | I • 0 • 0 • • 0                      | 5.540 = 05                 | 4.3225=03          | 2.715=02        |
|                      | 4.427.+00                 |                                      | 2,127=+02                  | 4, 24/s = 03       | 0,33/#* 02      |
|                      | 4,002±+UU                 |                                      |                            |                    | 7 (36) = 02     |
|                      |                           |                                      |                            | 5 254 - 03         | 1,700m=02       |
|                      |                           | 1,722,001                            |                            | 5 400 = 03         | 0.7//#702       |
| 4.4op +ol            |                           | 1.634                                | 1.502++02                  | 5.750.003          | 20 - 25         |
|                      |                           | 1.745.*01                            |                            | 5 0 0 5 m 0 3      | 1. 1222         |
|                      | 5.144.+00                 | 1.861                                |                            | 6.265.*03          | 1 ·   < 2 # = 0 |
| 4.700+01             | 6.404-+00                 | 1.982.701                            | 1,0220+02                  | 6,530,503          | 1 · 22 · 0 ·    |
| 4 800.40L            |                           | 2.107.001                            | 1 171 + 02                 | 6.799              | 1.054-001       |
| 4.900-+01            | 6,936,+00                 |                                      |                            | 7.073.=03          |                 |
| 100±±01<br>2.000±±01 | 7.209.+00                 | 2.374.*01                            | 1. 044 - + 02              | 7.352.*03          | 1, / ກິໂທສ 0 1  |
|                      | 7.486.+00                 | 2.514.501                            | 9 873.+01                  | 7.634-+03          | 1 ×48 m = 0 1   |
| 5,200++01            | 7.768.+00                 | 2.060.00                             | 9.351.+01                  | 7.921.803          | 1.997.0         |
| 5.3nn+++             | 8.653 <b>.</b> +00        | 2.811                                | 8.067.+01                  | 8.212.4.13         | 2, 155          |
| 5.400++el            | 8.343_+nn                 | 2.966                                | 8.418+01                   | 8.568.+03          | 2.317.00        |
| 5.5nn++01            | 8.636.+00                 | 3.128. TI                            | 8.002+01                   | 8.8n7.+n3          | 2.483##01       |
| 5.0n6++81            | 8,933.+00                 | 3.294.=01                            | 7.014 <b>m</b> +ni         | 9.11n.=n3          | 2. 0550-01      |
| 5.700+01             | 9.034.+00                 | 3.466. * 01                          | 7 253.401                  | 9.417. = 0.3       | 2 434           |



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| DIAMETER                        | AFFOCILA                              | RE                      | DRAG COEF              | RELAX TIME            | .98 DIST                 |
|---------------------------------|---------------------------------------|-------------------------|------------------------|-----------------------|--------------------------|
| Ⴢ,8 <u>00</u> #+0)<br>Ⴢ.900×+01 | $9,539_{0}+00$<br>$9,847_{0}+00$      | 3,643 <u>n</u> ≂0;      | 6.917#+DI              | 9,727 <b>x</b> =03    | 3. j 8⊭‴0 <br>3. in9n≖ni |
| 6+000**01                       | 9+0476+0U<br>Ι. ΠΙΦ <sub>10</sub> +ΠΙ | 4. ⊓ i 3.∞ ≂ ∩ i        | 5,000±01<br>5,302≠101  | 1. n36. • n2          | 3.406000                 |
|                                 | 1.047.+01                             | 4.207.01                | 6.035 <b>±</b> +ni     | 1.068 <u>.</u> =02    | 3.61n⊭≂01                |
| 6,200±+01                       | 1.079.+01                             | 4.405.01                | 5.777 + 01             | 1.100=02              | 3. 8210=01               |
| 6,300x+01                       | l+       + 0                          | 4,610=01                | 5,530 + 01             | 1,133,0=02            | 4. 039=01                |
| $6,400 \pm 01$                  | 1.144.+01                             | 4,820,00                | 5,309±+01              | , 66 <sub>2</sub> =02 | 4.2640-01                |
| 6,500x+01                       | 1.170 -+ 01                           | 5,035×01                | 5.097×+01              | 1,200%=05             | 4.496=01                 |
| 0.000*+01                       | 1+207++01                             | 5,256µ#01               | 4.090=+01              | 1,233,=02             | 4./35=01                 |
|                                 | ,243 <b>±</b> +0                      | 5 7 4 6 2 5 9 0 1       | 4,/00=+01              | 1,20/m=02             | 4.98                     |
|                                 | 1 + 270 + 01                          | ン+/ 4mm() <br>5 952-mol | 4,230≝●01              | 1.336.m02             | 5 495 - 01               |
| 7.000++01                       | 1,010s+01                             | 6, 195, = 01            | 4.0000+01              | 1,0005002             | 5 (630-0)                |
| 7.100**01                       | 1.378.+01                             | 6.444 <u>n</u> +01      | 4,055×+01              | 1.4.16.=.02           | 6. a38##n1               |
| 7.200=+01                       | $1.413_{m}+01$                        | 6.699. • AI             | 3.913±+n1              | 1.441.mmn2            | 6.321#*11                |
| 7.300++01                       | 1,448,+01                             | 6,959, 01               | 3,779.+11              | 1.476 02              | 6.012.01                 |
| 7.400*+01                       | 1.483 <u>+0</u> 1                     | 7,225,01                | 3,652=+01              | 1,512,02              | 6, 9   0 = 0             |
| 7,500 <b>=</b> +01              | 1.518m+01                             | 7,49601                 | 3,532+01               | 1.548.=02             | 7.216=01                 |
| 7,600×+01                       | 1+553m+01                             | 7,774.01                | 3,4 8,+01              | 1.584.02              | 7.529==01                |
| /+/00++01                       | 1.587.+01                             | 0.050.m                 | 3,309=+01              | 1.020.02              | 1.450=01                 |
|                                 |                                       |                         | 3,200,401              |                       | 8.179##01                |
| /+/UU#+UI<br>5.000++01          | 1,697,+01                             | 8.939-+01               | 3.1000+01              | 1,073,02              | 0.210#*01<br>8.46ep=p1   |
| S.Ino∍+il                       | 1.733.+01                             | 9.245.***               | 3+01***01<br>2.925**ni | 1,768⊾≢n2             | 9. / 3#= 0 i             |
| 6.2nn=+n1                       | 1.770.+n1                             | 9,557,01                | 2.840.+01              | 1.805p=02             | 9.573**01                |
| 8.300#+01                       | 1.807 + 01                            | 9,874. 0                | 2,759.+01              | 1,842=02              | 9.941***                 |
| 6,400x+01                       | 1,844,+01                             | 1.020=+00               | 2.082.+01              | ,88 <b>0</b> ∎≖02     | I.u32#+00                |
| 8.500x+01                       | 1.881.+01                             | 1.053.+00               | 2.600-+01              | 1,918,02              | 1. 07 0*+00              |
| 8.000x+01                       | · 1+318=+01                           | 1.086.+00               | 2,53/=+01              | 1.956. 02             | 1.109=+00                |
| 0./00=+01                       | 1,952=+01                             | 1,120×*00               | 2.407.41               | 1,994p=02             | 1.120**00                |
| 0,000x+01                       | 1,990 + 01<br>2.031 + 01              | 1,120+00<br>1,120+100   | 2,407#+01              |                       |                          |
| 9.000**01                       | 2. 169. + 11                          | 1.226.+00               | 2.282.0+01             | 2.110+=02             | 1.275+10                 |
| 9.100#+01                       | 2.107.+01                             | 1.262 <b>.</b> *nn      | 2,224=+01              | 2.148. • n2           | 1.318#* 00               |
| 9.200=+01                       | 2,145,+01                             | 1.300+00                | 2. 69 .+01             | 2,18802               | 1.362#+00                |
| 4,300×+01                       | 2.184.+01                             | 1, 337 + 00             | 2.110=+01              | 2,227, = 02           | 1.407=+00                |
| 9,400x+01                       | 2+222=+01                             | 1.376.+00               | 2,065=+01              | 2,266, 02             | 1.453=+00                |
| Y•⊅00≠+61                       | 2,261,+01                             | 1.4   5=+00             | 2.010.01               | 2,306= 02             | 1.499=+00                |
| 9.000±+01°                      | 2.300=+01                             | 4540+00                 | 1,900=+01              | 2,340,702             | 1. 247#+00               |
| 7+700**01<br>9 800-+01          | 21070070                              | 1 535.+0A               | +720m▼[]<br>  878+o.i  |                       | 1. 27 28 7 00            |
| - ∎∽uu⊭⊤uı<br>9.9nn⊶+ol         | 2.419-+01                             | 1.577.+00               | 1.030=+n+              | 2.467 mm n 2          |                          |
| 1.000±+02                       | 2.459.+01                             | 1.619±+nn               | 1,794 <u></u> ,11      | 2.508==02             | 1./45**00                |
| 1.100×+02                       | 2.874.+11                             | 2.082=*00               | 1,445,+11              | 2.931.02              | 2.300**00                |
| 1.200++02                       | 3,321+01                              | 2,624=+00               | 1.180×+01              | 3,387.02              | 2. y4n=+0n               |
| 1.300=+02                       | 3,794+01                              | 3,247=+00               | 9,801,0+00             | 3,869=02              | 3.066+00                 |
|                                 |                                       |                         |                        |                       | -                        |

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| DIAMETER                          | VELOCITA                         | RE                                      | DRAG: COEF                    | RELAX TIME                      | 90 DIST                |
|-----------------------------------|----------------------------------|---|-------------------------------|---------------------------------|------------------------|
| 1.400++02                         | 4,233,+01                        | 3,902=+00                               | 8,478,+00                     | 4.3160-02                       | 4,480#+00              |
| 1.200*+02                         | 4,030,0+01                       | 4,2/0,+00                               | 7,281,0+00                    | 4.727.8702                      | 2.300m+00              |
| 1.000=+02                         | 5.002.00                         | D,336≥≠00<br>6 150 100                  | 6,/0/>+00                     | 5.105.002                       | 0.306=+00              |
| 1./00=+02                         | 5.501s+01                        |   | 6,097=+00                     |                                 | /.438=+00              |
|                                   | 2,94Ux+UI                        | 7 995 +00                               |                               | 0 • U20 ≠ ® U∠<br>4:5 è 9 = e 2 |                        |
|                                   |                                  | 7+202#TUU                               |                               | 0;-2∐0p=U2<br>6:961             | 9,0374+00              |
| 2: 100.402                        |                                  |   |                               | 7.416.=02                       | 1 - 1 - 0 0 0 0 0 0    |
| 2.200++02                         | 7,719,+11                        |   | 4.000000                      | 7.872.02                        | 1.406#+01              |
| 2.3nn+n2                          | 8.167.+01                        | 1.237.+11                               | 3.742**00                     | 8.328 n2                        | 1. 562##01             |
| 2.400*+02                         | 8.610.+11                        | 1.362+11                                | 3.5n8_+nn                     | 8.786 <sub>**</sub> n2          | 1./27++11              |
| 2.500*+02                         | 9.064.+01                        | 1.492.+01                               | 3.3nl + nn                    | 9.244 - 02                      | 1.899##11              |
| 2.600=+02                         | 9.513.+01                        | 1,629,+11                               | 3.117=+ 00                    | 9,701,02                        | 2. 179++11             |
| 2.700++02                         | 9,962,+01                        | 1,771+101                               | 2.952×+00                     | 1.016m=01                       | 2.267**01              |
| 2,800++02                         | 1.041.+02                        | 1.919#+01                               | 2.803.+00                     | 1.062=01                        | 2.462=+01              |
| 2,900=+02                         | 1.086.+02                        | 2.074=+01                               | 2.669.+00                     | 1.107.01                        | 2.064+01               |
| 3,000±+02                         | 1.131.+02                        | 2,233=+D                                | 2,546=+00                     | +  53p=0                        | 2.073+01               |
| 3.100=+02                         | + 75 <b>+</b> +02                | 2,399#†0!                               | 2,435=+00                     | •  99 <b>=</b> =0               | 3. <sub>0</sub> 89#+0  |
| 3,200=+02                         | 1.220=+02                        | 2,570=+01                               | 2,333=+00                     | 1,244,*01                       | 3.312**01              |
| 3.300x+02                         | 1,264,+02                        | 2,747,+01                               | 2.240.+00                     | 1,28901                         | 3, 941=+01             |
| 3.400++02                         | 1,309±+02                        | 2,930=+01                               | 2.154.+00                     | , <b>335</b> , • 0              | 3. /78=+01             |
| 3,500++02                         | 1.353+02                         | 3. [  8. + 0 ]                          | 2.075++00                     | ,38 <u>0</u> =0                 | 4.020**01              |
| 3.000±+02                         | 1.39/#+02                        | 3,312#*01                               | 2,001=+00                     | • <del>4</del> 2 <b>2 p</b> = 0 | 4.2/0*+01              |
| S./00≠+02                         | 1,441,02                         | 3,2  m#   <br>3,7 5,+0                  | 1,933#+00                     |                                 | 4, 727**0              |
| 3.000x+02                         | + 40 - m + () 2<br>  5 2 9 + 6 2 | 3 925. + 1                              | ,0/Um♥[][]<br>  b]: +00       |                                 | 554 m + 0              |
| $0_{1} = 0_{1} = 0_{1} = 0_{2}$   | 1,747,0704                       |   | 1,0110+00                     | 1.003.001                       | 5 127++01              |
| <sup>+</sup> •UUU≇+U4<br>4 100+02 |                                  | 4.361-+01                               |                               |                                 | 5 6070+01              |
| 4.200++02                         | 1.659.+02                        | 4.587.+1                                | 1.656.+00                     | 1.69201                         | 5.892**01              |
| 4.300++02                         | 1.702+02                         | 4.819.+n1                               | 1.011m+00                     | 1.735 <sub>6</sub> = n i        | 6. 182#+n1             |
| 4.400*+62                         | 1.745.+02                        | 5.055=+01                               | 1.568±+nn                     | 1.779 <sub>0</sub> = n          | 6.478+n1               |
| 4,500++02                         | 788 + 02                         | 5,297+01                                | 528.+00                       | 1,823.01                        | 6.780+01               |
| 4.600 + 02                        | 1,830m+02                        | 5,543=+01                               | 1,490×+00                     | <b>,866,</b> ♥0                 | 7.086++01              |
| 4.700++02                         | 1,873 + 02                       | 5,795=+01                               | 1,454,+00                     | 1• <b>9</b> 1 <b>0</b> ¤≖01     | 7.398=+01              |
| 4,800±+02                         | 1:9150+02                        | 6,052,+01                               | 1,421,00                      | ,953 <b>∌</b> ≢0  -             | 7./ 5∞+0               |
| 4.900*+02                         | •957 <u></u> +02                 | 6, 3 4m+0                               | • 388 <b>¤+</b> 00            | 1,995, 01                       | 8. <sub>0</sub> 37#+01 |
| Þ,000x+02                         | 1.999.02                         | 6,58   + 0                              | 1,358,+00                     | 2,038.*01                       | 8.364#+0               |
| 2.100x+02                         | 2:040=+02                        | 6,852+01                                | 1,329#+00                     | 2.08 1 . 01                     | 8.096++01              |
| 2.200++02                         | 2+082+02                         | /.129.+01                               | 1.302+00                      | 2+123=                          | 9.035.01               |
| 2,3(0x+02                         | 2, 123,+02                       |   | 1.2/2=+00                     | 2,102,7                         | Y. 3/4=+01             |
| 2.400++02                         | 2. 102 - 02                      | 7 000                                   | 1+221**00                     | 2:40/07                         | 7.119=+01              |
| 2,200++02                         | 2.200+02                         | 1 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 1.22/=+00                     | <b>2,247</b> 0 <b>*</b> []]     | 1.007#+02              |
| 2,000x+02                         | 2,240,+02                        | 0.20407() <br>8 692 -                   |                               | 2 330                           | 1. 1420+02             |
|                                   | 2,20/0+02                        | 0,204#7101<br>8.89a=+01                 | •   ¤ ∠ ¤ Ŧ [] []<br>  •   62 | 2,37401                         | 1+0/8#*02              |
| ✓•∀UU≭♥U∠<br>5 900 ±02            | 2. 368 + 02                      | 9.100.+01<br>9.100+01                   | 1,1042.400                    | 2.4.5.101                       |                        |
| イップリリメキリム                         | 2,000stU2                        | <+!~~#`U!                               | ╡╸╡╼╘╾║║                      | ニャッシャーリー                        | 1.121#702              |

| PARTICLE | DENSITY | = | 1.0 | GRAMS | PER | CORIC | CENTIM | 1ETER |
|----------|---------|---|-----|-------|-----|-------|--------|-------|
|          |         |   |     |       |     |       |        |       |

| DIAMETER           | VELOCITY                | RE                                 | DRAG COEF              | RELAX TIME           | ,90 DIST                              |
|--------------------|-------------------------|------------------------------------|------------------------|----------------------|---------------------------------------|
| h. 000-+02         | 2.4.08.+                | 9.5.4.+                            | 1.123-+00              | 2 <b>. 456</b> ≖ n.i | I• 189≠n2                             |
| 0.000=+02          |                         | 9 877+01                           |                        | 2.496                | 1. 268 + 02                           |
|                    | 2,440,+02               | 9 0 0 0 m + 0 1                    |                        | 2.537.501            | 1. 264#+02                            |
| 0.200+02           | 2,400 + 02              |                                    |                        | 2,507                | 1.209+02                              |
| 0,300=+02          | 2,22/++02               | • [] 40 ø ⊺ [] 2<br>  • 082 m ≠ 02 |                        | 2,6,8,7,0            | 1.54.02                               |
| 0.400+02           | 2, 50/ = 02             |                                    |                        | 2.658 - 01           | 1.0800+02                             |
| 0.500+02           | 2,000 + 02              |                                    |                        | 2,090,00             | 1.42                                  |
| 0.000+02           | 2,042 + 02              | 1+120+12                           |                        | 2,737,201            | 1.46 0 + 02                           |
| 0,100=+02          |                         |                                    |                        | 2.777.01             | 1.7008402                             |
| 0.000**02          | 2,720,02                | 1+417=*02                          | 9 8 7                  | 2.8.6                | 1. 340#*02                            |
| 0,700=+02          | 2.102.0702              | 1,200,02                           | 9.688                  | 2,855,701            | 1. 38                                 |
| • 0 0 0 = + 0 2    | 2,000,000,02            |                                    | 9.563                  | 2,894,701            | 1.622#+02                             |
| · 100=+02          | 2,030 = + 02            | 1.364.+07                          | 9.0000000              | 2.933.01             | 1. 6640+02                            |
| 7.200=+02          | 2.0/0.+02               | 1,504p+02                          | 9.376.01               | 2.972                | 1.706#+02                             |
| 1.300x+02          | 2.717#+02               |                                    | 9,0206001              | 2,72,000,000         | 1. /48=+02                            |
| 1.400*+02          | 2,9520+02               | 1.476 +00                          | 9.210101               | 3 049 - 01           | 1. /9                                 |
| 1.200*+02          | 2,990=+02               | 1.5.5.*02                          | 9.10-20-01             | 3.087                | 1. 3330+02                            |
| 7.000=+02          | 3. 02/ # 02             |                                    | 0.9970°()              | 3.125.*01            | 1. #77#+02                            |
| 1.100*+02          | 3,0070+02               | 1+224#102                          | 0.0775-01<br>8 798.eni | 3.163.**01           | 1.9208+02                             |
| 7.000++02          | 3• 0≤±+0≤<br>7 :78 :•0  | •                                  |                        | 3.201.701            | 1.464+02                              |
| 1.900=+02          | 3,130,0+02              |                                    | 8./02=01               | 3 23801              | 2                                     |
| 8.000*+02          | 3. 1/2 = + 02           | 1,0/3,+02                          | 8.010.00               | 3,275, = 01          | 2.52*+02                              |
| 0.100=+02          | 3.212#+02               | 1 7 5 4 + 0 2                      |                        | 3.3.3                | 2. 97.402                             |
| 0.500=+05          | 3,240 + 02              | 1+734*****                         | 0.7020701              | 3.350.50             | $2 \cdot 0^{7/2} \cdot 0^{2}$         |
| 0,300=+02          | 3,202,+02               | 1.477 +02                          | 0,047,040              | 3.386                | 2.187.02                              |
| <b>A.400x+02</b>   | 3.3210+02               | ,03/#*()2<br>  670 ± 02            | 8.202.01               | 3.403                | 2 3 3 3 3 4 5 2                       |
| 0,500=+02          | 3,35/s+02               | 1.0/90702                          | 8,10,2,7,01            | 3 46 0. * 01         | 2.202-02                              |
| S.SOO*+05          | 3.393#+02               |                                    |                        | 3 406 - 01           | 2 2 2 2 4 1 + 0 2                     |
| <b>0./00#+</b> 02  | 3,420 + 02              | 2 2 2 7 + 22                       |                        | 3 532 - 01           | 2.524=+02                             |
| 0.000*+02          | 3,407,+02               |                                    | 7,990,000              | 3,569,001            | $2 \cdot 3 \cdot 0^{-1} \cdot 0^{-1}$ |
| 0,700 <b>x</b> +02 | 3,497 = 02              |                                    |                        | 3 6 5 - 01           | 2 463-402                             |
| 7.000x+02          | 3, 232=+02              |                                    | 7.748                  | 3,640,501            | 2. 3100+02                            |
| 7 • 1 U U = T U Z  |                         | 2 184 + 02                         | 7 68201                | 3.676                | 2. 558+02                             |
| 7.200#+02          | 3,002++02               | 2, 229, + 02                       |                        | 3.7110-01            | 2.005=+02                             |
| 7. SUUx+UZ         | 3,070,0702              | 2 274 + 02                         | 7 555                  | 3.747 01             | 2.053=+02                             |
|                    | 2 7 0 + 02              | 2.320.+02                          | 7.494.01               | 3.782 01             | 2. / 1 1 = + 12                       |
| 9.200x+02          | 3 743 + 02              | 2,366.+02                          | 7.435.***              | 3.817. 11            | 2. /49=+ 12                           |
|                    |                         | 2.4.3.+02                          | 7 376 01               | 3.852.+01            | 2. /97=+02                            |
|                    | 3,7778+02               | 2.460.02                           | 7 320 01               | 3.88701              | 2. 0460+02                            |
|                    | 3 845 +02               |                                    | 7 264                  | 3.921.01             | 2. 895=+02                            |
|                    | 3,077mTUZ<br>7 879 2 mg | 2,554_+02                          | 7,2104#01              | 3.956                | 2. 9440+ 02                           |
|                    |                         | 2,6n2-+n2                          | 7:158                  | 3.99 n. • a l        | 2. 4930+02                            |
|                    |                         | 2.651-+02                          | 7.106-=01              | 4.024.÷DI            | 3. 1420+12                            |
|                    | 2 080 - 87              | 2.600-+02                          | 7 05601                | 4.059.*01            | 3. 1920+02                            |
|                    |                         | 2,748.+02                          | 7.007.00               | 4.093                | 3. 1420+02                            |
| 1.040x+03          | 4.010+02                | 217400702                          | /+UU/PTUI              | 4.126=mil            | 3. (90 02                             |
| 1.0>0=+03          | 4,040,+02               | 2.790. 02                          | 0,7708=[]]             | च•।∠घ¤≕Ц             | 0.172-02                              |

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| DIAMETER                | AFFOCILA                | RE                         | DRAG CØEF              | RELAX TIME                           | .9d DIST                     |
|-------------------------|-------------------------|----------------------------|------------------------|--------------------------------------|------------------------------|
| 1.000x+00               | 6,051 <u>0</u> -03      | 3,9850=06                  | 5,830p+06              | 6 <b>,   7   10 = () 6</b>           | 1.186=07                     |
| I•100≠+00               | 7,3 2 <u>n=0</u> 3      | 5,296 <b>.</b> =06         | 4.4000+06              | 7,456 <u>,</u> =06                   | 1,288,707                    |
| 1.200*+00               | 8,691,=03               | 6,867.06                   | 3,402=+06              | 8,862,=06                            | 2.247=07                     |
| 1.300*+00               | 20-م19،19               | 8,722=06                   | 2,684.+06              | I,039 <b>.</b> ≂05                   | 3. 192=07                    |
| 1.400=+00               | 1.181.=02               | I <b>,</b> 088∎⇒05         | 2,154 m+ 06            | ,2 <sub>0</sub> 4∞=05                | 4.156=07                     |
| 1.500**00               | 1,354.=02               | 1 <b>,</b> 338±=05         | 1.756 <b>±+</b> 06     | 1.38   m = 05                        | 5.473=07                     |
| 1.000*+00               | 1.540                   | 1.622×*Q5                  | 1.450.+06              | <b> ,</b> 57 <mark>0∞</mark> #05     | 7. <sub>0</sub> 8 <u> </u>   |
| 1,700×+00               | 1.73 <u>7</u> =02       | 1,945 <u>n</u> = (5        | 1,211#+06              | 1,772=05                             | 9. 118007                    |
| 1+000×+00               | 1,947,02                | 2, <u>3</u> 07#*05         | 1.0220+06              | <b>,985</b> =05                      | 1.1330-06                    |
| 1.900*+00               | 2.168.02                | 2.712=05                   | 8.698 <b>±+</b> 05     | 2,211=05                             | 1.406==06                    |
| 2.000×+00               | 2,4010-02               | 3.16205                    | 7.467 <b>.</b> +05     | 2,449 <b>,</b> =05                   | 1./25=06                     |
| 2.100×+00               | 2,640, 02               | 3,659 <u>∍</u> ≂05         | 6,458±+85              | 2,698 <b>⊳</b> ≖ <u>0</u> 5          | 2, <sub>0</sub> 96≖≓06       |
| 2.200*+00               | 2,9 <u>0</u> 3=02       | 4.206.05                   | 5,623=+05              | 2 <b>,</b> 96  <b>⊭</b> = <u>0</u> 5 | 2. 523** 06                  |
| 2.300×+00               | 3.172=02                | 4.804.05                   | 4,9250+05              | 3₊235 <b>⊭</b> ₩05                   | 3• y 3≖ ŋ6                   |
| 2.400=+00               | 3,453m=02               | 5,457n=05                  | 4,3390+05              | 3,521=05                             | 3, <b>⇒7</b> <u>0</u> #706   |
| 2,500*+00               | 3, /40, = 02            | 0.166 <b>.</b> •05         | 3.842=+05              | 3,820×=05                            | 4.2020006                    |
| 2.000=+00               | 4.020==02               | 0,734p*05                  | 3.418=+05              | 4.130.05                             | 4.• ¥   3™≣ no               |
| 2+/00 <b>#</b> +00      | 4.30/102                |                            | 3.054=+05              | 4.453#*05                            | 5./12==06                    |
| 2.000 + 00              | 4,0720-02               |                            |                        | 4,70.0p*07                           | 0.004==06                    |
| 2• / UU# + UU           | 5,052,02                |                            | 2,4000+05              |                                      |                              |
| -0.000±+00              | 5 752 -00               | 1 174                      | 2.2014+05              |                                      |                              |
| V∎IUU#+UU<br>3.200⊭+00  | 6. 128. = 02            | 1,291                      | 2,0200+05              | 6.249.=05                            | A A 15m 00                   |
| -•⊑00≠•00<br>3.300≠+00  | 6.516.02                | 1.416.704                  | 1.078 <sub>∞</sub> +05 | 6.645.=05                            | 1. 720 + 05                  |
| 3.400x+00               | 6.910                   | 1.548m=04                  | 1. 232. + 05           | 7. 052. • 05                         | 1.433#=05                    |
| 3.500x+00               | 7.328 - 12              | 1.689 14                   | 1.408±05               | 7.472 = n5                           | l.on9∞•n5                    |
| 3.000+00                | 7.751.+02               | 1.837 14                   | 1.294+15               | 7.984 15                             | 1.000-05                     |
| 3.709++00               | 8,187,-12               | 1,995= 14                  | 1,193m+n5              | 8,349, - 05                          | 2.108-+05                    |
| 3.800#+00               | 8,634,-02               | 2,160.404                  | 1.101.0+05             | 8,8 <sub>0</sub> 5,-05               | 2,233== 05                   |
| 3.900x+00               | 9.094.=02               | 2. 335 × 04                | 1.019=+05              | 9.273 05                             | 2.477 - 05                   |
| 4.000×+00               | 9,565 <u>m=0</u> 2      | 2.5190=04                  | 9,449±+04              | 9,754 <u>∞</u> =∂5                   | 2.14 10 = 05                 |
| 4 100×+00               | <b>ا) - • &lt;</b> 00 ا | 2./13. 04                  | 8,777=+04              | 1,025,-04                            | 3, <sub>U</sub> 24⊭▼05       |
| 4.200*+00               | 1.054.01                | 2.9160=04                  | 8,16/0+04              | 1,07504                              | 3. ა3ე¤ • ე5                 |
| 4.300#+00               | 1+102**01               | 3.129.0-04                 | 7.013×+04              | 1,12/10-04                           | 3.6570-05                    |
| 4.400**00               | + ?/==0                 | 3,352# <b>™</b> [4         | 7.10/=+04              | I • 10 0 • • 04                      | 4.003=05                     |
| 7.200**00               | • <   [] # <b>*</b> []  | S, 2096 = 04.<br>€ 500 = 4 | 6.040×04               | • <b>∠</b> 34∞• []4                  | 4.30,5## [5                  |
|                         | ,20 <b>~</b> ±*0        | 3,029 <u>6</u> =64         | 0.223×704              | + <u>209</u> mm <u>0</u> 4           | 4./0/## 02                   |
| 7•/UU≝*UU               |                         | 4 350 004                  | 5,030 m € [4           |                                      | 2,210#=02                    |
| 4 400.400               | 1.070.0-01              | 4 628.=04                  | 5.40U#*04<br>5.150.404 | 463 m 04                             | 5.0/3==05                    |
| >+≠≠00×=00<br>2.500×+00 | 1,493= 01               | 4.916                      | 2,176×▼U9<br>4.050∞+n4 | I,523                                | 0, 10900 (0)<br>6. 576 mm 25 |
|                         | 1.553                   | 2.217=n4                   | 4.571m+n4              | 1.584w=n4                            | 7. 225×+05                   |
| 2.200×+00               | 1.015.01                | 5.53nmm.a4                 | 4.313+14               | 1.647.=04                            | 7.407                        |
| ν_00± 00<br>Σ.300±+00   | 1.678meni               | <b>5,854</b> , <b>≈</b> ∩4 | 4.075.+04              | 1.711                                | 8,424====                    |
| 2,400+00                | 1.74101                 | 6, 192. • 114              | 3.853 <u>s</u> +n4     | 1,776 <u>s</u> =04                   | 9. 1760 - 05                 |
| 2.5nn++an               | 1.000-01                | 6.542.= 04                 | 3.647.+04              | 1.842 04                             | 9 /65x=05                    |

| DIAMETER                                 | AFPOCILA                          | RE                        | DRAG COEF              | RELAX TIME                     | .90 DIST      |
|--|-----------------------------------|---------------------------|------------------------|--------------------------------|---------------|
| h 600 +00                                | 470 - 04                          | 6 VoE = 04                | 7 466 + - 4            | 1 9 . 0 4                      | 40            |
|  |                                   | 7 29 1 904                | 3,490 * 04             | + 7   7 # •   4<br>  978. • 04 | 1.0498-04     |
| 200#*UU<br>5.800-+00                     | [+740#"U <br>2.008.=0             | 7.670.00                  | 3,2/08+04              |                                | 1. 20070-04   |
| 2.900±+00                                |                                   | 8 073                     | 0.957.404              |                                |               |
| 6,000+00                                 | 2.149                             | 8,490.404                 | 2.812++04              | 2.192.04                       | 1. 182=04     |
| 6 I I I I H + I I                        | 2,221,411                         | 8.922.04                  | 2.676.+14              | 2.265                          | 476=04        |
| 6.2nn±+nn                                | 2.29401                           | 9.367 n4                  | 2.549+14               | 2.34                           | 1.275=14      |
| 6.300++00                                | 2.36901                           | 9.827.04                  | 2.430=+04              | 2.416. = 04                    | 1.079== 04    |
| 6,400#+00                                | 2,445,-01                         | 1.030.03                  | 2,318,+04              | 2,493,=04                      | 1./88##04     |
| 6,500,+00                                | 2,522=01                          | •079 <b>∍</b> =03         | 2.213=+04              | 2.57   04                      | 1.902=04      |
| 6.600=+00                                | 2.600=-01                         | <b>, 30∍</b> =03          | 2,114 + 04             | 2,651=04                       | 2. 12   == 04 |
| 6,700×+00                                | 2,679,01                          | <b>.</b>  82 <b>.</b> ⁼03 | 2.021=+04              | 2,732,*04                      | 2.146=04      |
| 6.800×+00                                | 2.759.01                          | 1,235=03                  | <b>1.934 • 1</b>       | 2,814=04                       | 2.277=04      |
| 0, 900×+00                               | $2,84 _{b}=0 $                    | 1,291,03                  | 1.851.+04              | $2,897_{\mu}=04$               | 2.413=04      |
| /•000×+00                                | 2+924+*01                         | .348=03                   | 1.//3.+04              | 2,982.04                       | 2.3560004     |
| /+100×+00                                | 3,000,00                          | 1,400×=03                 | 1.099=+04              | 3,00/==04                      | 2.1050004     |
| /+200#+00                                | 3,093,01                          | I,400±♥[]3                | 1,03(),+()4            | 3+124m#04<br>スロン40 = 04        | 2.800#=04     |
| /.300#+00                                | 3 +  /7 m ♥ []  <br>7 - 047 - • i | 1.2000                    | 1.2048404              | 3,2420-04                      | 3.0224-04     |
| 7 + TUU# TUU                             | 3 356 -01                         |                           | 1.201#+04              | 3 499 = 04                     | 3 466 4 - 04  |
| 7.500×+00<br>7.500++00                   | 3,446,=01                         | 1,724.+03                 | 1.386.+04              | 3.514.04                       | 3.549=04      |
| 7.700++00                                | 3.537                             | 1.793-=03                 | 1.333.+04              | 3.6n7. #n4                     | 3./39##04     |
| 7.8nn+nn                                 | 3.629.=01                         | I.864 <b>∍</b> ≖n3        | 1.283=+14              | 3.701×-04                      | 3. 936== 14   |
| 7.900*+00                                | 3.723                             | 1.936==n3                 | 1.235.+14              | 3.796 4                        | 4. 142== 04   |
| 8.000±+00                                | 3.81701                           | 2.011=03                  | 1.189.+14              | 3,893,-14                      | 4.355== 14    |
| 8.100x+00                                | 3.913.=01                         | 2,087.03                  | 1. 140+ 14             | 3,99 10= 04                    | 4. 576 = 04   |
| 8,200#+00                                | 4.010=*01                         | 2,165=03                  | 1.104=+04              | 4,090,=04                      | 4.006=04      |
| 8.300=+00                                | 4 • 1 0 <sup>9</sup> » = 0 1      | 2,245,03                  | 1,065=+04              | 4, 190 = 04                    | 5.044 = 04    |
| 8,400=+00                                | 4•20 <sup>8</sup> ∍⇒01            | 2,328. 03                 | 1.027=+04              | 4,29   = 04                    | 5, 29   = 04  |
| 8,500×+00                                | 4.30 = 01                         | 2,412=03                  | 9,91/2+03              | 4,394, = 04                    | 5.546=04      |
| °,°00±+00<br>8 7                         | 4.410==01                         | 2,498=03                  | 9,5%0,s+03             | 4,498,04                       | 5.8110-04     |
|  | 4, 2   3 ± = 0                    |                           | 9.22[m*[]3             | 4,003,04                       | 0.000±=04     |
| 0,0 <u>00⊭</u> +00<br>8:9:00 <u>+</u> 00 | 4.010.00                          | 2.076803                  | 0,2020703<br>8 642.+n3 | 4.8.6                          | 6 663 m = 04  |
|  | 4.830                             | 2,862. • 03               | 8.358.+03              | 4,925, - 04                    | 6.967 = n4    |
| 2. 100++00                               | 4.937                             | 2.959.*03                 | 8, 086=+03             | 5.035. • 04                    | 7. 28 i # n A |
| 9.200++00                                | 5. n46ni                          | 3. 157. • 13              | 7.826 <b>m</b> +n3     | 5, 146, - 04                   | 7.016=14      |
| 9.3nn±+nn                                | 5.1561                            | 3. 158 03                 | 7.577.+13              | 5.258,=04                      | 7.94   = 04   |
| $9.400 \pm +00$                          | 5.268                             | 3.261=03                  | 7,338,+03              | 5.3720-04                      | 8.287=04      |
| 9,500x+00                                | 5,380 <u>m</u> =01                | 3,366=03                  | 7.110=+03              | 5,487 04                       | 8.045=04      |
| 9,600±+00                                | 5,494,01                          | 3,473∍•03                 | 6.890=+03              | 5.0030-04                      | 9.014=04      |
| Y,700=+00                                | 5,009==01                         | 3.582=03                  | 6,680,+03              | 5,/20=04                       | 9.3940004     |
| 9.800=+00                                | 5.725=01                          | 3,694=03                  | 6,478=+03              | 5,838±=04                      | 9,/87##04     |
| 9,900x+00                                | 5,842=0                           | 3,808,03                  | 6.284=+03              | 5,958. 04                      | 1.019=03      |
| L • 0 0 0 × + 0                          | 5.901.01                          | 3, 725= 03                | 6.090=+03              | 0.0/8=04                       | 1.0014=03     |
| 1:100=+01                                | /.2/0₽₹01                         | 2,222.03                  | 4,282=+83              | / <b>,</b> 352 <b>∞</b> ≖()4   | 1.5520=03     |

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| DIAMETER                       | VELOCITY                 | RE                 | DRAG COEF                            | RELAX TIME                     | ,90 DIST                   |
|--------------------------------|--------------------------|--------------------|--------------------------------------|--------------------------------|----------------------------|
| 1.200=+01                      | 8,578 <sub>m</sub> =0    | 6,/78 <b>=</b> 03  | 3,535,+03                            | 8,747 = 04                     | 2.196==03                  |
| 1.300*+01                      | 1.000+00                 | 8,6 4 <u>,</u> #ŋ3 | . 2 <b>,</b> 782 <b>,</b> +03        | 1,026,-03                      | 3, 0220-03                 |
| 1.400++01                      | I, 167, +00              | 1.075=02           | 2.230++03                            | i 90p=03                       | 4, 1620-03                 |
| 1.500=+01                      | 1,339 <b>±</b> +00       | 1.322#*02          | 1.814.+03                            | <b>.</b> 365 <b>.</b> 03       | 5.349=03                   |
| <b>,</b> 600#+0                | 1.522.+00                | 1,604.02           | 1,496,+03                            | ,553p=03                       | 6.919=03                   |
| 1.700≖+01                      | 1,718 <b>,+</b> 00       | 1,923.02           | 1.249=+03                            | 1,752.03                       | 8.0 3#*03                  |
| •800 <b>⊭</b> +0               | 1.925 .+ 00              | 2,282=02           | I.853≠03                             | 1,963n=03                      | 1.107**02                  |
| 1 <b>,9</b> 00 <b>±+</b> 01    | 2.143 + 00               | 2,682,*02          | 8,960=+02                            | 2. 186 03                      | 1.374==02                  |
| 2.000*+01                      | 2.374 +00                | 3,126,02           | 7,698,+02                            | 2,420 = 03                     | 1.086==02                  |
| 2.100=+01                      | 2,612,+00                | 3,016##02          | 6,659,+02                            | 2,667.p=03                     | 2.0480-02                  |
| 2.200++01                      | 2,868 <b>,</b> +00       | 4.154.702          | 5,801**02                            | 2,924,*03                      | 2.465**02                  |
| 2.300++01                      | 3,132,+00                | 4./43.02           | 5,085,+02                            | 3, 194= 03                     | 2.944=02                   |
| 2.400=+61                      | 3.40/.+00                | 2.384»°02          | 4,484.402                            | 3,474 <u>,</u> =03             | 3.489=02                   |
| 2.200*+01                      | 3,693,+00                | 6,080,02           | 3,9750+02                            | 3,/66 <b>⊳</b> ≖03             | 4,106=02                   |
| 2.600=+01                      | 3,991#+00                | 6,832=02           | 3,541++02                            | 4,069,=03                      | 4.002002                   |
| $2 + 100 \times + 01$          | 4+299+00                 | 7.643.02           | 3.169.+02                            | 4.384.03                       | 5. 28 28 2 02              |
| 2,800=+01                      | 4.610 +00                | 8,2 30=02          | 2,848=+02                            | 4./09.=03                      | 6.454=02                   |
| 5. 200×+01                     | 4, 74/#+00               | 7,440=02           | 2.570**02                            | ₽:04₽≈°03                      | /• 423** 02                |
| 3.000=+01                      | 5,28/#+00                | 1.044.01           | 2,320=+02                            | 5,39   <u>⇒</u> ≣ 0.3          | 8,499=702                  |
| 3.100x+01                      | 2:03/#+00<br>5:007       | 1+121#=01          | 2.110002                             | ວະ/40ສ <b>ຫ</b> ຽວ             | A.0010+05                  |
| S, 200≠+01                     | <b>5,997 b</b> + 00      | 1+ 20 4# " []      | 745 + 02                             | 0,     0p = () 3<br>6 407 = 57 | 1.099.01                   |
| 3.300=+01                      | 0,300 p+ 00              | 1.004#=01          | 1.1020+02                            | 0,470,00"]J                    | 1.243=01                   |
| 5.400x+01                      |                          |                    | 1.0220+02                            | 0,070,♥[]3<br>7,075 = o.7      | 1.400**01                  |
|                                | 7 534 + 55               | 1 786 -01          | (77 + 02                             | 7 680 - 03                     | 1.5/2000                   |
| 5.000x+01                      | 7 042 +00                | 1.935.001          | 1,37/0402                            |                                | 1.759#*()                  |
| <b>∀</b> •/UU⊭+01<br>3 800 +01 | 7,742×400                | 2 092              | 1,2700+02                            | 8 525 -03                      | 1.9020001<br>2.9830001     |
|                                |                          | 2 256              | 1.1000+02                            | 8 960 - 03                     | 2+103#=() <br>2-4715=04    |
|                                |                          | 2.420.00           |                                      | 0,403.=03                      | 2,421**01                  |
|                                | 9 665.+00                | 2.6.9              | 1 • 0 2 1 # • 0 2<br>9 5 2 6 • • 0 1 | 9.85603                        | 2 4 5 6 4 4 1              |
| 4.200+01                       | 1 012+01                 | 2.708              | 9.9000000                            |                                | 3 2540-01                  |
| 4.300.+01                      | 1.050.+01                | 2.995.01           | 8.342.+01                            | 1.079.02                       | 3. 5650=01                 |
| 4.40.0.+01                     | $1 \cdot 1 \cdot 4 + 01$ | 3.200.01           | 7.029.+01                            | 1.126n=02                      | 3.087#*01                  |
| 4.5nn+61                       | 1. 152.+01               | 3.413.=01          | 7.36 Am+ n i                         | 1.175. 02                      | 4. 230 - 01                |
| 4.6an+al                       | 1.200.+01                | 3.635. 11          | 6.931±+01                            | 1.224. 02                      | 4.574== 01                 |
| 4.700+01                       | 1.249.+01                | 3.866. = 11        | 6.538m+ni                            | 1.274. = n2                    | 4. 94 10 = 01              |
| 4.8nn+41                       | 1.299.+01                | 4.105.01           | 6.176.+n1                            | 1.324 02                       | 5. 5230-01                 |
| 4.9 nox + ol                   | 1.349 + ni               | 4.352              | 5.044.+01                            | 1.376 = n2                     | 5./22»=ni                  |
| >.nnn≠+al                      | 1.4n0±+n1                | 4.6 <sub>0</sub> 9 | 5.537 .+ n i                         | 1.428. • n2                    | 6. j37=ni                  |
| <b>⊅</b> ,100±+01              | 1,45 l±+ni               | 4.874 <u></u> ni   | 5.254 + n1                           | 1,48 n= n2                     | 6. j7 n#= n i              |
| 5.200x+01                      | 1,504 <b>.</b> +01       | 5,148,01           | 4,992 <b>.</b> +ni                   | 1.533 12                       | 7.a19.⊭n1                  |
| 5.300x+01                      | [,550_+ μ]               | 5,4310"01          | 4,/49.+11                            | 1,587 = n2                     | 7,485×=ni                  |
| 5.400+01                       | 1,60%+01                 | 5,72301            | 4,524.0+01                           | 1.64 1.0-02                    | 7.969×ni                   |
| 5.500x+01                      | 1.663.+01                | 6,023,001          | 4,315.+11                            | 1,696= 02                      | 8.4710-01                  |
| 5.600x+01                      | 1,717+01                 | 6,333#=0           | 4,120,+01                            | 1.751.02                       | 8. <b>99</b> , <b>•</b> •1 |
| 5.700x+01                      | 1,772+01                 | 6,651=01           | 3,939+01                             | 1.8 <sub>0</sub> 7.=02         | 9.28**01                   |



| UIAMETER VELOCITY                     | RE                        | DRAG COEF                | RELAX: TIME             | .98 DIST           |
|---------------------------------------|---------------------------|--------------------------|-------------------------|--------------------|
| Þ,800≠+01 1,827≠+01                   | 6,979=-01                 | 3.769=+01                | 1.863=-02               | l+un8≠+0n          |
| $5,900 \pm 01$ [,883 $\pm 0$ ]        | 7,315m=01                 | 3.6   <b>n</b> +n        | 1,920,02                | 1.166+00           |
| 6.000=+01 1.939=+01                   | 7.661.801                 | 3,463+11                 | 1.977.=02               | 1.125*+00          |
| 6,100=+01 1,995=+01                   | 8,015,*01                 | 3,324,+11                | 2,035,02                | 1. 186#+00         |
| 6,200x+01 2,052x+01                   | 8,379, mj                 | 3.194.+01                | 2.093 02                | 1.249=+00          |
| 6.300=+01 2.110=+01                   | 8,751=01                  | 3,072++01                | 2,151=02                | 1.314+00           |
| $6.400 \pm 01$ 2.167 $\pm 01$         | 9,133,001                 | 2,957_+01                | 2,210,=02               | 1.381=+00          |
| 6,500++01 2,225++01                   | 9,524 01                  | 2,849,+01                | 2,269,=02               | 1.4490+00          |
| 6,600x+01 2,283x+01                   | 9,924,01                  | 2.747 =+ 01              | 2,329.02                | 1. 20 + 00         |
| 6,700=+01 2,342=+01                   | 1,033,+00                 | 2,651#+01                | 2,388,=02               | 1. 992=+00         |
| 6,800x+01 2,401x+01                   | 1,075,+00                 | 2,560,0+01               | 2 <b>,449,-</b> 02      | 1.067=+00          |
| 6.900x+01 2.461x+01                   | 1,118,+00                 | 2.4730+01                | 2,509=02                | 1.743#+00          |
| 7+000++01 2+520++01                   | ∣,∣62∞+00                 | 2,392+01                 | 2,570=02                | 1.822=+00          |
| 7.100=+01 2.580=+01                   | 1.206=+00                 | 2.314+01                 | 2,631,0=02              | 1.902+00           |
| 7.200**01 2.641**01                   | 1,252=+00                 | 2.241+01                 | 2,693 02                | .984=+00           |
| 7+300=+01 2+701=+01                   | 1,299,+00                 | 2.171=+01                | 2,755,02                | 2∙u68≠+00          |
| $7.400 \pm 01$ 2.763 $\pm 01$         | <b>,</b> 346 <b>∍</b> +00 | 2,104=+01                | 2,817.02                | 2,155=+00          |
| 7.500++01 2.824+01                    | 1,395,+00                 | 2.041=+01                | 2,880,02                | 2.243#+00          |
| 7.600#+01 2.886#+01                   | 1,444,+00                 | <b>.</b> 980 <b>=</b> +0 | 2,943.02                | 2.33 <b>*</b> +00  |
| /+700++01 2+949+01                    | 1.495.+00                 | 1.922=+01                | 3, <sub>00</sub> 7,,-02 | 2.426#+00          |
| 7.800×+01 3.0[[±+0]                   | 1,547=+00                 | .867 <b>±</b> +0         | 3,071=02                | 2∙>2 <b>°</b> +00  |
| 7.900=+01 3.075=+01                   | 1.299.*00                 | 1.014.*01                | 3.135.02                | 2.016=+00          |
| $8 \cdot 000 + 01 = 3 \cdot 138 + 01$ | 1.653.+00                 | 1.763.+01                | 3.200.02                | 2./15=+00          |
| $v_{+} _{00=+01}$ 3.203=+01           | 1.708.+00                 | 1.7 4.+01                | 3,266,02                | 2.815+00           |
| $8,200 \pm 01$ $3,261 \pm 01$         | 1./64.+00                 | 1.66/#+01                | 3.3320-02               | 2.418=+00          |
| 8,300x+01 3,333x+01                   | 1.851*+00                 | 1+622=+01                | 3,399=02                | 3. 022**00         |
| 0,400x+01 $3,399x+01$                 | 1,880,,*00                | 1,578,+01                | 3.466»=02               | 5.129#+00          |
| $9,200 \pm 01$ 3,402 $\pm 01$         | 1. 7 39 = + 00            | 1,530 m + 01             | 3, 234 = 02             | 3.23/#+00          |
| 0,000x+01 $3,232x+01$                 | <.000»+00                 | 1.490±+01                | 3,002.02                | 3.348#+00          |
|                                       | 2.002.00                  | [,4 <b>7/</b> , • 0]     | 3,0/ =02                | 3,40   # + 00      |
|                                       | 2,120,0700                |                          | 3,741=02                | 3.5/50+00          |
|                                       | 2 256 +00                 | 347.+01                  | 3 883 -02               | 3 8 1 - + 00       |
|                                       | 2.324.+00                 | 1.313+*01<br>1.313+*01   | 3,954,*02               | 3,011=+00          |
| 9.200 + 01 $3.949 + 01$               | 2.392.+00                 | 1.280+01                 | 4.027.02                | 4                  |
| 9.300 + 01 $4.021 + 01$               | 2.462.+00                 | 1.248.+01                | 4.100.02                | 4. 18 ma + 0 n     |
| $9.4nn_{+}n1$ $4.n93_{+}n1$           | 2,534,+10                 | 1.217.+01                | 4.174.*02               | 4.308=+00          |
| 9.5nd+n1 4.166+1                      | 2.6n6.+nn                 | 1.188 <b>.</b> +ni       | 4.249 - 02              | 4.437+10           |
| 9.6nn+n1 4.24n+n1                     | 2.68n.+00                 | 1.159m+n1                | 4.324 - 02              | 4. 568#+11         |
| 9.7 nn+ ni 4.315+ ni                  | 2.756.+00                 | i. 131.+ni               | 4.400.02                | 4./02#+00          |
| 9,800#+01 4,389 <u></u> +01           | 2,832.+00                 | i. in4=+ni               | 4,476. 12               | 4,×37≠+nn          |
| 9,900=+01 4,464_+01                   | 2,910+00                  | r. ∩ <b>78</b> ∍+ni      | 4,553. 02               | 4.975 <b>*</b> *nn |
| 1.000*+02 4.540*+01                   | 2,989 <b>.</b> +nn        | 1.153 -+ 11              | 4,631 12                | 5.115#+nn          |
| 1.100**02 5.264**01                   | 3,813,+10                 | 8,6 5 <b>±</b> +nn       | 5,368 02                | 6.627 <b>#</b> +nn |
| 1,200=+02 5,902=+01                   | 4.664.+00                 | 7.476.+nn                | 6.019.02                | 8,349=+nn          |
| 1.300++02 6.589+01                    | 5,64 [ . + 00             | 6,497 <b>+</b> 00        | 6,720=02                | 1.u28#+01          |



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| DIAMETER                  | VELOCITY               | RE                 | DRAG COEF                 | RELAX TIME                  | .98 DIST     |
|---------------------------|------------------------|--------------------|---------------------------|-----------------------------|--------------|
| 1.400=+02                 | 7.284.+01              | 6,715=+00          | 5,720 × 00                | 7,428=02                    | 1.242=+01    |
| 1.200=+02                 | 7,985=+01              | /,886_+00          | 5,100++00                 | 8.142.02                    | 1.476#+01    |
| 1,600±+02                 | 8,690+01               | 9,155m+00          | 4,598,+00                 | 8.861.=02                   | 1./30*+01    |
| 1./00x+02                 | 9,390,+01              | 1+052=+01          | 4.17/0+00                 | 9,283, 02                   | 2.004=+01    |
|                           | 1+011+02               | 1+198+101          | 3,823,00                  | •   <b>\$</b>    <b>#</b> = | 2.297+01     |
|                           | +0°4±+02               | 1,354.070          | 3.222=+00                 | 1.103=01                    | 2.010**01    |
| $4 \cdot 000 + 02$        |                        |                    | 3,263,00                  | +  .76 <u>⇒</u> ₹ [)        | 2, 94   =+01 |
| 2.200-+02                 | 1.296.+02              | 090m+[]            |                           | 1 30                        | 3.290=+01    |
| 2.300++02                 | 1.367.+02              | 2.070.000          | 2.0700+00                 | 1 394 01                    |              |
| 2.400++02                 | 1.438.+02              | 2,272,+01          | 2,071,0+00                | 1.466.=01                   |              |
| 2.500++02                 | 1.509+02               | 2,484 + 01         | 2 383 + 00                | 1.539.01                    | 4 463 401    |
| 2.600+02                  | 1.579.+02              | 2.704.+81          | 2,262.+00                 | 1.01                        | 5 08 4 7 1   |
| 2.700 + 02                | 1.650.+02              | 2.933.+01          | 2,153m+nn                 | 1.682 m n l                 | 5.7500+01    |
| 2,800++02                 | 1.720+12               | 3.171.+01          | 2.054.+00                 | 1.754                       | 6.216#+01    |
| 2.900++02                 | 1.790.+02              | 5,4180+01          | 1.964 <b></b> + nn        | 1.825.01                    | 6.699+11     |
| 3.000=+02                 | 1.860.+02              | 3,674,+01          | j.683∞+00                 | 1.896m = 01                 | 7, 196=+ 11  |
| 3.100++02                 | 1+929 <u>+</u> 02      | 3,938=+01          | 1.808.+00                 | 1,967 <b>,</b> ≡01          | 7./17.+01    |
| 3.200=+02                 | 1.998.+02              | 4,210+01           | 1.739=+00                 | 2,038.01                    | 8.233=+01    |
| 3,300=+02                 | 2.067.+02              | 4.491.+01          | 1.676.+00                 | 2.108×*01                   | 8. /73=+01   |
| 3.400=+02                 | 2+135+02               | 4,781=+01          | <b>,</b> 6 8 <u>,</u> +00 | 2, 78, 70                   | 9.326=+01    |
| 3,500=+02                 | 2.204.+02              | 0+a80,c            | 1.564=+00                 | 2,247, 01                   | 9,0930+01    |
| 3,000#+82                 | 2.271.02               | <b>2,384∞+0</b>    | 1.514.+00                 | $2, 3 6_{n} = 0 $           | 1.147=+02    |
| 3./00x+02                 | 2,357,+02              |                    | 1.468.+00                 | 2,385=01                    | 1.107=+02    |
|                           | $2 + 40^{4} + 02$      |                    |                           |                             | 1.10/#+02    |
|                           | 2,7/0,702              | 6 688.+01          | .346 <u>.</u> +00         |                             | 1.229##02    |
| 4.100++02                 | 2, 505 = + 02          | 7.033-+01          | 1,040g+00                 | 2,20,50,00                  | 1+272#*()2   |
| 4.200++02                 | 2.671+02               | 7.387+∩I           | 1.278 <b>+</b> +00        | 2,724.=01                   | 1.4210+02    |
| 4.3n0x+02                 | 2.730.+02              | 7.748.+ GI         | 1.240stnn                 | 2.790.01                    | 1.487=+02    |
| 4.400+62                  | 2.801.+02              | 8.116±+11          | 1.217.+00                 | 2.857. mi                   | 1. 354 # 02  |
| 4,500+12                  | 2, 666, + 02           | 8,492.+01          | 1.189±+nn                 | 2,923. 01                   | 1.623=+12    |
| 4.000+12                  | 2.930.+02              | 8,876#+D           | 1.162.+00                 | 2,988 01                    | 1.092*+12    |
| 4.700++02                 | 2,994,+02              | 9,267=+01          | 1.138 m+00                | 3,054=01                    | 1.1630+02    |
| 4.800+02                  | 3.0 <sup>58</sup> .+02 | 9,065=+01          | 1.114=+00                 | 3.1180-01                   | 1.034++02    |
| 4,900=+02                 | 3.1210+02              | 1.00 <b>7.</b> +02 | 1.091=+00                 | 3, 183, -01                 | 1. 707 + 02  |
| 5,000*+02                 | 3,184×+02              | 1.048=+02          | 1.070+00                  | 3.247. = 01                 | 1.98 0#+02   |
| 5.100++02                 | 3,247 + 02             | 1,090=+02          | 1.050-+00                 | 3,31 0-01                   | 2.054+02     |
| 2.200×+()2                | 3,309+02               | 1,133=+02          | 1.031.+00                 | 3, 574, = 01                | 2.129#+02    |
| 2,300x+02                 | 3.371.+02              | 1,176,+02          | 1.012+00                  | <b>3.</b> 438∞*01           | 2.205+02     |
| 2:400x+02                 | 5,455m+02              | 1+221++02          | 9,940,01                  | 3,200x=01                   | 2.585+05     |
| 2.200x+02                 | 3.4940+02              | 1,202#702          | 9,//¤¤•0                  | 3,203=01                    | 2.300*+02    |
| $2 \cdot 0        +    2$ | 3 615 +02              | 1.357              | 9,010 <b>≈</b> •01        |                             | 2.439#+02    |
| 5.800-+02                 | 3.675 102              | 1.404.+02          | 9,707#70] <br>0 517       |                             | 2.210**02    |
| 5.900±+02                 | 3.735.+02              | 1.451.+02          |                           | 3.809                       | 2.77000002   |

| DIAMETER                             | VELOCITY                            | RE                    | DRAG CUEF                       | RELAX TIME           | ,98 DIST                |
|--------------------------------------|-------------------------------------|-----------------------|---------------------------------|----------------------|-------------------------|
| 6.000x+02                            | 3,795_+02                           | I.499 <b>*</b> +Q2    | 9.041==01                       | 3.87 (m= 0 i         | 2.16   # # 02           |
| 6,100*+02                            | 3,854,+02                           | 20+1,548ه+02          | 8,912=701                       | 3,930#*01            | 2. 144++02              |
| 6.200×+02                            | 3,9 3,+02                           | 1,598=+02             | 8,78 <u>7</u> #*01              | 3,990=01             | 2.927=+02               |
| 6.300 + 02                           | 3,972,+02                           | 1.648=+02             | 8,667=01                        | 4,050#=01            | 3.011#+02               |
| 0,400+02                             | 4.030++02                           | 1,098.+02             | 8,552=01                        | 4.110#=01            | 3.096=+02               |
| 0,500x+02                            | 4,088,+02                           | 1,750=+02             | 8.441=01                        | 4,  69µ≠0 <br>4, 007 | 3.181#+02               |
| 0,000#+02                            | 4.140.+02                           | 1,002=+02             | 8,334=01                        | 4,22/p=0             | 3.207#+02               |
|                                      | 4,203+02                            |                       | 0,23[#*[]                       |                      | 3 44 4 4 7 7            |
|                                      | 4,2000+02                           | 1, 20/ # 102          | 8 030                           | 4 4 0 2 0 1          | 3 29 + 02               |
| 7.000.+02                            | 4.373.+02                           |                       | 7 943                           | 4,459,*01            | 3.617 + 02              |
| 7.100.+02                            | 4, 429, + 02                        | 2.071++02             | 7.854 <b>•</b> 1                | 4.517.01             | 3. / 170+12             |
| 7.200±+62                            | 4.485.+02                           | 2.126.+02             | 7.768 n n l                     | 4.57401              | 3. /96++ 12             |
| 7.300+12                             | 4.541.+02                           | 2,183,+12             | 7.684                           | 4,630,001            | 3,087++02               |
| 7.400+12                             | 4,596,+12                           | 2,239,+02             | 7.0n3=*n1                       | 4,687.01             | 3. 478 * 02             |
| 7,500++02                            | 4,651,+02                           | 2,297.+02             | 7,525,01                        | 4,743,001            | 4. <sub>0</sub> 69#+02  |
| 7,600=+02                            | 4,7 <sub>0</sub> 5 <sub>m</sub> +02 | 2.355=+02             | 7,449 <b>,</b> •01              | 4,798, <b>*</b> 01   | 4.161=+02               |
| 7.700*+02                            | 4.760.+02                           | 2.413=+02             | 7.376.00                        | 4,854,=01            | 4.254+02                |
| 7.800*+02                            | 4,814.+02                           | 2,472=+02             | 7.304.01                        | 4,909                | 4.347**02               |
| 7.900±+02                            | 4,868 + 02                          | 2,532=+02             | 7,235=01                        | 4,964,,=01           | 4.441#+02               |
| 8.000*+05                            | 4,921+02                            | 2,592=+02             | 7,168,01                        | 5,019p=01            | 4.535**02               |
| 8.100#+02                            | 4,975,+02                           | 2.053=+02             | 7.103.0701                      | 5.0/3p=0             | 4.629#+02               |
| 0.200x+02                            | 5,020 <b>s+0</b> 2                  | 2,777,+02             | /•040₽70 <br>4 979.∎0           | 2+12/p=01            | 4.720#*02               |
| 5 4 0 0 x + 0 2                      | 2+[]0()#*()2<br>5 133 +02           | 2 839.+02             | 6.9/7#*[]]<br>6.9/9==01         | 5.234.=01            | 4 4 4 4 4 4 4 4 4 4 7 2 |
| 0,700x+02                            | 5, 185, +02                         | 2.902++02             | 6 861-201                       | 5.287                | 5                       |
| 0.000+02                             | 5.237.+02                           | 2.966.+02             | 6 005-001                       | 5.34                 | 5. 10**02               |
| 5.700 <b>∗</b> +02                   | 5,289,+02                           | 3. n3n.+ n2           | 6.75n • ni                      | 5.393. 01            | 5. / 17 =+ 12           |
| 0.00x+02                             | 5.340.+02                           | 3.094.+02             | 6.697. nj                       | 5,446=01             | 5.305++02               |
| 8,900x+02                            | 5, 39 l=+ n2                        | 3, 159 + 02           | 6,645 <u>.</u> .ni              | 5,498,-01            | 5.403=+02               |
| 9.000++12                            | 5,442,+02                           | 3.225.+02             | 6,595m+01                       | 5,550×*01            | 5.202+02                |
| 9.100++02                            | 5,493,+02                           | 3,29 1=+ 02           | 6,54501                         | 5,601=01             | 5.001*+02               |
| 9.200*+02                            | 5.543+02                            | 3,358±+02             | 6,498, BI                       | 5,053,001            | 5.101*+02               |
| 9.300x+02                            | $5.593_{m}+02$                      | 3,425=+02             | 6,•45   •• 0                    | 5, / 04p = 01        | 5.800**02               |
| 9.400x+92                            | 5.643+02                            | 3,493 <b>.</b> +02    | 6,402=01                        | <b>う。/ うう</b> … = () | 5.901#+02               |
| 7.500x+02                            | 5,693,+02                           | 3, 26   = + 02        | 6. 36 B . 01                    | <b>5,0</b> [0#=[]]   | 0.U01≞+02               |
| <b>7</b> •000±+02                    | 5,742+02                            | 3,030±02<br>3,690 ±02 | 0.,0  0 p = []  <br>4 075 = 2 ( |                      | 0.1020+02               |
|                                      |                                     | 3 769 + 02            | 0, 2/2≡*01<br>6 234==01         | 5 956 - 01           | 0.204#+02               |
| 2,900 <u>,</u> ±02                   | 5,889 ± nº                          | 3.839-+02             | 0.20787U <br>6.194_=ni          | 6.006-01             | 6.408±402               |
| -•••UU#*U4                           | 5,938_+n2                           | 3.91n+n2              | 6.155                           | 6.055.eni            | 6.510#+02               |
| ++UUU≖+US                            | 5,986_+n2                           | 3.981 + n2            | 6.110seni                       | 6.105m=01            | 6.0.13#+02              |
| 1.020++03                            | 6. n34_+n2                          | 4.053=+02             | 6. n <b>79</b> ∍= ∩ i           | 6.154m = 01          | 6./16=+02               |
| 1. <u>1</u> 3 <u>1</u> x+ <u>1</u> 3 | 6, n82_+n2                          | 4.125.+02             | 6.042=*01                       | 6,202=01             | 6.819#+12               |
| 1.040 + 03                           | 6,130.+02                           | 4.198.+02             | 6,007=01                        | 6.2510=01            | 6. 423 + 02             |
| 1.050=+03                            | 6.177.+02                           | 4.2710+02             | 5,972# 01                       | 6.299=01             | 7. u27»+02              |

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| DIAMETER       | VELOCITY                            | RE                               | DRAG COEF               | RELAX TIME                         | .98 DIST                 |
|----------------|-------------------------------------|----------------------------------|-------------------------|------------------------------------|--------------------------|
| 1+000×+00      | 9, <sub>0</sub> 77 <sub>0</sub> =03 | 5,977 <b>#</b> #86               | 3,887.+06               | 9,257 <u>*</u> +06                 | 1. 956==07               |
| 1.100=+00      | 1.097.02                            | 7 <b>.</b> 944 <b>.</b> *06      | 2,933=+06               | 50 = م 1   1   1                   | 2.0610=07                |
| ·1.200*+00     | 1.304==02                           | 1;030 <b>*</b> *05               | 2,268,+06               | , <b>3</b> 29 <b>∍</b> =05         | 4. 148 - 07              |
| 1.300++00      | 1,528_=02                           | 1.308.*05                        | 1.789.+06               | 1,559 <b>.</b> =05                 | 5.5710-07                |
| 1.400=+00      | 20 <del>-</del> ط 1,771             | I,633 <u>m</u> ≖05               | 1.436 <b>±+</b> 06      | .8 <u>0</u> 6 <b>₽</b> 05          | 7.488#=07                |
| 1.500*+00      | 2.031.02                            | 2.006=*05                        | 1.170±+06               | 2,072.*05                          | 9.561¤¤07                |
| 1.600.+00      | 2,310==02                           | 2,433 <sub>m</sub> =05           | 9,664=+05               | 2,355 m= 05                        | 1.276=06                 |
| 1./00=+00      | 2,600,02                            | 2,917.0*05                       | 8,071+05                | 2,05/p+05                          | 1.025**06                |
| 1,000#+00      | 2.720=02                            |                                  | 6,0][ <b>»</b> +[)>     | 2,7/0,707                          | 2. 141. 00               |
|                | 3.2760 02                           | 4 747 8 85                       | 5,/778 + 5              | 3 + 3   0 m = () 2<br>7 6 7 7 = ∴5 | 2.332**00                |
|                | 3,002×*02<br>7 049 - 02             |                                  | 4, 970                  |                                    | 3.100.00                 |
| 2 200++00      |                                     | 0,409 <u>8</u> ≋09<br>6 308-∎05  | 4,3076₹05<br>7 789.4a5  | 4 4 4 4 5 5                        | 3.//jam [0               |
| 2.300++00      |                                     | 7.206.205                        | 3,737840405             | 4.852.=05                          | 4.545#* 10<br>5.008++.06 |
| 2.400++00      | 5.179.02                            | 8.185.805                        | 0.693.+05               | 5.282==05                          | 5.420=+00                |
| 2.500++00      | 5.618.402                           | 9.249 mm n5                      | 2,56                    | 5.729.05                           | 7. 7. 7                  |
| 2.600*00       | 6 n75m n2                           | l.84n.a≅04                       | 2,279=+05               | 6.195. 75                          | 8.852#=06                |
| 2,700++00      | 6.550±*02                           | 1.165m=14                        | 2.030m+05               | 6,679, = n5                        | 1. n29## n5              |
| 2,800++00      | 7.043.02                            | 1.298.004                        | 1.027.+05               | 7,182,*05                          | •   9 n <b>≈</b> ≈ n 5   |
| 2.900++00      | 7,55302                             | 1,442=04                         | .645.+05                | 7,702=05                           | 1.369.05                 |
| 3.000=+00      | 8.08202                             | 1.596= 04                        | j,487∞+05               | 8,241=05                           | 1.567#• n5               |
| 3.100*+00      | 8.628.02                            | ,76  <b>#</b> 04                 | 1.348=+05               | 8 <b>,</b> 798,∎05                 | 1. /86== 05              |
| 3,200*+00      | 9,192=02                            | 1.937. 04                        | 1.227.+05               | 9,374,05                           | 2. 127 05                |
| 3.300x+00      | 9,774 <sub>m</sub> =02              | 2.124. 704                       | 1,119±+05               | 9,967, 105                         | 2.292.05                 |
| 3,400x+00      | • 0 <sup>3</sup> /m• 0              | 2.322. 04                        | 1.024+05                | •0 <sup>58</sup> ∞≖04              | 2. 28 20 • 05            |
| S, ⊃U()⊭ + U() | • 097 <b>=</b> 0                    |                                  | 9,08/0+04               | • 2  <b>•</b> 704                  | 2,8980=05                |
|                |                                     | 2.100 = 04                       | 0,030#404<br>7 052 + 44 | • 00µ≠84<br>⊧ 260 = n4             | 3,243=707                |
| 3 800-+90      | •220⊕•U <br>  295 - ∩               | 5 241.704                        | 7.5924 04               | 1.321.04                           | 3.010**05                |
| 3.900±+00      | 1.36401                             | 3.503.704                        | 6 795 + 04              | 1.391.04                           | 4 46305                  |
| 4.000++00      | 1,432,*01                           | 3.779.=04                        | 6.300m+04               | 1.463. • 04                        | 4. 438#= 05              |
| 4.100*+00      | 1.50701                             | 4.169.*14                        | 5.852.+14               | 1,537p=04                          | 5.449=7.15               |
| 4.200*+00      | 1,58 Lp+01                          | 4.374. = 04                      | 5.445.+04               | 1.013p=04                          | 5.999==05                |
| 4,300=+00      | 1.658                               | 4,693 <u>s</u> =04               | 5, 075=+04              | 1,69 Dp = 04                       | 6. 289 05                |
| 4,400=+00      | 1.735m 01                           | 5. U28. = 04                     | 4,738,+04               | ,77 <sub>0=*0</sub> 4              | 7.222.05                 |
| 4.500≠+00      | 1.0120-01                           | 5.37804                          | 4.4310+04               | <b>,</b> 85  <b>,</b> *04          | 7.7000005                |
| 4.600=+00      | 1,896, 01                           | 5, 1440=04                       | 4.149.+04               | 1.934. 04                          | 8.024= 05                |
| 4./00=+00      | 1.980.01                            | <b>6</b> , 126 <b>=</b> 04       | 3,8910+84               | 2,019.04                           | 9.397# <del>*</del> 05   |
| 4,600+00       | 2.062.01                            | 6,525¢=04                        | 3,053,+14               | 2.105 04                           | 1. u22==04               |
| 4,700=+00      | 2.1510-01                           | 0, Y4   p = 04                   | 3.432=+04               | 2,194,-04                          | 1.10=04                  |
| 2.000**00      | 2,240=01                            | 7 805 m c4                       | 3,2340+04               | 2.2046=04                          | 1.2030-04                |
|                | ∠,33Us*[]] .<br>2,402 - 0:          | 7,022 <b>9</b> ≢04<br>8 204 = 64 | 3,040×+04               | 2, 3/0p=04                         | 1.302=04                 |
|                | 2+7260701                           | 0+674x=04<br>8.781-+04           | 2,0/00+04               | 2.566 -04                          |                          |
| -•             | 2,612,=0+                           | 9,287=n4                         | 2 · / 1/ = 7 (14)       | 2:563.=0A                          | 1.5104704                |
| 5.500±+00      | 2.709.01                            | 9,6 <u>12</u> , - <u>1</u> 4     | 2.432.+14               | 2.763.+14                          | 1./59.mm/14              |
|                |                                     | · · · · ·                        |                         | u ·                                |                          |

| DIAMETER                                | VELOCITY                     | RE                     | DRAG COEF                  | RELAX TIME                                   | ,98 UIST                     |
|---|------------------------------|------------------------|----------------------------|--|------------------------------|
| b 600 1 40                              | 0 8 9 • •                    | 1 - 7/ 7               |                            |  |                              |
|   | 2+007=01                     | 1.000×00               | 2,304=+04                  | 2,004, 7,004                                 |                              |
| 2.800×+00                               | 2+7   0=7 0                  | 1. 150-203             | 2.1020+114                 | 2. 20/2 04                                   | 2. 290 04                    |
| 5 900-+00                               | 3 1 7 - 01                   | 1.211.03               | 2. (7.7 + 0.4              | 3,0/20-04                                    |                              |
| 6. nnn++ nn                             | 3.223                        | 1.273. n3              | 1.875.+04                  | 3.287.en4                                    | 2. 320×11+<br>2. 49 mm = 0.4 |
| 6.100×+00                               | 3.332.01                     | 1.338.#n3              | 784.+04                    | 3.397. ± n4                                  | 2.059=04                     |
| 6.200×+00                               | 3.441m=01                    | 1.405.003              | 1.7n0++n4                  | 3.509-04                                     | 2.838. 14                    |
| 6.3nn=+nn                               | 3.553                        | 1.474m=n3              | 1,02n=+04                  | 3.623 14                                     | 325**4                       |
| 6,400=+00                               | 3,667                        | 1,545,=13              | 546,+14                    | 3,739_=04                                    | 3.221=14                     |
| 6.500+00                                | 3,782,-01                    | 1.6 9m=03              | 1,470 <b>_+</b> 4          | 3,857, - 04                                  | 3. 426= 14                   |
| 6,600x+00                               | 3,899=01                     | 1.695=03               | 1.410=+04                  | 3,976,=04                                    | 3.0420-04                    |
| 6,700=+00                               | 4,018,01                     | 1.73 <u>n = 0</u> 3    | 1,348m+04                  | 4. <sub>0</sub> 97 <b>⊳</b> • <sub>0</sub> 4 | 3.867= 04                    |
| 6,800=+00                               | 4,139=01                     | 1.853 <b>.</b> 703     | 1,289 <b>,+</b> 14         | 4.220=*04                                    | 4.102.04                     |
| 6,900#+00                               | 4,26   = 0                   | 1,936n=03              | <b>.</b> 234 <b>∍</b> +04  | <b>4,345</b> ₽≭04                            | 4.348=04                     |
| /+000#+00                               | 4,385=01                     | 2,021 <b>#</b> #03     | <b>.</b>  82 <b>∞</b> +04  | 4,472,=04                                    | 4.005=-04                    |
| <u>/</u> +100=+00                       | 4,511,0=01                   | 2,109 <b>.</b> =03     | <b> .</b>  33 <b>⊮</b> +∏4 | 4,600,04                                     | 4.873=04                     |
| 7.200++00                               | 4,639=01                     | 2,199 <b>n</b> =03     | 1.087 <b>±</b> +04         | 4,73   = 04                                  | 5.1530004                    |
| 1.300×+00                               | 4,769.01                     | 2.292.03               | 1+043p+04                  | 4,863,=04                                    | 5.4450004                    |
| /+400×+00                               | 4,900=01                     | 2,38803                | 1.001++04                  | 4.997.04                                     | 5.748 = 04                   |
| /.200=+00                               | 5.0330-01                    | 2,486                  | 9.61/.+03                  | 5,1320-04                                    | 6. <sub>0</sub> 65∺⇒04       |
| /.00+00                                 | 5,168,01                     | 2,586,03               | 9.243.+13                  | 5,270×04                                     | 6.394=04                     |
| / • / 00 <b>* +</b> 00                  |                              | 2.090.03               | 8,087,0403                 | <b>2,4</b> 0 <b>7*</b> 04                    | 0./36=04                     |
| / · · · · · · · · · · · · · · · · · · · |                              | 2.4.790.8 7 0.3        | 8,252=+03                  |  | 7.0920=04                    |
| 1.70U±+00                               | 5,000 m = [] [<br>5,705 - 0) | 2,704»=03              | 8.233#*[]3<br>7 659 + 2    | 5,094 p 04                                   | 7.402**04                    |
| ♥ ↓ U U U # ♥ U U                       | 5 469 -01                    | 5.010m=03              | 7.7270703                  | 5 945 - 04                                   | 7.040×004                    |
| 8 200**00                               |                              | 3 248.003              | 7,0070403                  |  | 8 5 8 4                      |
| 8.300**00                               |                              | 3.368mm.03             | 7,007±+03                  | 6.284.=04                                    | 987.m.n.4                    |
| 0,400+00                                | 6.311.01                     | 3.491.00               | 6.052.+n3                  | 6.436.• p4                                   | 9.332004                     |
| ο.<br>200±+00                           | 6.462m+ni                    | 5.617.03               | 6.014n+03                  | 6, 59 n 04                                   | 9. 9930 = 04                 |
| 6,600×+00                               | 6.615.01                     | 3.746 m = n3           | 6. 380 + n.3               | 6.74504                                      | 1. 147                       |
| 8,700x+00                               | 6.76901                      | 3.878 03               | 6.169 + 13                 | 6,913=14                                     | 1. 196== 03                  |
| 8,800++00                               | 6,925,-01                    | 4.013.03               | 5,962+03                   | 7,062 04                                     | 1. 148== 03                  |
| 8,900=+00                               | 7.083.001                    | 4.151=03               | 5,764 + 03                 | 7.223. • 04                                  | 1.201=03                     |
| <sup>9</sup> •000*+00                   | 7,243.*01                    | 4,2920 03              | 5,574 <b>,+</b> 03         | 7,386 <b>»</b> ≖ <u>0</u> 4                  | 1.255=03                     |
| 2.100×+00                               | 7.402=01                     | 4,437,=03              | 5.393±+03                  | 7,55   » + 04                                | 1.512¤*03                    |
| 9,200*+00                               | 7,56°=01                     | 4,585. 03              | 5.220+03                   | 7, 7   8 . * 04                              | · 37 <u>0</u> ™ ■ 03         |
| 9.300=+00                               | /./33m=01                    | 4,736 03               | 5, <u>0</u> 53±+03         | 7,886s+04                                    | 1.4310-03                    |
| ¥•400≠+00                               | 7.900.00                     | 4.890.03               | 4.894.+03                  | 8,056,-04                                    | 1.493=03                     |
| 7.200×+00                               | 8,057 = 01                   | 2.04/2=03              | 4. / 4.20+ 03              | 8,228,=04                                    | 1. 228 = 03                  |
|   | 0,2370-01                    | 2.200# 03<br>5.470 7   | 4, 590, + 03               | 0.402.04                                     | 1.624=03                     |
| 7 • / () () <b>* †</b> () ()            |                              | 5,5/2=03               | 4.45.2.0+03                | 0,2// <u>s</u> .04                           | 1.073==03                    |
| ו¤UU≭+.00<br>9.900±+00                  | 0 20 2m 0 0                  |                        | 4,02,10*()3                |  | 1. 10,30 - 03                |
|   | 8.939.eni<br>9.7018*01       | -+/  #"UJ<br>5.886.202 | 4.1768-103                 | 0.1.5_#04                                    | 1.000000000                  |
| I = UUU≢ = UI<br>I = 100 = 4 01         |                              | 7.831-003              | 4.800×100<br>7.59-447      | 1.10203                                      | 1+711=703-<br>0 /04=02       |
| ···UU#·*UI                              | 1.601W_00                    | ·*•••!=~0              | U • (i ≠ * ≡ * () O        | i•iŲ⊂⊅‴U√                                    | <u>د،/70‴"</u> US            |

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| DIAMETER                   | VELOCITY                            | RE                                      | DRAG COEF                          | RELAX TIME                          | .90 DIST                 |
|----------------------------|-------------------------------------|---|------------------------------------|-------------------------------------|--------------------------|
| 1.200x+01                  | ,286 <b>,+00</b>                    | 1.016.0=02                              | 2,359 <b>#+</b> 03                 | ,3   <b>n=03</b>                    | 3, 956==03               |
| 1.300=+01                  | 1.509 <b>±+</b> 00                  | 1.2910-02                               | .857 <b>∍</b> +03                  | ,538 <b>n</b> ≖03                   | 5.444mm03                |
| l•400±+01                  | 1.749.+00                           | 1.612#*02                               | +489 <b>+</b> 03                   | 1,783 <u>m</u> =03                  | 7.5170703                |
| 1.200=+01                  | 2,000,+00                           | 1.982.02                                | 1,212+03                           | 2.046. 03                           | 9.036=03                 |
| .600**0                    | 2,281,+00                           | 2,4 <u>0</u> 3⊭≂02                      | 9.997=+02                          | 2,326.0703                          | 1.247 02                 |
| 1.700=+01                  | 2.574 + 00                          | 2,881#702                               | 8.347+02                           | 2,624,=03                           | 1.288#=02                |
| 1.000*+01                  | 2,883=+00                           | 3,417=02                                | 7.043 <b>*</b> *02                 | 2.940 03                            | 1.995+02                 |
| 1.900**01                  | 3,209=+00                           | 4.015**02                               | 5,999+02                           | 3,273 <b>∍</b> =03                  | 2.475==02                |
| 2+000**01                  | 3,553∍+00                           | 4,679=02                                | 5,153++02                          | 3,623,*03                           | 3. y37##02               |
| 2.100=+01                  | 3,913#+00                           | 5.4  #=02                               | 4,461#+02                          | 3,99003                             | 3.089==02                |
| 2.200=+01                  | 4,290,+00                           | 6.2140=02                               | 3,889,+02                          | 4,375 <sub>#</sub> #ე3              | 4.442=02                 |
| 2.300=+01                  | 4,683 <u>∍</u> +00                  | 7.092=02                                | 3,4 2++02                          | 4,776 <sub>m</sub> = <sub>0</sub> 3 | 5.304=02                 |
| 2.400=+01                  | 5.092.+00                           | 8,048=02                                | 3,011=+02                          | 5,193,=03                           | 6.2860002                |
| 2.500×+01                  | 5,518+00                            | 9,083.02                                | 2.671=+02                          | 5,627∎⇔ეპ                           | 7.398=02                 |
| 2.600*+01                  | 5,959.+00                           | 1.020×*01                               | 2,382+02                           | 6,077 <b>.</b> =03                  | 8.05   = 02              |
| 2.700++01                  | 6,416,+00                           | 1.141.01                                | 2.134=+02                          | 6,542 <b>.</b> •03                  | I. 006==01               |
| 2,600+01                   | 6,887 <u>+</u> 00                   | 1,270×=01                               | 1,920=+02                          | 7,024. 03                           | 1.163##01                |
| 2.900*+01                  | 7,374 <u>m</u> +00                  | ,4 <u>0</u> 8∍≂0                        | 1,735=+02                          | 7,520 <b>,</b> "03                  | 1.337=01                 |
| 3.000±+01                  | 7 <b>,</b> 876 <b>,</b> +00         | ,556=*0                                 | 1.573=+02                          | 8, <u>0</u> 32,-03                  | 1. 531=01                |
| 3.100x+01                  | 8,392.+00                           | 1,713=01                                | .432 <b>±+0</b> 2                  | 8,558×°03                           | •745¤♥0                  |
| 3.200=+01                  | 8,922 <b>.</b> +00                  | <b> ,880#</b> "0                        | 1.3080+02                          | 9,098¤≈03                           | •A81m=0                  |
| 3.300+01                   | 9,460,+00                           | 2,057.01                                | 1,198,+02                          | 9,65303                             | 2,240==01                |
| 3,400x+01                  | 1.002#+01                           | 2.243.01                                | 1,105=+02                          | 1,022==02                           | 2. >23#=01               |
| 3,500±+01                  | 1.059=+01                           | 2,440=01                                | 1.010+02                           | 1.080.02                            | 2.832#=01                |
| 3,600x+01                  | 1.17.+01                            | 2,648,01                                | 9,39   <b>+</b> 0                  | 1.139.02                            | 3.169##01                |
| 3,700x+01                  | 1.17/0+01                           | 2,867. 01                               | 8.700=+01                          | 1,200,=02                           | 3, 235# 7 0              |
| 3,000x+01                  | $1.237 \pm 01$                      | 3,096==01                               | 8.080×+01                          | 1,262p = 02                         | 3. 732=01                |
| 3,900x+01                  | 1+299+01                            | 3, 336. * 01                            | 7,220+01                           | 1, 325, - 02                        | 4.362=01                 |
| 4.000x+01                  | 1. 36 2m + 0                        | 3.28/#*01                               | 7.0170+01                          | 1. 389 02                           | 4.011==01                |
| 4.100++01                  | ,420 <u>w</u> +0                    | 3,850ø=01                               | 6,563×01                           | 1,4540=02                           | 5.278001                 |
| 4.200++01                  | 1.491.+01                           | 4.12401                                 | 6.149 <b>.</b> +01                 | 1+22 =02                            | 5./67.01                 |
| 4.300x+01                  | 1.55/#+01                           | 4 • 4 () 9 # 7 ()                       | 5.//3#+01                          |                                     | 0.2/9##01                |
| 4.400×+01                  | [+02+±+0]                           | 4./02#*0                                | 5.43()=+()                         |                                     | 0.00000000               |
| 4.200+01                   | 1.0960+01                           | 2+010x=01                               | <b>5.</b>     / ⊭♥ []              | +/27p*02                            | 7.3//0701                |
| <b>4</b> •000 <b>±</b> +() | • / 0   <u>•</u> + []               | J, JJ J J J J J J J J J J J J J J J J J | 4,030,∎♥0                          |                                     | 1.4038501                |
| 4./00=+11                  | • <sup>0</sup> , 3 () <b>u</b> + () | 2,004p*()                               | 4.20/                              |                                     | 8.3/8#=01                |
| 4 • 8 () () # + ()         | 1+901+01                            | ○,00/                                   | 4,320+0                            | 20 - 200 - 02                       | 9.21/#=01                |
| 4.900×+01                  | 1,9/6=+01                           | 0,302=01                                | 4. [0.9+0]                         | 2+011=02                            | 9.8830=01                |
| 2.000=+()1                 | 2.043.+01                           | 0,/20µ≡0 <br>7 106 = 01                 | 3,090±+[]                          | 2,004=02                            | 1.024+00                 |
|                            |                                     | 7 406 -01                               | 3,/00#*01                          |                                     | [• [3]]»+0]              |
|                            |                                     | י אָטעדי<br>7 אָטע דון                  | 3,236=*[]]                         |                                     | 1.2020+00                |
|                            | 2.2040+01                           | 7,09/8701<br>R 311 - 01                 | 3.307m+()                          |                                     | 1.5050+00                |
|                            |                                     | ひょり[[#『U]<br>お 736、=n:                  | 3, C   0 # + []  <br>7 077 + 0 + 1 |                                     | 1.303#+00                |
|                            |                                     |   |                                    |                                     | I • 440 <b>₽ •</b> [] [] |
|                            | 2 + 40 0 m + []  <br>3 564 + 0      | 7 1 / J B7 U  <br>9 6 2 2 - 0 1         | 2,9400701                          | 2,23/0=02                           | 1,2020+00                |
|                            |                                     |   |                                    | / . U I # . T II/                   |                          |



| DIAMETER               | VELOCITY                           | RE                 | DRAG COEF              | RELAX TIME        | ,98 DIST                                |
|------------------------|------------------------------------|--------------------|------------------------|-------------------|---|
| 5.800 <b>x</b> +01     | 2.640m+01                          | i,008=+00          | 2.708=+01              | 2,692=02          | 1./13++00                               |
| 2.900#+01              | 2,71/0+01                          | 1,056,+00          | 2.001=+01              | 2,771=02          | 1,d08#+00                               |
| 6,000 <b>#</b> +01     | 2,795+01                           | I+104++00.         | 2,500+*01              | 2.850=02          | 1, 706++00                              |
|                        | 2,875+01                           | 1,154,00           | 2.402**01              | 2,930="02         | 2.007**00                               |
|                        | 2 9748+01                          | 1,207,00           | 5,3 0p+0               | 3,01,007,02       |   |
|                        | 3 iii + 0 i                        | 1,22/10/00         | 2.2320401              | 3 172.=02         | 2.21/#*00                               |
| 6.5nn.+nl              | $3 \cdot 191 + 01$                 | 1.366.+00          | 2 078 + 01             | 3, 254 = 02       | 2.4400+00                               |
| 0.6nn±+ni              | 3.272.+01                          | 1,422p+00          | 2.007.01               | 3.337m=n2         | 2. 556+100                              |
| 6.7 <u>00</u> =+01     | 3.353.+11                          | 1,479 <b>.</b> *nn | 1.939±+ni              | 3,420,02          | 2.075*****                              |
| 6.8 <u>00</u> +01      | 3.436.+01                          | 1.538s*nn          | 1.875s+n1              | 3. 5040=02        | 2. /97#+ nn                             |
| 6,900#+01              | 3,5 8,+01                          | 1,599×+00          | 1.814 <b>.</b> +n1     | 3,588µ=n2         | 2. 723*+nn                              |
| 7 . 000 + 01           | 3.602.+01                          | 1,660,+00          | 756 + 01               | 3,673=02          | 3. u <sup>5</sup>   * + 00              |
| Z•100=+01              | 3,680,+01                          | 1,723=*00          | 1,701++01              | 3,759,02          | 3.182=+00                               |
| 7•200 <b>≠</b> +01     | 3,771,+01                          | 1,788,+00          | 1,648,+ <u>0</u> 1     | 3,846==02         | 3. 317=+00                              |
| /,300*+01              | 3,85/+01                           | 1,854,+00          | 1,59/+01               | 3,934,02          | 3.455**00                               |
| 7+400*+01              | 3,947,01                           | 1,722=00           | 1,240.+01              | 4.022.02          | 3.390++00                               |
| 7.500=+01              | 4+032#+01                          | 2 262 + 20         | 1.202.701              | 4 1 1 2 = 0 2     | 3./40**00                               |
| 7.700#+01              |                                    | 2.135.*00          | 1.497.6+01<br>1.414+01 | 7+6020702         | 3,00/₽♥ <u>0</u> 0<br>4 37 <b>₽</b> ★00 |
| 7.800++01              | 4.301-+01                          | 2.209.*00          | 1.372++01              | 4.386             | 4. 9. 4. 00                             |
| 7.9 en#+ el            | 4.393 <sub>m</sub> +ni             | 2.285.+ 00         | 1.333×+01              | 4,48 n= n2        | 4.347#+00                               |
| b,000=+01              | 4,486 m+ 01                        | 2,363.+00          | 1.294 <b>.</b> +ni     | 4,574.= 02        | 4.207**00                               |
| 8.100x+01              | 4,580.+01                          | 2,443,+00          | 1,257.+01              | 4,670=02          | 4.071=+00                               |
| 8,200*+01              | 4,675.+01                          | 2.524.+00          | 1.222.+01              | 4,76702           | 4.037=+00                               |
| 8.300=+01              | 4,770+01                           | 2.607.+00          | <b> , 87∞+</b> ∩       | 4,86502           | 5. <sub>00</sub> 6 <b>*</b> +00         |
| ¢,400≠+01              | 4,86/0+01                          | 2,092=+00          | ,  54 <b>#</b> +[]     | 4,963.02          | 5. 790+00                               |
|                        | 4,962+01                           | 2.779.00           | 1.123=+01              | <b>5,063 *</b> 02 | 5.355=+00                               |
|                        |                                    | 2,007,00           | •U <sup>7</sup> 4∞♥U   | 5 263 - 02        | 5,334##())<br>5 /17****                 |
|                        | 5.260.+01                          | 3.048=+00          |                        | 5.36402           | 5 7030+00                               |
| 8,900,+01              | 5.357.+01                          | 3.141.+00          |                        | 5.465. • 02       | 6, 19 is+nn                             |
| 9,000++01              | 5,458,+01                          | 3.235.+00          | 9.034++00              | 5,566, - 02       | 6.284+00                                |
| 9.100x+01              | 5,550n+01                          | 3,329=+00          | 9.596.+00              | 5,666s=02         | 6.479**00                               |
| 9.200*+01              | 5.6530+01                          | 3,425,+00          | 9.371.+00              | 5,765#=02         | 6.678 <b>∞+</b> 00                      |
| 9.300++01              | $5,748_{p}+01$                     | 3,520=+00          | 9.162.00               | 5,062.00          | 6.880.+00                               |
| 7,400,+01<br>9,500,+01 |                                    | 3,010=*00          | 8,900=+00              |                   |   |
|                        | - 2+ 93 (mm, 0)<br>- 6 - 0 1日 - 01 | 3 No 4-+00         | 8./90*00               | 6 137. = 0.2      | 7 293#+00                               |
| 9.700++01              | 0,099,÷01<br>6.099,÷01             | 3.896.+00          | 8 488 + nn             | 6, 220 m = 0.2    | 7. /20++00                              |
| 9.8nn+nl               | 6.175m+n1                          | 3.985.+nn          | 8.360m+nn              | 6.297. 02         | 7.938+10                                |
| 9.900×+01              | 6,237,+ni                          | 4.066              | 8.284=+nn              | 6,361.m=n2        | 8.159# <b>+</b> nn                      |
| 1.000++02              | 6.320.+01                          | 4.165.+00          | 8.134=+.00             | 6,4510=02         | 8.384+11                                |
| 1.100=+02              | 7.221.+01                          | 5.230=+00          | 6,868.+00              | 7,363=02          | 1. 181 - + 01                           |
| 1.200x+02              | 8.128.+01                          | 6,422++00          | 5,913+00               | 8,289,02          | 1.356=+01                               |
| 1.300x+02              | 9,045,0+01                         | 7,742 <b>+</b> +00 | 5.173.+00              | 9,223==02         | 1.063=+01                               |



| DIAMETER                         | VELOCITY                  | RE                                 | DRAG COEF                   | RELAX TIME                      | .98 DIST                |
|----------------------------------|---------------------------|------------------------------------|-----------------------------|---------------------------------|-------------------------|
| 1,400++02                        | 9,968 <sub>0</sub> +01    | 9,[89,+00                          | 4,586,+00                   |                                 | 2.001*+01               |
| 1.600+02                         | 1.183.+02                 | 1.246.+01                          | 3.723.+00                   | 1.206401                        | 2.371#+01               |
| 1.700+02                         | 1.276_+12                 | 1.428.+01                          | 3,398_+00                   | 1.301p+01                       | 3.2020+01               |
| 1.800.+02                        | 1,370-+02                 | 1.623.+01                          | 3,124,+00                   | 1.397×=01                       | 3.062=+01               |
| 1.900=+02                        | $1,463_{\mu}+02$          | ,83 <b>0</b> +0                    | 2,890=+00                   | 1.492.=01                       | 4.151.+01               |
| 2.000++02                        | 1,556,+02                 | 2.049.0+01                         | 2,689,+00                   | <b>,</b> 587 <b>∞</b> ≠0        | 4.067*+01               |
| 2.100++02                        | 1,649,+02                 | 2.280+01                           | 2,5 3,+00                   | ,082p=0                         | 5.212+01                |
| 2.300.402                        | 1 834 +02                 | 2 778 + 01                         | 2,300,400                   |                                 | 5./83#+01               |
| 2.400++02                        | 1.927.+02                 | 3.045±+01                          | 2,227#*UU<br>2.105#*00      | 1.965.**                        | 7                       |
| 2.5nnx+02                        | 2.018.+02                 | 3.323±+11                          | 1,997 <b>.</b> +nn          | 2.058m*01                       | 7.65.0                  |
| 2.600=+02                        | 2.110.+02                 | 3,612,+01                          | i.9n1+nn                    | 2.152. 01                       | 8.323#+01               |
| 2.700++02                        | 2.201+02                  | 3,913=+01                          | 1.814.+00                   | 2,244=01                        | 9.019+01                |
| 2,800=+02                        | 2,291+02                  | 4.225.+01                          | 1.736.+00                   | 2;337 <b>#</b> # 0              | 9,/38=+01               |
| 2.900++02                        | 2,381+02                  | 4,548,+01                          | j,665±+00                   | 2,429=01                        | 1.048#+02               |
| 3.000±+02<br>3.100≠+02           | 2.471.+02                 | 4.88[m+0]<br>5.226_+01             | 1.599=+00                   | 2.520.01                        | 1+124=+02               |
| 3.200 + 62                       | 2,649,+02                 | 5.581.+11                          | 1.485++00                   |                                 | 1.203**02               |
| 3.300=+02                        | 2.737_+n2                 | 5,947,+11                          | 434.+00                     | 2.791.01                        | 1.366#+n2               |
| 3.400=+02                        | 2,824,+02                 | 6.323.+01                          | i, 387 <b>∍</b> +00         | 2,88001                         | 1.451#+12               |
| 3,500x+02                        | 2.912.+02                 | 6,710,+01                          | 1.344m+00                   | 2,969 01                        | 1. 37 + 02              |
| 3.6U0±+U2                        | 2,998=+02                 | 7.107.+01                          | 1.304=+00                   | 3,057×01                        | 1.026#+02               |
| 3,/00=+02                        | 3.084,+02                 | 7, 9 4 = + 0                       | 1.260±+00                   | 3, 145, = 0  <br>3, 270,        | 1./16#+02               |
| S,0[[ <u>#</u> +]}∠<br>S 900-+u2 | 3, 170x+02<br>3, 255, +02 | 7 + 70   m 7 ()  <br>5 - 358 + n ( | 1.201m+00                   | 3,232±≠1] <br>3:3:9 = n i       | 1.008*+02               |
| 4.000++02                        | 3. 339 + 02               | 6,794 <sub>a</sub> +ni             | I. 168∞+nn                  | 3.405pm01                       | 1.997.02                |
| 4.100++02                        | 3.423,+02                 | 9.241.+01                          | 1.139±+00                   | 3,490, -01                      | 2.195+12                |
| 4.200++82                        | 3,500+02                  | 9,697m+01                          | 1.112=+00                   | 3,576=01                        | 2.194+02                |
| 4,300±+02                        | 3,5890+02                 | 1.016#+02                          | ,087 <b>+</b> 00            | 3,660==01                       | 2.294=+02               |
| 4.400++02                        | 3.671.+02                 | 1.064.+02                          | 1,063+00                    | 3,744,=01                       | 2.396++02               |
| 4,700x+02                        | 3,/コシュ+()2<br>※ H35 + 02  |                                    |                             | 3,92/p=01                       | 2.200**02               |
| 4,700 + 02                       | 3.915+02                  | 1.212m+02                          | 0 980+#01                   | 3.993                           | 2.0024+02               |
| 4.8nn+++2                        | 3.996.+12                 | 1.263 + 02                         | 9.787. ni                   | 4. n75∞•n1                      | 2.019#+n2               |
| 4.9 nn=+ 12                      | 4. n75 + n2               | 1.315.+02                          | 9.003.01                    | 4, 156, - 01                    | 2.728*+02               |
| 5.000x+02                        | 4.155.+02                 | 1,368.+02                          | 9.429 - 01                  | 4,237. 01                       | 3. U39×+02              |
| 5.100*+02                        | $4,233_{m}+02$            | 1.422=+02                          | 9,263=01                    | 4,3170-01                       | 3.151+02                |
| 2.200=+02                        | 4.312+02                  | 1,476=+02                          | 9.102-01                    | 4,397 . 01                      | 3.264=+02               |
| 2.300=+02                        | 4.390.+02                 | 1.232.+02                          | 8,954=01                    | 4,4/0, <b>₽</b> 0 <br>4,555 - 1 | 3.379#+12               |
| 2,4()()#+()∠<br>5,500=±02        | 4.544 ± n2                | 1.646-+02                          | 0,0;0#*01<br>8 672          | 4,033 = 1                       | 3 6 1 2 = = = = = = = = |
| 5.60n-+02                        | 4.620-+02                 | 1.7.14.+02                         | 8.54001                     | 4,7,1,                          | 3.7300+02               |
| 5.700x+02                        | 4.696.4.02                | 1,763.+02                          | 8,414 <b>#</b> = <u>∩</u> 1 | 4,789 <u>∞</u> ≖ni              | 3.849.+12               |
| 5,800++02                        | 4.77   =+02               | 1,822=+02                          | 8,293 <b>.</b> -01          | 4,866,0701                      | 3. 7 1 + 12             |
| >,900x+02                        | 4.046,+02                 | 1,883,+02                          | 8.  77. <del>-</del> 01     | 4,942.01                        | 4. 09 1 - + 02          |



| DIAMETER  | VELOCITY   | RE  | DRAG COEF  | RELAX TIME   | ,98 DIST   |
|---|--|---|--|--|--|
| 6,000x+02 6,100x+02 6,200x+02 6,300x+02 6,400x+02 6,500x+02 6,500x+02 6,600x+02   | 4,921+02<br>4.995+02<br>5.068+02<br>5.142+02<br>5.214+02<br>5.286+02<br>5.358+02   | 1,944n+02 2,069n+02 2,069n+02 2,133n+02 2,197n+02 2,263n+02 2,329n+02   | 8, 066, m 0 1<br>7, 959, m 0 1<br>7, 857, m 0 1<br>7, 758, m 0 1<br>7, 663, m 0 1<br>7, 571, m 0 1<br>7, 483, m 0 1                | 5. $(18^{0} = 0)$<br>5. $(93^{0} = 0)$<br>5. $169^{0} = 0$<br>5. $243^{0} = 0$<br>5. $317^{0} = 0$<br>5. $39^{0} = 0$<br>5. $464^{0} = 0$  | 4. 2   4 + 02<br>4. 37 + 02<br>4. 462 + 02<br>4. 588 + 02<br>4. 14 + 02<br>4. 642 + 02<br>4. 97 + + 02   |
| 6,700x+02 6,800x+02 7,000x+02 7,000x+02 7,100x+02 7,200x+02 7,300x+02 7,300x+02 7,400x+02   | 5.430m+02<br>5.501m+02<br>5.571m+02<br>5.641m+02<br>5.711m+02<br>5.711m+02<br>5.780m+02<br>5.849m+02<br>5.849m+02<br>5.918m+02                     | 2, 395 + 02 $2, 463 + 02$ $2, 531 + 02$ $2, 600 + 02$ $2, 670 + 02$ $2, 741 + 02$ $2, 812 + 02$ $2, 884 + 02$     | 7, 398 = 01<br>7, 316 = 01<br>7, 236 = 01<br>7, 26 = 01<br>7, 160 = 01<br>7, 086 = 01<br>7, 014 = 01<br>6, 945 = 01<br>6, 575 = 01 | 5. $537_{\mu} = 01$<br>5. $609_{\mu} = 01$<br>5. $681_{\mu} = 01$<br>5. $753_{\mu} = 01$<br>5. $824_{\mu} = 01$<br>5. $895_{\mu} = 01$<br>5. $965_{\mu} = 01$<br>6. $035_{\mu} = 01$ | 5. 100 <sup>20</sup> +02<br>5. 230 <sup>20</sup> +02<br>5. 362 <sup>20</sup> +02<br>5. 494 <sup>20</sup> +02<br>5. 627 <sup>20</sup> +02<br>5. 761 <sup>20</sup> +02<br>5. 761 <sup>20</sup> +02<br>5. 695 <sup>20</sup> +02<br>6. 031 <sup>20</sup> +02 |
| 7.500 $x$ +02<br>7.600 $x$ +02<br>7.700 $x$ +02<br>7.800 $x$ +02<br>7.900 $x$ +02<br>7.900 $x$ +02<br>8.000 $x$ +02<br>8.100 $x$ +02<br>8.200 $x$ +02 | 5.986 $m + 02$<br>6.054 $m + 02$<br>6.121 $m + 02$<br>6.188 $m + 02$<br>6.255 $m + 02$<br>6.321 $m + 02$<br>6.387 $m + 02$<br>6.452 $m + 02$       | 2,956±+02<br>3,030±+02<br>3,104±+02<br>3,178±+02<br>3,254±+02<br>3,330±+02<br>3,407±+02<br>3,484±+02              | 6.8 3=0 <br>6.750=0 <br>6.689=0 <br>6.630=0 <br>6.573=0 <br>6.5 6=0 <br>6.5 6=0 <br>6.464=0 <br>6.41=0                             | $6 \cdot 1 0 4 \mu = 0 1  6 \cdot 173 \mu = 0 1  6 \cdot 242 \mu = 0 1  6 \cdot 3 1 0 \mu = 0 1  6 \cdot 378 \mu = 0 1  6 \cdot 446 \mu = 0 1  6 \cdot 58 0 \mu = 0 1 $              | 6. 167 × + 02<br>6. 3 0 4 × + 02<br>6. 44 1 × + 02<br>6. 78 0 × + 02<br>6. 7 19 × + 02<br>6. 859 × + 02<br>6. 999 × 02<br>7. 14 1 × + 02   |
| 8.300x+02<br>6.400x+02<br>6.500x+02<br>8.600x+02<br>6.700x+02<br>6.800x+02<br>6.900x+02<br>6.900x+02<br>7.00x+02<br>7.00x+02                          | 6,5 8,+02<br>6,582,+02<br>6,647,+02<br>6,7 1,+02<br>6,775,+02<br>6,838,+02<br>6,901,+02<br>6,964,+02   | 3,562 + 02 $3,64 + 02$ $3,72 + 02$ $3,8 + 02$ $3,88 + 02$ $3,88 + 02$ $3,962 + 02$ $4,044 + 02$ $4,127 + 02$      | 6,360=*0 <br>6,3 ==0 <br>6,263=*0 <br>6,216=*0 <br>6,216=*0 <br>6,171=*0 <br>6,126=*0 <br>6,283=*0 <br>6,283=*0 <br>6,241=*0       | 6,646p=01<br>6,778p=01<br>6,843p=01<br>6,908p=01<br>6,973p=01<br>7,037p=01<br>7,101=01   | 7.282=+02<br>7.425=+02<br>7.768=+02<br>7.712=+02<br>7.056=+02<br>8.101=+02<br>8.146=+02<br>8.292=+02   |
| 9,100x+02<br>9,200x+02<br>9,300x+02<br>9,400x+02<br>9,500x+02<br>9,500x+02<br>9,700x+02<br>9,700x+02<br>9,700x+02                                     | 7. $026 + 02$<br>7. $088 + 02$<br>7. $150 + 02$<br>7. $211 + 02$<br>7. $272 + 02$<br>7. $33 + 02$<br>7. $39 + 02$<br>7. $39 + 02$<br>7. $454 + 02$ | 4,210=+02<br>4,294=+02<br>4,378=+02<br>4,463=+02<br>4,549=+02<br>4,635=+02<br>4,635=+02<br>4,722=+02<br>4,810=+02 | 6.001×01<br>5.961×01<br>5.92×01<br>5.084×01<br>5.047×01<br>5.047×01<br>5.011×01<br>5.776×01<br>5.742×01                            | 7,165=*0 <br>7,228=*0 <br>7,294=*0 <br>7,354=*0 <br>7,4 6=*0 <br>7,478=*0 <br>7,540*0 <br>7,540*0  | 8.439=+02<br>8.586=+02<br>8./34=+02<br>8.882=+02<br>9.031=+02<br>9.180=+02<br>9.529=+02<br>9.480=+02   |
| 9.900x+02<br>1.000x+03<br>1.010x+03<br>1.020x+03<br>1.030x+03<br>1.040x+03<br>1.040x+03<br>1.050x+03  | 7.5 $(3_{0}+02)$<br>7.573.+02<br>7.632.+02<br>7.691+02<br>7.750+02<br>7.50+02<br>7.808+02<br>7.866+02  | 4,898 + 02 4,987 + 02 5,076 + 02 5,166 + 02 5,256 + 02 5,347 + 02 5,439 + 02                                      | 5,709=01<br>5,676=01<br>5,644=01<br>5,613=01<br>5,583=01<br>5,553=01<br>5,553=01<br>5,524=01                                       | 7,662±=01<br>7,723±=01<br>7,783±=01<br>7,843±=01<br>7,903±=01<br>7,962±=01<br>8,021±=01  | 9.0300+02<br>9.7810+02<br>9.7330+02<br>1.0080+03<br>1.0240+03<br>1.0390+03<br>1.0540+03  |

| DIIAMETER                       | VELOCITY                             | RE   | DRAG ÇUEF              | RELAX TIME.                | • 48 hist      |
|---------------------------------|--------------------------------------|--|------------------------|----------------------------|----------------|
|                                 | 1 210 -02                            | 7 969 -06                                    | 0 915 104              | 1 234 -05                  | 4 47 07        |
| 1.100**00                       | 1.462.=02                            | 1.050.e05                                    | 2,212#400              | 1 40                       | 4,443##[/      |
| 1.200++00                       | 1.738.=02                            | 1 373 .= 05                                  |                        | 1 779 -05                  | 0,4794407      |
| 1.300+00                        | 2.038.002                            | 1.744.205                                    | 1.342.406              | 2.078.=05                  | 9,19/200/      |
| 1.400*+00                       | 2.361 = 02                           | 2.177.5                                      | 1.072.406              |                            | 1.2004000      |
| 1.580++80                       | 2.709 = 02                           | 2.675.00                                     | 1•0779u≠o5             | 2,762,=05                  |                |
| 1.600x+00                       | 3.080                                | 3.245 n = n5                                 | 7.248 .+ a5            | 3.140==05                  | 2. 298         |
| 1.700*+00                       | 3.475.02                             | 3.889 <b>.</b> = <u>1</u> 5                  | 6, n54 <b>n</b> +n5    | 3.54305                    | 3.6918=06      |
| 1.800++00                       | 3,893,-02                            | 4,614=05                                     | 5.108+15               | 3.970 05                   | 4.037==06      |
| 1.900++00                       | 4.336 02                             | 5,424. 05                                    | 4.349±+n5              | 4.421.05                   | 5./54=06       |
| 2.000++00                       | 4,802.02                             | 6,324,=05                                    | 3.734.+05              | 4,897, = 05                | 7              |
| 2.100=+00                       | 5,292,02                             | 7,318.05                                     | 3.229+15               | 5,397- 15                  | 8.578=006      |
| 2.200*+00                       | 5,800,.02                            | 8.4110=05                                    | 2,811×+05              | 5,921,0005                 | 1.1330-15      |
| 2.3 <u>00</u> #+00              | 6,344 <u></u> #02                    | 9 <b>,</b> 6 <sub>0</sub> 8, <b>-</b> 05     | 2.4630+05              | 6.469 <u>.=0</u> 5         | 1.233== 05     |
| 2.400×+00                       | 6,906 <sub>0</sub> #02               | I, 09  <b>#</b> = 04                         | 2,170 <b>+</b> 15      | 7.042=05                   | 1.461** 05     |
| 2.500*+00                       | 7,491.02                             | i,233±=04                                    | 1.921=+05              | 7,63905                    | 1./20**05      |
| 2.600±+00                       | 8,100==02                            | 1.387=04                                     | 1.709++05              | 8,260, -05                 | 2.011**05      |
| 2.100=+00                       | 8,/33,02                             | 1.253=04                                     | 1.527=+05              | 8,906=05                   | 2.338=• 05     |
| 2.000=+00                       | 9.390=02                             | 1,731=04                                     | 1.370++05              | 9,576, 05                  | 2./03**05      |
| ∠, , , () = + () ()             | I+00/m=01                            | 1,723=*04                                    | 1.234=+05              | 1.02704                    | 3.109=+05      |
|                                 |                                      | 2 349 -04                                    | 1.12*05                | 1.099.04                   | 3.560==05      |
| J•     ]⊭ ♥ [ []<br>3 200± + 00 | • ?Us≠U <br>  226 - n                | 2,040.04                                     |                        | • /3±*04                   | 4. 157= 05     |
| 3.300**00                       | +∠∠⊂µ=[] <br> -3¤3µ=0                | 2,832,*04                                    | 9.200≠04               | I • <b>C 7 () • *</b> () 4 | 4.005==05      |
| <b>3.4</b> 00-+00               |                                      | 3 197. = 14                                  | 7,0729+04              | 1. 4/2 - 04                | 2.50/mm02      |
| 3.500++00                       | 1.465.+01                            | 3. 377. = 0.4                                | 7.040.+04              |                            |                |
| 3.0an#+en                       | 1.550                                | 3.675m=n4                                    | 6 472s+04              | 1.58                       | 7 168          |
| 3.7nox+no                       | 1.637 01                             | 3.989 <b>⊨</b> ⊓4                            | 5. 964. + 04           | 1.67 n. • 0.4              | 8.300±+05      |
| 3,800*+00                       | 1.727.01                             | 4. 521 04                                    | 5.507=+04              | 1.76 <sub>1a</sub> =n4     | 9. 42#*n5      |
| 3,900x+00                       | 1.019-01                             | 4.67 n= 14                                   | 5, n96, + n4           | 1.855m = n4                | 1. 14= 04      |
| 4.000**00                       | 1.91301                              | 5, <u>0</u> 38, - <u>0</u> 4                 | 4,725 <b>±+</b> n4     | 1.9510-04                  | 1.122==04      |
| 4.100=+00                       | 2.0100-01                            | 5,425s+04                                    | 4,389=+04              | 2.049.=04                  | 1.2380-04      |
| 4:200*+00                       | 2 • 10 9 • • 01                      | 5,831=04                                     | 4. 384.+ 14            | 2.150=04                   | 1.3630-04      |
| 4.300++00                       | 2.2100-01                            | 6 <b>.</b> 257 <b>.</b> ⁼ ()4                | 3,8 <sub>0</sub> 7,+04 | 2,254,=04                  | 1.497.4        |
| 4 • 4 0 0 = + 0 0               | 2.3 4.01                             | 6,704 = 04                                   | 3,554 <b>+</b> 14      | 2,359 <u>∍≖</u> 04         | 1.04.1=04      |
| 4,500=+00                       | 2,420=01                             | 7.170.04                                     | 3. 323=+ 14            | 2.46804                    | 1.195==04      |
| 4.600=+00                       | 2.528                                | <b>√.059</b> ∎€04                            | 3.112++04              | 2,578 <sub>0</sub> =04     | 1.759mm 04     |
| 4./00*+00                       | 2.037.0-01                           | 8, 68∍*04                                    | 2,910,+04              | 2,092=04                   | 2. 135#= 04    |
| 4.800#+00                       | 2.1500-01                            | 8,/ <u>00</u> ,704                           | 2,/40=+04              | 2,80704                    | 2.322=-04      |
| 4.700++00                       | 2.000.01                             | Y、295mm 04                                   | 2.5/0+04               | 2,925.0*04                 | 2.521==04      |
|                                 |                                      | ▼ • ¤ 3 ∠ » * [] 4<br>↓ 0 4 3 = 0 3          | 2,427,04               | S, []4⊃₀ = []4             | 2./33==04      |
|                                 | J +   [/ ∞ ♥ []  <br>X - Ω Z Ω = Ω + | I•U43∞▼U3                                    | 2.200.0+04             | J, 100 m = ()4             | 2, 45/0=04     |
| イ・イリリ#キリリ<br>5 300.±00          | <b>3 (55 - 0)</b>                    | د) ≂م¤]۱•۱<br>۱۰۱7۱ → ۵۲                     | 2 + 12/10 + 114        | 3.431 - 04                 | 5.196.04       |
|                                 | 3 482 - ni                           | 「●   /   Ø <sup>™</sup> Ü O<br>  シスネ . = ∩ 7 | 2,0000+04              | 0∎¶∠ ø#04<br>3 55,         | J.448⊭≖04      |
| ✓∎ □ U U # □ U U 5 5 0 0 + 0 0  | 3 612 - ní                           | 1 3 0 8 - 03                                 |                        | 312710704<br>3644 - 54     | 3・/   ラキョ () 4 |
| ~ • ~ U U # ~ U U               | 0+01-0-01                            | 1.0000-00                                    | ╏╡╘┍╤┙╔┱║╉             | J∮AC4™≜∏4                  | こ・メメノル # 🛛 4   |

| DIAMETER               | AFFACILA                              | RE                     | DRAG COEF               | RELAX TIME              | .98 DIST               |
|------------------------|---------------------------------------|------------------------|-------------------------|-------------------------|------------------------|
| 5.600*+00              | 3,745 <u>,</u> m01                    | , 38  == 03            | 1,728 <b>±+</b> 04      | 3.8 9 04                | 4.295**04              |
| Þ,700≠+00              | 3,879,-01                             | •456 <b>¤</b> ¶03      | <b>.</b> 639#+.04       | 3,956=•04               | 4.0090004              |
| 5,880x+00              | 4,016,=01                             | ,534 <b>=</b> ₹03      | 1.556±+04               | 4,096,*04               | 4.74   04              |
| 5,900*+00              | 4,156,01                              | 1.615.03               | <b> .479∞+</b> 04       | 4,238∍•∩4               | 5.289=04               |
| ¢,000≠+00              | 4.298 01                              | 1,698. 703             | 1.400=+04               | 4, <u>383</u> , - 04    | 5.056×+04              |
| ¢.100≖+00              | 4,442==01                             | i,/84 <u>0</u> 703     | 1.338×+04               | 4, 230, * 04            | 6. 042=04              |
| 6+200=+00              | 4,588,-01                             | 1.873=03               | 1.275.+04               | 4,679 <u>∞</u> ≠04      | 6,447=04               |
| °.300#+00              | 4,/3/==01                             | <b>, 765</b> ± 03      | 1.2120+04               | 4, °3∣∞ = ₿4            | 0.0/2#=04              |
| 6.400×+00              | 4,889,01                              | 2,060=*03              | 1.159=+04               | $4,985_{m}=04$          | 7.318=04               |
| 0,500+00               | 5+0420=01                             | 2, 158="03             | 1.10/=+04               | 2.142=04                | 1, 1850-04             |
| o+o00=+00              | <u>ן המסען ול</u>                     | 2,259= 03              | 1.02/04                 | 5.301=04                | 8.2/30004              |
| 00**00                 | 5.35/m=01                             | 2,3630=03              | 1.011.04                | 5,403m = 1)4            | 8./85##04              |
| °+°00≠+00              | <b>2</b> • <b>2</b>   <b>0</b> • • 0  | 2,4/1,000              | 9,0/10+03               | <b>5</b> 707 4          | 9.320**04              |
| ·**00**00              | <b>₽₽₽₽₽₽₽₽₽₽₽₽₽</b>                  | 2,201,000              | 9,250,0+03              | 2,773p≠04               | 9.0/95=04              |
| (+000 <b>#</b> +00     | 2,040 <u>a</u> =0                     | 2.095,005              | 8,000 <b>,</b> +03      | 2,702p=()4              | • <u> </u> 40⊭▼ეა      |
| (•100 <b>*</b> +00     | 0.017000                              | 2.0120 - 3             | 8,4970+03               | 6 3.7 - 4               | 1.10/03                |
| /+ <u>200</u> ++00     |                                       | 2,7320703              | 8, 2 ∞*n3               |                         |                        |
| /•300×+00              | 0,37/#*0                              | 3,070p*03              | 7,0220+03               | 0,403p+04<br>6 660 - 04 | 1.23/1903              |
| /•400×+00              | 0,232=01                              |                        | 7,210=+03               |                         | 1.3000000              |
| /+200#+00              | 0,/[U==0]                             | 3,3 4 <u></u> m=[3     |                         |                         | 1.3/8##[3              |
|                        | 0,07(), <b>*</b> () <br>7, 0,7(), ∞,0 | 3.440±≈03<br>3.586 mol | 0.709mT[3<br>6.668 # n7 | 7 9 10 = 04             | 1.425##[3              |
|                        | 7 056 - 01                            | 3,200, 203             |                         | 7 4 0 0 0 0 4           | 1.0000000              |
| 7,000±+00              |                                       |                        |                         |                         | 1.011=03               |
|                        |                                       | 4 021 = 03             | 6 945 + 3               | 7.78704                 | 1,075e=00              |
| UUU≠≠UU<br>D 100=+00   | 7 8 24 - 01                           | 4. 173. = 03           |                         | 7.979                   | 1. 773mm o3            |
| 5 100x + 00            |                                       | 4 3 29 03              |                         | 8 177 • 04              | 1.073=00               |
| 0,200±+00<br>8 300±+00 |                                       |                        | 5,2228103<br>5,328.4n3  | 8 377 - a4              | 2                      |
| 0,000⊮+00<br>δ.400-+0Ω | 8.415.=01                             | 4.654.*03              | 5 + 4 + 03              | 8.58 0 04               | 2. 166                 |
| 8,5nn++0n              | 8.614.+01                             | 4.022.003              | 4 962 + n 3             | 8.78504                 | 2. 27 no = 0.3         |
| 5.6nn+nn               | 8.810.01                              | 4.993.03               | 4.79 lm+n3              | 8.992 - 04              | 2.579.03               |
| 6,700±+00              | 9.024.01                              | 5, 169, = 03           | 4.020 + 13              | 9.2020-04               | 2,4910=03              |
| 8,800+00               | 9,232, - 01                           | 5.350.03               | 4.47.5+13               | 9,414=04                | 2.007=03               |
| 8,9.00x+00             | 9.445 = 01                            | 5,534 <u>n</u> -03     | 4.324=+03               | 9,629,-04               | 2. / 28 = 03           |
| 4.000x+00              | 9,656,01                              | 5,7220=03              | 4,182=+03               | 9,046 <u>,</u> =04      | 2.0520703              |
| Y,100±+00              | 9,871,01                              | 5,9 5,03               | 4.046 <b>.</b> +03      | 1.007 03                | 2,98 <sub>0</sub> ∍≓03 |
| 9.200++00              | 1.00%+00                              | 6.112=03               | 3,916=+03               | 1:029=03                | 3.113=•03              |
| Y.300=+00              | 1.031.+00                             | 6 <b>,</b> 3 3ø≂03     | 3,792±+03               | 1.0510=03               | 3.251#₹03              |
| 9,400±+00              | 1.053+00                              | 0,5180=03              | 3.672=+03               | 1.074=03                | 3. 392=03              |
| 9,500x+00              | 1.070 + 00                            | 0.728 <b>.</b> =03     | 3,558±+03               | 1,097 <u>m</u> =03      | 3. > 39 - 03           |
| 9,600±+00              | .098×+00                              | 6.943. 03              | 3,448 m+ 03             | 3 0 = م 1 2 1 + 1       | 3.090**03              |
| Y./00=+00              | I+121±+00                             | /, 16   = 03           | 3, 343 <b>0+ 1</b> 3    | 1.143.0-03              | 3.045== 03             |
| 9,800±+00              | 1 + 144 + 00                          | /,385∞=03              | 3,242=+03               | 1,167.0 = 03            | 4. <u>006</u> ° - 03   |
| 7,700±+00              | 1.168,+00                             | 7.613=*03              | 3, 145 =+ 03            | 1.1910-03               | 4.1710003              |
| 1.000×+01              | 1.191.+00                             | /.846.503              | 3.0520+03               | 1.2150-03               | 4.342=03               |
| I• 100≠411             | •44  <u>+</u> 00                      | 1.044.02               | 2,2900+03               | 1.4690-03               | 6.351#783              |



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| DIAMETER                      | AFFACILA                 | RE                          | DRAG COEF              | RELAX TIME                                       | ,98 DIST           |
|-------------------------------|--------------------------|-----------------------------|------------------------|--|--------------------|
| 1.200*+01                     | 1.714=+00                | 1,354.=02                   | 1.771.+03              | 1,748 <b></b> +03                                | 8, 788= 03         |
| 1.300x+Ul                     | 2.010.+00                | 1./21#*02                   | 1,394=+03              | 2,020=03   | 1.237 = 02         |
| 1.400+01                      | 2.330+00                 | 2,148,02                    | 1.1180+03              | 2,376=03   | 1.662##02          |
| 1.200+01                      | 2,673,+00                | 2.040.02                    | 9,10 <sup>4</sup> **02 | 2,/20, = 03                                      | 2.189##02          |
|                               | 3.030.÷00                | 3 876 - 00                  | /.2/76 +.02            | 3.0996703<br>7.405 - 07                          | 2.0028702          |
|                               | 3,72/#700                | 4.549.=02                   | 0.270mm02              | 3,914,03   | 3.00/ <b>0</b> =02 |
| 1.900++01                     | 4.272.+00                | 5.344                       | 4 515402               | 4.356  | 5.0230=02          |
| 2.000+01                      | 4.727.+00                | 6.226.*02                   | 3:881+02               | 4.821  | 6.899##02          |
| 2.100**01                     | 5.205.+00                | 7.197.12                    | 3.362 + n2             | 5.308.03   | 8.382##02          |
| 2.200++01                     | 5.7n4.+nn                | 8,263,=02                   | 2.933 <b>.</b> +n2     | 5,8 <sub>1</sub> 7 <sub>m</sub> + <sub>0</sub> 3 | L. 1098701         |
| 2.308+01                      | 6,224,+00                | 9,427,02                    | 2.575+12               | 6.347 D3   | 1.205**01          |
| 2.400++11                     | 6,760,+00                | 1.069.01                    | 2.274.+12              | 6,899 <u>m=0</u> 3                               | 1.428##11          |
| 2.500=+01                     | 7,328,+00                | 1,206.01                    | 2.019=+02              | 7,472= 03  | 1.081.00           |
| 2,600*+01                     | 7,910=+00                | 1.354. 01                   | ,8 <b>03</b> ∎+02      | 8 <b>.066.</b> =03                               | 1.965# 01          |
| 2.700=+01                     | 8,5110+00                | 1.513=01                    | 1.017.+02              | 8,68 <sub>0=</sub> -03                           | 2,285**01          |
| 2.800x+01                     | 9,133m+00                | 1.684                       | 1.450.+02              | 9, 5   30 - 03                                   | 2.042=01           |
| 2•700×+01                     | 9.//2+00                 | 1,066.01                    | 1.31/=+02              | 9,966 p = (j3                                    | 3. 139             |
| 3.000=+01                     | 1.0430+01                | 2.000000                    | 1.19.0 + 02            | [• <u>0</u> 04∞*02                               | 3+479#*0           |
| - 3, [[[]⊭≁(]]<br>-3, 200×+01 | 10 Tellin TOL            | 2.486                       | 0 9 0 0 T 1 2          | 1, 1000 TOZ                                      | 4 200000           |
| 0,200¥≁01<br>3.300×+01        | [+ [0][e+0]<br> . 25]+0] | 2.7.18.***                  | 9,707±11               | 1.276-=02  | 5880               |
| 5.400+11                      | 1.323.+01                | 2.962                       | 8.431.401              | 1.349 02   | 5./2n##n/          |
| 3.5nn+el                      | 1.397.+01                | 3.220m = 01                 | 7.782m+ni              | 1.425. 7.02                                      | 6.379=01           |
| 3.6nnx+61                     | 1.473_+11                | 3.491 11                    | 7.202+01               | 1.502=02   | 7. 174 . 1         |
| 3.708x+01                     | 1.550.+01                | 3.776. 01                   | 6.084.+01              | 1, 581, - 02                                     | 7.009==01          |
| 3,800x+01                     | 1,629=+01                | 4.075.01                    | 6.2190+01              | 1,661,0-02                                       | 8. 284             |
| 3,900++01                     | 1,708+01                 | 4. 387 m = 01               | 5.00×+01               | 1.742=02   | 9,401000           |
| 4•000 <b>×</b> +91            | 1.789+01                 | 4.130-01                    | 5,422++01              | 1,825=02   | 1. 156 + 00        |
| 4 • 100 * + 61                | 1.872.+01                | <b>5.053</b> • 0            | 5.079=+01              | 1.9090702  | 1.116#+00          |
| 4,200++01                     | 1,952,+01                |                             | 4,/69=+01              | <b>,</b> 994 <b>⊭</b> ∎02                        | 1.211#+00          |
| $4 400 \pm 01$                |                          |                             | 4,4000+01              |  |                    |
| 4.500.+01                     | 21 21 24 + 01            | 6.554 <u></u>               | 4.220 H []             | 2,255.=02  | 1. 723#+00         |
| 4.600+01                      | 2,299,+01                | 6.964 m BI                  | 3.777 <b>.</b> +ni     | 2.345  | 1.036#100          |
| 4.700++01                     | 2,388,+01                | 7 <b>.</b> 389 <b>в</b> П I | 3. 578 + ni            | 2.435= 02  | 1./54=+00          |
| 4.800+01                      | 2.477 + 01               | 7.828 ni                    | 3. 396 = + 11          | 2. 526 02  | I. 077⊭+nn         |
| 4.900=+61                     | 2,567.+01                | 8,2820761                   | 3.220 .+ 11            | 2,018-12   | 2                  |
| 5.000x+01                     | 2,658,+01                | 8,750=-01                   | 3, 073∞+01             | 2:7100-02  | 2.136=+00          |
| 5.100=+01                     | 2,749 + 01               | 9,232=01                    | 2. 529=+01             | 2,8030-02  | 2.274=+00          |
| 2.200+61                      | 2+841=+01                | 9,729:01                    | 2,/90#+01              | 2,897 02   | 2.416=+00          |
| 5.300x+01                     | 2.934+01                 | 1.024=+00                   | 2.0720+01              | 2. 7920-02                                       | 2. 563 = 00        |
| 2.400*+01                     | 3.020+01                 | 1.07/=+00                   | 2.550+01               | 3.088p-02  | 2.715=+00          |
| 2.200×+01                     | 3,122+01                 | 1.10( +00                   | 2,447.0+01             | 3, 184∞=02                                       | 2.8/2=+00          |
|                               | 3+21/m+01                |                             | 2.3400+01              | 3,40 [6=02                                       | S• US4∞+00         |
| 2+/00++01                     | S+S S∞+[]                | 1+2400700                   | 2 • 27 * * []          | 3+3/05=05  | 0.501%+00          |

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| DIAMETER               | AFFOCILA               | RE                 | DRAG COEF                    | RELAX TIME                | ,98 DIST                     |
|------------------------|------------------------|--------------------|------------------------------|---------------------------|------------------------------|
| Ե.8ՍՕ≖+Ս∣              | 3,409=+01              | 1.302=+00          | 2. 60 - 01                   | 3,477 <b>=</b> *02        | 3.374=+00                    |
| 5.900×+01              | 3,5 <sub>0</sub> 7,+01 | 1.362#+00          | 2.082×+01                    | 3,576±-02                 | 3, 5510+00                   |
| 6,000±+01              | 3,605+01               | 1,424,00           | 2.004=+01                    | 3,676∍•∏2                 | 3./34**00                    |
| 6,100x+01              | 3.703+01               | 1.488.+00          | 1.930m+01                    | 3,777.02                  | 3. 722*+00                   |
| 6,200=+01              | 3,803,+01              | 1.553.+00          | 1,860+01                     | 3,878,•02                 | 4.115=+00                    |
| 6,300±+01              | 3,904,+01              | 1.619 <b>±</b> +00 | 1,794 <b>±</b> +01           | 3,981=02                  | 4.313=+00                    |
| 0,400=+01              | 4,002=+01              | 1,688,+00          | 1./31.+01                    | 4,085,=02                 | 4. 5   7 = + 00              |
| 6,500x+01              | 4.108.+01              | 1./58.+00          | 1.6/2=+01                    | 4.189.02                  | 4./26#+00                    |
| 6.600=+9I              | 4.212++01              | 1,830,0+00         | 1.012+01                     | 4,295. = 02               | 4.940**00                    |
| ••/00×+0               | 4.51/0+01              | 1+904=00           | ,20  <b>#</b> +0             | 4,402=02                  | 2.1270+00                    |
| 0,000x+01              | 4,420,+01              | 1.780.00           | 1,207,401                    | 4,210=02                  | 5.304#+00                    |
| °,900±+01              | 4, 530, +01            | 2,070×+00          | 1,477×+01                    | 4.0200 02                 | 5,014#+00                    |
| • 000=+0               | 4,037=+01              | 2,130,+00          |                              |                           | 9.099##00<br>6.90m+00        |
| 7 • 100× • 01          | 4,/4/±+01              | 2,220,07.00        | [ <b>.</b> 300 <b>µ</b> ♥[]] |                           | 6 4 <b>7</b> 5=+00           |
| 7.200++01              | 4.000±+01              | 2,004.00           | , 323 <b>⊎</b> ∓ []          |                           | 6 587 sto                    |
|                        |                        |                    | [.20] <b>b</b> ₹ [] [        | 7+U/ #*U2<br>5  88.=02    | 6 #43 <b>m</b> +00           |
| 7.500.+01              | 5 203 ADI              | 2, 7/98 00         | 1.203.401                    | 5.305                     | 7 .06**00                    |
| 7.500**01<br>7.500**01 | 5.319+01               | 2,562,100          | 1.160m+01                    | 5.425m=02                 | 7.373=+00                    |
| 7.700++01              | 5.437.+01              | 2.757.+00          | 1.130.+01                    | 5.545. 02                 | 7.046s+00                    |
| 7.800-+01              | 5.556.+01              | 2.854.+00          | 1.997 <b>.</b> +01           | 5.666 02                  | 7.924#+00                    |
| 7.9na+01               | 5.675.+ni              | 2.952.+00          | 1.064.+01                    | 5.788 02                  | 8.207**00                    |
| 8.000±+01              | 5.795.+01              | 3.053×+00          | 1.034 <b>.</b> +01           | 5.910.0-02                | 8.496+00                     |
| 0.100x+01              | 5.915=+01              | 3,155.+0.0         | 1.005*+01                    | 6,032=02                  | 8.1910+00                    |
| 8.200 + 11             | 6, 035,+01             | 3,258.+00          | 9,775.+00                    | 6,154,=02                 | 9. 190**00                   |
| 8.300x+11              | 6, 153m+01             | 3,3630+00          | 9.515=+00                    | 2 ن <del>م</del> « 27 • 6 | 9.396*+00                    |
| 6.400x+01              | 6,270+01               | 5,468=+00          | 9,274=+00                    | 6,394±=02                 | 9.706=+00                    |
| 8,500x+81              | 6,384 <b>m+</b> 01     | 3,5730+00          | 9.052∞+00                    | 6.510×02                  | 1.002*+01                    |
| 8,600x+01              | 6,495 <b>,+01</b>      | 3.678=+00          | 8.849.+00                    | $6,623_{\mu} \bullet 02$  | 1.134=+01                    |
| b./00±+01              | 6.601 <b>0+0</b> 1     | 3.781=+00          | 8,66/_+00                    | 6,731,0702                | . <sub>0</sub> 67#+ <u> </u> |
| 0,000±+91              | 6,701+01               | 3,883 <b>,+</b> 00 | 8.,20/++00                   | 6,033,-02                 | 1.100**01                    |
| 8.900=+(il             | 6.793=+01              | 3.98.1.+00         | 8,37.1++00                   | 7 -0 - 4 - 5 3            | 1.134#+01                    |
| 7•000±+01              |                        |                    | 0,2/Ja+()()                  | 7 1 16 = 02               | 1. 1000+01                   |
|                        |                        |                    | 7 953                        | 7,226                     | 1.238+11                     |
| 9.300+01               | 7, 193, +01            | 4.405.+00          | 7.000+00                     | 7.336 - n2                | 740+01                       |
| 9.400.+01              | 7.302+01               | 4.519.+00          | 7.053.+00                    | 7.44602                   | 1.3110+11                    |
| 9.5nn+41               | 7.410.+01              | 4.035.+00          | 7.210.+00                    | 7,556,02                  | 1.348#+11                    |
| 9.6n.n.+11             | 7.518+11               | 4, /52,+00         | 7.371=+00                    | 7.66702                   | 1. 385=+01                   |
| <b>7.700</b> + 11      | 7.627.+01              | 4,871,+00          | 7.230.+00                    | 7,778,02                  | 1.423=+01                    |
| 9.800x+01              | 7,736,+01              | 4,992=+00          | 7.108.+00                    | 7,888.02                  | 1.462=+01                    |
| 5.900=+01-             | 7,845=+01              | 5.11.4.+00:        | 6.982-+00                    | 8,000=02                  | 1.201**01                    |
| 1.000++92              | $7,954_{m}+0.1$        | 5.237.+00          | 6,061=+00                    | 8.1110=02                 | 1.741+01                     |
| 1.100=+02              | 9.0530+01              | 6,558,+00          | 5.025.+00                    | 9.232=02                  | 1.967#+01                    |
| 1.200#+02              | 1.017.+02              | 8,032=+00          | 5.040.+00                    | 1,037×°01                 | 2.445*+01                    |
| 1.300++62              | 1.129.+02              | 9.661#+88          | 4,430+00                     | 5  0=0                    | 2.975=+01                    |

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| DIAMETER          | VELOCITY           | RE                 | DRAG COEF           | RELAX TIME         | ,98 DIST               |
|-------------------|--------------------|--------------------|---------------------|--------------------|------------------------|
| 1.400++02         | 1.241.+02          | 1,144,+01          | 3.944.+00           | • 266m = D         | 3.556++01              |
| 1.500++02         | 1.354.+02          | 1,338,+01          | 3,550=+00           | 1.381.01           | 4.187=+01              |
| 1,600 = +02       | 1.467.+02          | 1,546=+01          | 3,220,+00           | ,496 <b>.</b> =0   | 4,865=+0               |
| 1.700++02         | 1,580.+02          | 1,769,+01          | 2.954+00            | 1.612.01           | 5,59 #+0               |
| 1,000*+02         | 1.693.+02          | 2.007#*01          | 2,724 +00           | ,/27,,≓0           | 6.362=+01              |
| 1.900++02         | 1,800+02           | 2,260,+01          | 2,528 <b>±</b> 00   | ,842 <u>.</u> •0   | 7. <sub>1</sub> 78#+01 |
| 2.000*+02         | 1.919+02           | 2.527.+01          | 2,358,+00           | 1,957 <u>m</u> =01 | 8.037=+01              |
| 2.100=+02         | 2.031.+02          | 2.808.+01          | 5.510×+00           | 2.071»=01          | 8.938**01              |
| 2.200*+92         | 2.142.+02          | 3,103,*01          | 2.081=+00           | 2,185.*01          | 9,880,**01             |
| 2.300=+02         | 2.253.+02          | 3.413+01           | 1.966.+00           | 2.298.01           | 1.086=+02              |
| 2.400+42          | 2,364,+02          | 3./36s+01          | 1,864 <b>m</b> +00  | 2.4110-01          | 1, 88+02               |
| 2.500=+02         | 2,474=+02          | 4,072=*01          | 1.773.+00           | 2,523p=01          | 1.294++12              |
| 2.600*+02         | 2,583,+02          | 4,422=+01          | 1.691#*nn           | 2,634, - 11        | 1.413++12              |
| 2.700++02         | 2.692.+02          | 4.786=+01          | 1.017.+00           | 2,74501            | 1. 2 6 + 12            |
| 2.800++02         | 2.800.+02          | 5.162.01           | 1.550.+00           | 2,855. 0           | 1.032=+02              |
| 2.900++02         | 2.907.+02          | 5,552+01           | 1,489±+00           | 2,9650=01          | 1.152**12              |
| 3.000++02         | 3.014.+02          | 5.9540+01          | 1.435=+00           | 3.074=01           | 1.075=+02              |
| 3.100=+02         | 3. 1200+02         | 0.369#+01          | 1.382=+00           | 3. 182= 01         | 2.101**02              |
| 3.200=+02         | 3.220+02           | 6,/97 <b>.+</b> 01 | 1.335=+00           | 3,289. 01          | 2. 130+02              |
| 3,300+02          | 3,330=+02          | 7,236,+01          | 1.291.+00           | 3. 396 01          | 2.262=+02              |
| 3,400*+02         | 3,434,+02          | 7.688.+01          | 1.2510+00           | 3, 2020-01         | 2.397#+02              |
| 3.500=+02         | 3,5376+02          | 8. 153.+01         | 1,214=+00           | 3,007=01           | 2. 34 + 02             |
| 3.600+02          | 3,640m+02          | 8,629∎+0           | 1.179.00            | 3.7120=01          | 2.075+02               |
| 5.700++02         | 3,742 + 02         | 9,116m+01          | 1.147.+00           | 3. 8 1.6x = 0      | 2.018+02               |
| 3.800x+02         | 3,843,+02          | 9,616,+01          | 1.117.+00           | 3.919:00           | 2.963=+02              |
| <b>3,900≖+</b> 02 | 3,943 <b>±+</b> 02 | 1.0130+02          | 1,088∞+00           | 4.021=*01          | 3.111#+02              |
| 4.000 + 02        | 4,043,+02          | 1.065m+02          | 1.062#+00           | 4.123.=01          | 3.2620+02              |
| 4.100++02         | 4,142 <u>+</u> 02  | 1.118.+02          | 1.037=+00           | 4,224=01           | 3,415=+02              |
| 4.200=+02         | 4.241.+02          | 1,173=+02          | I•0!4∞+00           | 4,325,-01          | 3.570+02               |
| 4.300x+82         | 4,338,+02          | 1,228,+02          | 9,910°n=01          | 4.424.01           | 3./27#+02              |
| 4.400x+02         | 4,435,+02          | 1,285#+02          | 9.707=01            | 4,523,01           | 3.087=+02              |
| 4,500++02         | 4,532,+02          | 1,343±+02          | 9.210.00            | 4.621.001          | 4.0490+02              |
| 4.600=+02         | 4,62/0+02          | 1,402+02           | 9.324=01            | 4./19.01           | 4.212=+02              |
| 4.100*+02         | 4,/22,+02          | 1.462=+02          | 9.14/0701           | 4,0100-01          | 4.378=+02              |
| 4,800+02          | 4.81/0+02          | 1.255.405          | 8.979               | 4,9120-01          | 4.546=+02              |
| 4•9·00#+02        | 4.911=+02          | 1, 584, + 02       | 8.012=01            | 5,008∍≂01          | 4,/16=+02              |
| 2.000=+62         | 5,0040+02          | 1.647 . + 02       | 8,660 <b>∞</b> ≖01. | 5.103. 01          | 4.087 + 02             |
| 5.100++02         | 5,090,+02          | 1./11.+02          | 8,523=01            | 5,197 <u>s</u> =01 | 5.060**02              |
| 5,200++02         | 5.180.+02          | 1./76=+02          | 8,385=01            | 5,290p=01          | 5.235+02               |
| 5,300x+02         | 5,279,+02          | 1.842.+02          | 8,254=*()           | 5,383բ≑լլ          | 5.412=+02              |
| 2:400x+62         | 5,370,+02          | 20 + ه 9 0 4 و 1   | 8,128,-01           | 5,476 01           | 5.590**02              |
| <b>▶.500±+</b> 02 | 5.460.+02          | 1,977,02-          | 8.000=01            | 5,568±=01          | 5.17 10+02             |
| 5.600=+02         | 5,549,+02          | 2,646.+02          | 7,093 <b>=</b> =01  | 5,659 01           | 5. 452=+02             |
| 5,700x+02         | 5.638.+02          | 2.116=+02          | 7,783 <b>.</b> •01  | 5,749 <u>0</u> -01 | 6.135=+02              |
| 5,600x+02.        | 5,720,+02          | 2,187:+02          | 7,678 <b>.</b> =0   | 5,839±+01          | 6.320*+02              |
| 5.900x+02         | 5.814.+02          | 2.259.+02-         | 7.577.0-01          | 5,928×=01          | 6,206+02               |

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| DIAMETER                       | VELOCITY               | RE                        | DRAG COEF                      | RÉLAX TIME                               | ,98 DIST   |
|--------------------------------|------------------------|---------------------------|--------------------------------|--|--|
| 6,000=+02                      | 02+ھ194                | 2,33 =+02                 | 7.479.501                      | 6.017 <b>.</b> =01                       | 6.094=+02  |
| <b>4.100.+</b> 02              | 5,987±+02              | 2•405 <b>*</b> *02        | 7,380 <u>0</u> ,01             | 6,105×*0                                 | 6,883#+02  |
| 6.200*+02                      | 6.073 <b>.</b> +02     | 2,479=+02                 | 7,296,=01                      | 6,193,001                                | 7. <sub>0</sub> 73»+02   |
| 6.300++02                      | 6, 158, +02            | 2,555#+02                 | 7.210==01                      | 6,280,01                                 | 7,265=+02  |
| 6,400x+02                      | 6,243 <sub>m</sub> +02 | 2.631.+02                 | 7.127∞≖01                      | 6,366 <b>=</b> =0                        | 7,458#+02  |
| 6,500x+02                      | 6,327 <b>,+</b> 02     | 2,708**02                 | 7.047±=01                      | 6,452,-01                                | 7,052*+02  |
| 6,600=+02                      | 6,4 1=+02              | 2.786.+02                 | -6.97 <u>0</u> =01             | 6,538 <u>,</u> =0                        | 7.8470+02  |
| 6.700++02                      | 6,4 <u>94</u> =+Q2     | 2,865=+02                 | 6,895 <u>∞≠n</u>               | 6,623,01                                 | 8, 044 + 02  |
| 6.800x+02                      | 6,57/s+02              | 2,945=+02                 | 6,623,01                       | 6,/0/01                                  | 8.2420+02  |
| 6,900x+02                      | 6,659 <u>s</u> +02     | 3,025=+02                 | 6,754 <b>.</b> *01             | 6,79   m= 0                              | 8.441=+02  |
| 7.000=+02                      | 6.7410+02              | 3.107.+02                 | 6.68/.=01                      | 6,874p=0                                 | 8.041**02  |
| 7.100*+02                      | 6,822+02               | 3.189±+02                 | 6,622.0                        | 6,956, 01                                | 8.842=+02  |
| 1.200*+02                      | 6,902+02               | 3,272=+02                 | 6,559=*0                       | 7.039×=01                                | 9.044=+02  |
| 1.300x+02                      | 6,982,+02              | 3.356=+02                 | 6.499=01                       | /+1.20#=01                               | 9.24/#+02  |
| 1.400++02                      | 7.062.+02              | 3,441+02                  | 6,440=01                       | /•202∍=01                                | 9.4520+02  |
| 1.200=+02                      | 7,141,+02              | 3,72/=+02                 | 6,383=01                       | 7.282.0                                  | 9.05/#+02  |
| /,6∪0∗+02                      | 7.220.+02              | 3,013m+02                 | 6.328=01                       | /.3020-01                                | 9.0030+02  |
| /./00=+02                      | 7,298,+02              | 3,/00=+02                 | 6.272#=01                      | 7,442000                                 | 1.00/#+03  |
| 7.800*+02                      | 7,370 + 02             | 3./88.+02                 | 6,2230-01                      | 7.221.000                                | 1.028*+03  |
| 1.900=+02                      | 7,4530+02              | 3,8//=+02                 | 6, 7.3 = 0                     | /, <b>○</b> (), <b>▷</b> =() <br>7,670,, | 1.0490+03  |
| 8.000*+02                      | 7.530.+02              | 3.966.+02                 | 6,124=01                       | /•0/8¤*0                                 | I. U/ D. + 0.3   |
| ו100≠+02                       | 7.600.02               | 4.05/0+02                 | 6.0//==01                      |  | 1. <u>19</u> 1. <b>9</b> 1 |
| 0.200x+02                      | 7.082.+02              | 4.148.702                 | 6.03   # 0  <br>5 1) 8 5 - 5 1 | 7,034,0000                               | 1.1204 []3   |
| 0.300*+02                      | 7.15/#+02              | 4.240.02                  | 5,900m=[]]                     | / • 7   <b>  •</b> 7   ]                 | 1.1330703  |
| 0.400×+02                      | 7.832.+02              | 4,332=+02                 | 5,943=01                       | /,70/#*[]                                |  |
| 0,200=+02                      | 7,90/=+02              | 4.722#702                 | 5.9010901                      |  | 1.1/0#+03  |
| 0,000++02                      | /.981+02               | 4,220+102                 | 5.00(»=0                       | 0 •   3 × 0   • 0                        | 1. 19/84 (3  |
| 9./00≠+0∠                      | 8,022,+02              |                           | 5,020 <b>≈</b> 0               | 0,4 4 <u>p</u> 70 <br>8 280 - 01         | 1,219**03  |
|                                | 0, 120 p+ 02           |                           | 5,70 m []                      | 8 363 -01                                | 1.240+03   |
| ○• <b>&gt;</b> 00 <b>×</b> +02 | 9+2019702<br>9-077     | 4,000+02                  | 2,/77#*[]<br>5 7-7 - 6         | 8 4 27 - 01                              | 1.202.0403   |
| 7:000×+02                      |                        | 7,7(Jan+()2<br>5 001,±102 |                                | 8,510,m01                                | 1.204##U3  |
| 9 200 + n2                     | 8 417 + 12             | 5.099.+02                 | 5 636 - = 01                   | 8.58301                                  | 1.328#+n3  |
| 9.300+02                       | 8.488.+02              | 5.198.+02                 | 5.602-01                       | 8.656                                    | 1. 50 + 03   |
| $9.400 \pm 02$                 | 8.559.+02              | 5.298.+02                 | 5.569-01                       | 8.728.*01                                | 1. 372++03   |
| 9.500++02                      | 8.630.+02              | 5.398.+02                 | 5.537.01                       | 8.800.0                                  | 1.394=+03  |
| 9.600+02                       | 8.700+02               | 5.499.+02                 | 5.5n5-ni                       | 8.872 = n I                              | 1.416=+03  |
| 9.700+02                       | 8.769.+n2              | 5.011.+12                 | 5.474 <b>.</b> -11             | 8,943 11                                 | 1.438=+05  |
| 9.800++02                      | 8.839.+02              | 5.704.+02                 | 5.444. • 01                    | 9.013. 01                                | 1.46 n#+ n3  |
| 9.9nn+++                       | 8,918.+12              | 5.8.7.+.12                | 5.415. • ni                    | 9,084                                    | 1.482+13   |
| 1.nnn±+n3                      | 8.976_+n2              | 5.9112+02                 | 5.387. • ni                    | 9.154± n1                                | 1.005+13   |
| 1.010+03                       | 9. n45.+ n2            | 6.015.+02                 | 5.359 <u></u> ni               | 9,223 01                                 | 1. 27 + 13   |
| 1. n2n <sub>x</sub> +n3        | 9.112.+02              | 6.120.+02                 | 5.331seni                      | 9,293. 11                                | 1. 25 1 * + 0.3  |
| 1.n3n±+n3                      | 9,188=+02              | 6,226=+02                 | 5.3n5=ni                       | 9.36                                     | 1. 572+13  |
| 1.040x+03                      | 9.247 + 02             | 6.333=+02                 | 5.279.01                       | 9.430.00                                 | 1. 295=+ 33  |
| 1,050++03                      | 9,314+02               | 6,440=+02                 | 5,253=01                       | 9.498. 01                                | 1.017#+03  |



PARTICLE DENSITY #

5.0 GRAMS PER CUBIC CENTIMETER

| DIAMETER                            | VELOCITY                | RE 2.                        | DRAG: COEF            | RELAX TIME                             | .90 DIST                |
|-------------------------------------|-------------------------|------------------------------|-----------------------|--|-------------------------|
| I+000×+00                           | 1,513 <sub>0</sub> =02  | 9,962#=06                    | 2,332+06              | . <b>  ,</b> 5′43: <sub>20</sub> = 0,5 | 6, 928 = 07             |
| 1.100x+00                           | 1,828,02                | 1.324.=05                    | 1,760 <b>m+0</b> 6    | <b> ,</b> 864∞=05                      | .u 3=+06                |
| 1.200#+00                           | 2.173.02                | 1.717=05                     | 1,3610+06             | 2.216=05                               | 1.434==06               |
| 1.300±+00                           | 2,547,02                | 2,180=25                     | 1,073=+06             | 2,598 <b>.</b> •05                     | 1.74=06                 |
| 1.400=+00                           | 2,952.02                | 2,721.05                     | 8.6 8 m + 05          | 3.040±705                              | 2.653==06               |
| 1.500±+00                           | 3.386.02                | 3,344,=05                    | 7.023.+05             | 3,453∞=05                              | 3.493+-06               |
| 1.600*+00                           | 3.85002                 | 4.056.=05                    | 5,798,+05             | 3.926. = 05                            | 4.519=06                |
| 1,/00±+00                           | 4.34302                 | 4,062.705                    | 4.843.+05             | 4,429 <b>p</b> =05                     | 5./56==06               |
| 1.800#+00                           | 4,86/0=02               | 5, 168 <sub>0</sub> = 05     | 4,080,+05             | 4.963.05                               | 7.2310-06               |
| 1.700=+00                           | 5.420.0702              | 0,781#=05                    | 3,479×+05             | 5,527×05                               | 8,97 ==06               |
| 2.000=+00                           | 6,003-02                | /, / 05m= 05                 | 2,98/++05             | 6, 121= 85                             | 1.101-05                |
| <.100x+00                           | 6.6 2.02                | Y, 48∞=05                    | 2,583=+05             | 6,746=05                               | 1.337=05                |
| 2.200++00                           | 7,250,02                | 1.051=04                     | 2.249=+05             | 7,401=05                               | 1.010**05               |
| 2.300x+00                           | /,930==02               | 1.201=04                     | 1.9/0=+05             | 8.087                                  | 1.923=-05               |
| <b>∠</b> • <b>4</b> 00 <b>≠+</b> 00 | 8,032=02                | 1.364. 04                    | 1./30=+05             | 8.003=05                               | 2.279=05                |
| 2.200**00                           | 9.3040=02               |                              | 1,23/0+()5            | 9,249× 05                              | 2.682** ()5             |
| $2 \cdot 0 = 0 = 1$                 | 1.092                   | 1.94 Lat 04                  | 1.30/m []5            | 1. 1.7 = 04                            | 3. 1.30 = 0.5           |
| 2.000++00                           |                         | 2.164                        | 1,222=+05             | 1.197.=04                              | 0+0+0##102<br>4 035×=05 |
| 2.900++00                           | 1,259                   | 2.404.*04                    | 9.873-+n4             |  | 4,215=05                |
| 3. nnnx + 8n                        | 1.347 <u>.</u> •ni      | 2.061                        | 8.923±+n4             | 1.374p+n4                              | 5.5518805               |
| 3.100=+00                           | 1.438 <sub>m</sub> = n1 | 2.935. 04                    | 8.191=+14             | 1.466 14                               | 6.3270-05               |
| 3.200x+00                           | 1,532. = 0              | 3,228 04                     | 7.360.+04             | 1, 262, - 14                           | 7.181##15               |
| 3,300x+00                           | 1,629 = 01              | 3,54 <sub>00</sub> =04       | 6.714.+04             | 1.66 1. = 04                           | 8.1900005               |
| 3.400=+00                           | $1,729_{p}=01$          | 3,871,0=04                   | 6.142 + 04            | 1.76304                                | 9. 146= 05              |
| <b>3,⊅00≠+</b> 00                   | ,832 <b>m</b> ≑0        | 4.222#=04                    | 5,032x+04             | 1,868 <u>,</u> =04                     | 1. 127 - 04             |
| 3,600x+00                           | 1,930 <sub>0</sub> +01  | 4.593.04                     | 5.178×+04             | 1,976,=04                              | I•   49 <b>⊭</b> ≓ 04   |
| 3,700=+00                           | 2.047=01                | 4.986. 04                    | 4.771=+04             | 4 0 • • 18 7 • 0 4                     | 1.282=04                |
| 3.800x+00                           | 2, 158, 01              | <b>7.</b> 40   <b>.</b> • 04 | 4,400,+04             | 2.2010-04                              | 1.426=•04               |
| 3.900+00                            | 2.273.01                | 5.838. = 04                  | 4.07/++04             | $2.318_{p} = 0.4$                      | 1. 28 [## 04            |
| 4.000++00                           | 2.391                   | 0,298=04                     | 3./80=+04             | 2,438p=04                              | 1.749.04                |
|                                     |                         | 7 989 - 04                   | . 3, 2   10 + []4     |  | 1.4000-04               |
| <b>→</b> + 200×+00                  | 2,000                   |                              |                       |  |                         |
| 4.400**00                           | 2,892,01                | 8.379.704                    | 0.043.+04             | 2.949. = n4                            | 2.334#* [4              |
| 4.500++00                           | 3. 725. = 01            | 8.963 • n4                   | 2.0100-04             | 3.085.4                                | 2. /99/0 = 04           |
| 4.6nnx+nn                           | 3.160m⇒01               | 9.573.04                     | 2.490+04              | 3.223 n= 04                            | 3                       |
| 4,700x+00                           | 3.299. 11               | 1.021=03                     | 2.35 - 14             | 3,364.=04                              | 3.329==14               |
| 4.800+00                            | 3.441.00                | 1,08703                      | 2.192.+n4             | 3.5 <sub>0</sub> 9′2 • <u>0</u> 4      | 3.0210+14               |
| 4,900++00                           | -3,585m=01              | •   <del>5</del> 7∎=03       | 2.061.+04             | 3.656. = 04                            | 3. 43   = n4            |
| 5.000*+00                           | 3,733=01                | 1,229="03                    | , <sup>9</sup> 40∞+04 | 3,8 <sub>0</sub> 7,,•04                | 4.2010-04               |
| 5.100*+00                           | ८,885 <u>∞</u> =01      | I.3 <u>0</u> 4∍≖03           | 1.0290+04             | 3,96 <sub>00</sub> ,96                 | 4.0110-04               |
| 2.200×+00                           | 4.037.01                | 1.3820=03                    | 1./20.+04             | 4 <b>,</b>   7 <sub>10</sub> +04       | 4. 783 = 04             |
| 2.300#+00                           | 4.193.001               | 1,463.*03                    | 1,030=+04             | 4,276 <sub>0</sub> =04                 | 5.376=04                |
| 2.400=+00                           | 4,353 <u>∞</u> #0       | 1,548,=03                    | 1.5420+04             | 4,439,-04                              | 5 <b>./93∺</b> •04      |
| 2.2002+00                           | 4,512,0001              | 1,035.0*03                   | 1.457m+n4             | 4.0 <u>04</u>                          | 6. 233×+14              |

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| DIAMETER               | VELOCITY  | RE                                    | DRAG COEF                                    | RELAX TIME             | .98 DIST            |
|------------------------|---|---------------------------------------|--|------------------------|---------------------|
| Þ.6n∩±+n0              | 4.680 <b></b> *0i                                   | 1.726.03                              | 1.383 <b>0+</b> 04                           | 4,773=04               | 6.097= 04           |
| 5.700+00               | 4.84901   | 1.82n=n3                              | 1.3120+04                                    | 4,945=04               | 7 <b>.  87#</b> #04 |
| 5.800+00               | 5.020   | 1.917.03                              | 1.2450+04                                    | 5.119==D4              | 7./04=04            |
| 5.9nn+nn               | 5, 194.+ 01   | 2.018.03                              | 1.183.+04                                    | 5.297 <b></b> 04       | 8.248=-04           |
| 6. 000±+00             | 5.372.01  | 2.122=03                              | 1.1250+04                                    | 5 <b>, 478, -</b> 04   | 8.020-04            |
| 5.100++00              | 5.552.01  | 2.230. = 03                           | 1.071=+04                                    | 5,662. + 04            | 9.421=04            |
| 6.2nn+nn               | 5.73501   | 2.341 03                              | 1.020=+04                                    | 5,848 <u></u> •04      | l.u05#=03           |
| 6.3nn+nn               | 5.921.001   | 2.456, = 03                           | 9.723=+03                                    | 6,038 <u>,</u> -04     | 1.072=03            |
| 0.4nn+nn               | 6.110m=01   | 2,575.=03                             | 9,270.+03                                    | 6,2310-04              | 1.141=03            |
| 6.5nn+nn               | 6.30201   | 2.697.03                              | 8,050_+03                                    | 6,427 <u>s=</u> 04     | 1.2 40-03           |
| 6.600+00               | 6,498, - DI   | 2,824. 03                             | 8,4610+03                                    | 6,626=04               | 1.290=03            |
| 6.7nn=+nn              | 6.696 DI  | 2,954=03                              | 8. 189.+13                                   | 6,828 <u>m=0</u> 4     | 1. 37 0** 03        |
| 6.8nn=+nn              | 6,897 -01   | 3,088=03                              | 7,730,+03                                    | 7,033 <u>»</u> =04     | 1.4530-03           |
| 6,900x+00              | 7.100.01  | 3,226,=03                             | 7,4₀7 <b>⊳</b> +₀3                           | 7,24 =04               | J. 74 Dr 03         |
| 7.000++00              | 7.307.01  | 3,368∍*03                             | 7. <sub>0</sub> 96 <sub>m</sub> + <u>0</u> 3 | 7,452=*04              | 1.031=3             |
| 7.100=+00              | 7,517,001   | 3,5140=03                             | 6.¤ŋ∣∍+ŋ3                                    | 7,666° - 04            | 1. /26== 03         |
| 7.200++00              | 7,73001   | 3,665∎=03                             | 6.522*+03                                    | 7,883,=04              | 1.026=03            |
| 7.300=+00              | 7,94601   | 3,819₽₹03                             | 6,259 <b>*</b> +n3                           | 8.10304                | 1.929==03           |
| 7.400=+00              | 8,165,01  | 3,978₽=03                             | 6, <u>0</u> 09±+03                           | 8.32604                | 2. 136 03           |
| 7.500++00              | 8,38601   | 4.142=03                              | 5,773 <b>+</b> 13                            | 8,252,-04              | 2.148=03            |
| 7,600=+00              | 8,611.01  | 4 <b>,</b> 3 <sub>0</sub> 9∞≈03       | 5,549=+03                                    | 8,/8 [ <b>n</b> = []4  | 2.2050-03           |
| 7.700=+00              | 8,839. 01   | 4.481=03                              | 5.330 + 03                                   | 9.013=04               | 2.380**03           |
| 7.800±+00              | 9,06901   | 4,658∍•03                             | 5. 34. + 03                                  | 9,249,04               | 2.212.03            |
| 7 <b>,900±+</b> 00     | 9,303.01  | 4,839, 03                             | 4.942=+03                                    | 9,48/∞≠04<br>0.708 = 4 | 2.0430 - 03         |
| 8.000=+00              | 9,539.01  | 5.025=*03                             | 4./60.0+03                                   | 9,720,*04              | 2.7798003           |
| 8 <b>.100±+</b> 00     | 9 <b>,77%</b> =01                                   | 5.216=03                              | 4.280.+03                                    | 9.9/20 04              | 2.9210703           |
| 8,200×+00              | 1.002+00  | 5,411=03                              | 4,4210+03                                    | 1.022=03               | 3. 00/00 03         |
| 8,300r+00              | 1.02/0+00   | 5.0110-03                             | 4,264=+03                                    | 1.04/m=03              | 3.219#7 []3         |
| 8,400=+00              | 1,052,+00   | 2,0100 03                             | 4,114#+63                                    |                        | 3.3//==03           |
| 8,500=+00              | 1+07/=+00   | 0,026±=03                             | 3. 4/ 1 = [] 5                               |                        | 3.94 [] # 2.9       |
| 8.600=+00              | 1.102=+00   | 0,24 . 03                             | 3.03404 63                                   | 1. 150. = 03           | 3 84 - 03           |
| 8./00 <b>*</b> +00     | 1.120.0+00  | 0,40,1µ∺US<br>6,686 = 03              | 3./[["#"]]3<br>2.580±+03                     |                        | 466# 03             |
| 0,000++00              | [+ [ <b>7</b> <sup>4</sup> <b>b</b> <sup>+</sup> ]] |                                       |  | 1. 2034-03             | 4. 1530 - 03        |
| <b>○, ∀</b> 00= + 00   | 1. 10.0.+00   |                                       | 3, 40 Jur 83                                 | 1.231.03               | 4.447               |
| <b>9 • 000= +</b> 00   |   | 7 390. • 03                           |  | 1.258 = 13             | 4.047.0-13          |
| 7.100×+00              | 1.237#+UU   | 7 638: • 03                           | 7 134 + 03                                   | 1.286 - 03             | 4. 055⊭ = 3         |
| 7.200×+00              | 1.201.0700  | 7 889 - 03                            | 3. 10 4 b 10<br>3. 13 b 4 13                 | 3.314 = 0.3            | 5. 069 03           |
|                        | 316 + 00  | 8.146.*03                             | 2:939++03                                    | 1.342. 7.13            | 5.29 n= 13          |
| 7.400**00              |   | 8.408.703                             | 2.0484+03                                    | 1.371m=n3              | 5.2180-03           |
| 7.700x700<br>9:600x+00 | -1.073±+nn  | 8.676.=03                             | 2.7611+13                                    | 1.40 <b>0</b>          | 5. /53= 83          |
| 9.700-+00              | 1.4000000000000000000000000000000000000             | 8.95n=n3                              | 2.0703+03                                    | 1:429.03               | 5. 996= 13          |
|                        | 1. 1. 1UI ■ 100<br>1. 430±±00                       | 9.220 - n3                            | 2,595=+13                                    | 458 03                 | 6.246= 03           |
| 9,9004+00              | 1.4591.400  | 9.5146703                             | 2,540,0403                                   | 488. • 13              | 6.205=03            |
|                        | 1.489.+00   | 9.0n4=13                              | 2.445=+03                                    | 1.518.+03              | 6.17   = 03         |
| 1.100±+01              | 1,801,400   | 1.304. 02                             | 1.8380+03                                    | ,836m - 03             | 9, 904=03           |
| 1 1 1 0 0 4 1 0 1      |   | · · · · · · · · · · · · · · · · · · · | • • • • •                                    | -                      |                     |



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| DIAMETER                                    | VELOCITY.                              | RE                    | DRAG COEF                      | RELAX TIME         | ,98 DIST           |
|---|--|-----------------------|--------------------------------|--------------------|--------------------|
| 1.200++01                                   | 2.141.+00                              | 1,092=-02             | 1,418m+03                      | 2,184,-03          | 1.4010-02          |
| 1.300±+01                                   | 2,5110+00                              | 2.150=02              | •     7 <b>•</b> + 03          | 2,5610-03          | 1.729==02          |
| 1.400=+01                                   | 2,910=+00                              | 2,683,-02             | 8,957.402                      | 2,968.=03          | 2, 392**02         |
| 1•200≠+81                                   | 3,338 <u>,</u> +00                     | 3,297 02              | 7,296=+02                      | 3,404p=03          | 3.4 4= 02          |
| <b>!•600≖+01</b>                            | 3,794,+00                              | 3,997=-02             | 6.024.02                       | 3,869,∎∎03         | 4,4160=02          |
| 1.700*+01                                   | 4,278,+00                              | 4,789, 02             | 5.034+02                       | 4,363 <u>0</u> +03 | 5.625==02          |
| 1.800*+01                                   | 4,790±+00                              | 5,678=02              | 4,252m+02                      | 4,885,#03          | 7. 166 - 02        |
| 1.900*+01                                   | 5,330+00                               | 6,668=02              | 3,622=+02                      | 5,435 <u>,</u> •03 | 8.767 <b>#</b> #02 |
| 2+000++01                                   | 5,89/0+00                              | /,/66==02             | 3.110=+02                      | 6 <b>.014</b> =03  | .u76⊳≂0            |
| 2.100=+01                                   | 6,491=+00                              | 8,975.02              | 2,702=+02                      | 6.619.03           | 1.307#*01          |
| 2.200=+01                                   | 7.111.00                               | •03 <b>0</b> ⊨‴0      | 2,359+02                       | 7,25 ∞•03          | 1+574=01           |
| 2.300*+01                                   | 7,756 <u>m</u> +00                     | • 75 <b>»</b> *0      | 2,0735+02                      | 7,910,∞≂03         | •¤79≖⇔o            |
| 2.400++01                                   | 8,427,+00                              | 1,332.01              | 1,832+02                       | 8,594 <u></u> 03   | 2.227==01          |
| 2.500#+01                                   | 9,123 <u>+</u> 00                      | 1.502=*01             | 1.628=+02                      | 9,304=03           | 2+02 **0           |
| 2.600#+01                                   | 9,843 <u></u> +00                      | 1,685=*01             | 1.455 <b>=+</b> 02             | 1.004=02           | 3•y65¤⇒g∣          |
| 2.700=+01                                   | 1+059=+01                              | 1.882.01              | 1,3 <u>0</u> 0m+02             | 1.080+02           | 3. 263**01         |
| 2,800=+01                                   | 1.132+01                               | 2.093=01              | 1. 178. + 02                   | 1.158.02           | 4.1190 01          |
| 2.900=+01                                   | 1+214+01                               | 2,319.01              | 1.06/#+02                      | 1.238m=02          | 4./38==01          |
| 3.000±+01                                   | 1+295=+01                              | 2,559=01              | 9,69/#+01                      | 1.321=02           | 5,424=01           |
| 3.100±+01                                   | • 3/0 •+ B                             | 2.013=01              | 8.847.+01                      | 1,400.02           | 6. 183= 01         |
| 3+200x+01                                   | 1.403.+01                              | 3-083-01              | 8.103=+01                      | 1.492.02           | 6.984=01           |
| 3.300x+01                                   | 0+ <u>u</u> 0¢¢•                       | 3, 369, 01            | 7.442.+01                      | 1,28   02          | 7,829000           |
| <b>3.400±+01</b>                            | ,030±+0                                | 3.068±*()             | 6,872=+01                      | 1.0/ 02            | 8,/26000           |
| 3,200m+0                                    | 1.154 - 11                             | 3.9850 01             | 6.3520+01                      | 1.1050-02          | 9.0//#*01          |
| 3.000x+01                                   | 1.821.+01                              | 4.3/2701              | 5.087=+01                      |                    | 1.068=+00          |
| <b>○</b> •/ <u>0</u> <u>u</u> + <u>(</u> )] | 1.712#+01                              | ₩,000µ♥[]             | 2.4/7.0+01                     |                    | 1.1/20+00          |
| <b>○, ○</b> [] [] <b>±</b> + [] []          | 2.010++01                              | <u>ان • ط (د)</u> • د |                                |                    | 1. 207 . 00        |
| 3. 700x+01                                  | 2+10/0+01                              |                       |                                | 2 2 4 9 0 2 0 2    |                    |
| 7.000**01                                   | 2.20-2+01                              | j] <u>a</u> ∉[]0,€    | 4,702.0401                     | 2 + 2 - 7 = 02     | 1.729# 00          |
| 4 0 a a i i                                 | 2. 3020+01                             | 6 652 -01             | 4. [00m.▼·[]]<br>2. 0.78 + m · |                    | 1.000×00           |
| -7•208×+01<br>-4-300→01                     | 2.507.401                              | 7.099.001             |                                | 2,557.02           | 1.///##00          |
|   |  | 7.562.=01             | 3.504.440                      | 2.062.002          | 289                |
| 4.500.+01                                   | 2.714 + 01                             | 8, n42, = n1          | 3 3 5 4 4 0 1                  | 2.768              | 2. 245 . 00        |
| 4.600 + 01                                  | 2819                                   | 8.538.eol             | 3 341 + 01                     | 2.875 02           | 2.4070+00          |
| 4.7.00**01                                  | 2,925.+01                              | 9.05201               | 2 981+ni                       | 2.983. 02          | 2. 766+00          |
| 4.800×101                                   | 2, 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 9.582                 | 2 834 + 01                     | 3.0914=02          | 2.7514+00          |
| 4.900+01                                    | 3.139.+01                              | 1.013++00             | 2.698.401                      | 3.201.02           | 2. 4336+00         |
| 5.000401                                    | 3.248.+01                              | 1.069.+00             | 2,572.+ni                      | 3.312.02           | 3. (220+00)        |
| 5.1000#*01                                  | 3.357.+n1                              | 1.127.+00             | 2,455+ai                       | 3.423.=02          | 3. 318 - 00        |
| 5.2nn+++                                    | 3.467_+n1                              | 1.187a+nn             | 2.347 + n1                     | 3.236.+02          | 3. 92 n# + 0.0     |
| 5.300-+81                                   | 3.578.+01                              | 1.249.+00             | 2.240±+ni                      | 3.049.+02          | 3. /29.0+0.0       |
| 5.400++01                                   | 3.69 8.4 81                            | 1.312+11              | 2.151stn1                      | 3.763 02           | 3.9450+00          |
| 5.5nn+++1                                   | 3.8n3.+n1                              | 1.377 <u></u> +nn     | 2.063_+01                      | 3.879              | 4.168+00           |
| 5.600+01                                    | 3.917.+01                              | 1.445.+00             | 1.988×11                       | 3.995 - n2         | 4.398±+nn          |
| 5.700-+01                                   | 4.032.+01                              | 1, 2 3, + 00          | 1.902 <b>.</b> +01             | 4.1120-02          | 4.035±+nn          |

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| DIAMETER                                       | AFFOCILA               | RE                                    | DRAG COEF                   | RELAX TIME              | .98 DIST                         |
|--|------------------------|---------------------------------------|-----------------------------|-------------------------|----------------------------------|
| ა,ა <u>ეე</u> ∗+ე                              | 4.149.+01              | 1,584=+00                             | , o.20_+[]                  | 4.23   m= 02            | 4.0790+00                        |
| 2.900x+01                                      | 4,266 + 01             | 1.657.+00                             | 1.759.01                    | 4.35 <u>0</u> ∞•02      | 5.130**00                        |
| 6.000±+01                                      | 4,385=+01              | 1,732=+00                             | 1,093m+01                   | 4,47  = 02              | 5.388=+00                        |
| 0.100x+01                                      | 4,504+01               | 1.809=+00                             | 1.031m+01                   | 4,593=02                | 5.053+00                         |
| b,200x+01                                      | 4,626=+01              | 1,888,+00                             | 1.5720+01                   | 4,7170-02               | 5. 926 + 00                      |
| 6,300x+01                                      | 4,749±+01              | 1,970#+00                             | <b>,</b> ⊅  <b>4</b> ∞+0    | 4,842,-02               | 6.205**00                        |
| 0.400x+01                                      | 4,873+01               | 2,054=+00                             | 1.4620+01                   | 4,969,02                | 6.4920+00                        |
| 6,500×+01                                      | $4,999_{\mu}+01$       | 2.140+00                              | . <b> +4  .#+</b> 0         | 5, <b>0</b> 98,=02      | 6 <b>./85</b> # <b>+</b> 00      |
| 6,600x+01                                      | 5,127=+01              | 2.228.+00                             | 1.362=+01                   | 5,228.02                | 7, <sub>0</sub> 86 <b>»+</b> 00  |
| 6,/00=+01                                      | 5,250,+01              | 2,319×+00                             | 1.310=+01                   | 5,36 <u>0</u> ,=02      | 7, 394*+00                       |
| 6,800x+01                                      | 5,388m+01              | 2,412=*00                             | 1.271=+01                   | 5,494,02                | 7.109#+00                        |
| 6,900±+01                                      | 5,521,0+01             | 2,508,+00                             | 1.2200+01                   | 5.630=02                | 8. <sub>0</sub> 32»+00           |
| /•000×+01                                      | 5,655,+01              | 2,607,+00                             | , 8/∞+ŋ                     | 5, 167, = 02            | 8.362=+00                        |
| /+100×+.01                                     | 5,791,+01              | 2.107.*00                             | 1.149=+01                   | 5,700=02                | 8.699=+00                        |
| 1.200**01                                      | 5.929#+01              | 2+811=+00                             | •  <u> </u>   <b>∞+</b> ∏   | <b>6.040 </b> 02        | 9. 43*+00                        |
| /.300#+81                                      | 6,06/+01               | 2,716=+00                             | , <u>070</u> #+0            | 6,18/m=02               | 9.394=+00                        |
| /+400×+01                                      | 6+20°±+01              | 3,024=*00                             | , ( <b>42</b> # <b>†</b>  ) | 6,329m=02               | 9.153#*00                        |
| 1.500×+01                                      | 6,342=+01              | 3, 34∞+00                             | 1.011**01                   | 6,470,02                | 1.015+01                         |
| /••00±+01                                      | 6,484,+01              | 3,245=+00                             | 9,000+00                    | 0.0120-02               | 1.049=+01                        |
| /•/00#+.01                                     | 0,021 <u></u> ,+01     | 3.3 <u>5/s+00</u>                     | 9,520=+00                   | 0,/52x=02               | 1.087=+01                        |
| /••000±+01                                     | 6+/5/m+01              | 3,470=+00                             | 9,269=+00                   | 6,890=02                | 1.126 <b>*</b> 01                |
| 7.900x+01                                      | 6,887 <u></u> +01      | 3,284±+00                             | 9,031=+00                   | 7.025=02                | 1.102=+01                        |
| <b>♀</b> •;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;; | /+0//#+0/              | 3.090±+00                             | 8,812=+00                   |                         | 1.206**01                        |
| ○•!00 <b>*</b> +()!                            | 7.130.+01              | 3,00/#+00                             | 8,024±+00                   | 7.2/98 02               | 1.247=+01                        |
| 0•200≖+()                                      | 1,2520+01              | 3,7  0x+00                            | 8,457,+00                   | 7,395,*()2              | 1.584+01                         |
| 0.000x+01                                      |                        | · · · · · · · · · · · · · · · · · · · | 8.3/4.00                    | 7,4/8,02                | 1.331=+01                        |
|  |                        | 4.125.40                              | 00 + 40 00                  | 7,0000002               | 1.3/4=01                         |
|  | 7,202+01               | 4,244#*00                             |                             | /+/3∠∞*9∠<br>7 860 = 52 | 1.4   8 # + []  <br>  46 3 = + 0 |
|  | 7 832 401              | 4 487 + pp                            | 7.694.+00                   |                         |                                  |
| 5 505-+61                                      | 7 958 + 01             | 4 6 1 + 00                            | 7 539 + 80                  | 8 115 - 02              | 1. 2(10#+0)                      |
| 0.9an.+al                                      |                        | 4.737.+00                             | 7,389m+nn                   | 8,244,=02               |                                  |
| · · · · · · · · · · · · · · · · · · ·          | 8.210+01               | 4.865.+00                             | 7.244.+00                   | 8.372 92                | 1.048#+11                        |
| Y.108++11                                      | 8-330-+01              | 4.995.+00                             | 7.105.+00                   | 8.501.002               | 1.696***                         |
| 9•2n0*+n1                                      | 8.463m+GI              | 5.127. 10                             | 6.970 <b>=</b> +00          | 8.630 02                | 1. /45 - 11                      |
| -9.3n8x+u1                                     | 8.589 + ni             | 5.261.+11                             | 6.039.+00                   | 8,759, n2               | 1.194=+11                        |
| ·9•400±+01                                     | 8.710+11               | 5.395.+00                             | -6.7.13s+nn                 | 8,888,*92               | 1.345=+01                        |
| . 4.500x+11                                    | 8,843 <sub>0</sub> +01 | 5.532.+00                             | 6.5910+00                   | 9.018.02                | 1.096=+01                        |
| 9,000x+11                                      | 8,970=+01              | 5,07 10+00                            | 6.472.+00                   | 9.148 02                | 1.948#+01                        |
| 9.700++01                                      | 9.098.+01              | 5.0110+00                             | 6.356.+00                   | 9,278=02                | 2.0004+01                        |
| 9,800x+iil                                     | 9,220,+01              | 5,953=+00                             | 6,247.+00                   | 9.408.02                | 2. 534+01                        |
| .9 <b>.</b> 900±+01                            | 9:353=+01              | 6,097=+00                             | 6.139.+00                   | 9,538, -02              | 2.107=+01                        |
| · 1+000=+02                                    | 9-48 1=+01             | 6,243=+00                             | 6.035 <b>±+</b> 00          | 9.669. 02               | 2.162=+01                        |
| 1.100*+92                                      | 1.077.+02              | 7.800=+00                             | 5.140.+00                   | 1.098.01                | 2.1470+01                        |
| 1,200=+02                                      | 1.207.+02              | 9,536=+00                             | 4.470=+00                   | 1.2310-01               | 3.402*+01                        |
| <b>1.300±+</b> 02                              | 1,338,+02              | 1.145.+01                             | 3,942=+00                   | 1,364p=01               | 4.126*+01                        |



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| DIAMETER                    | VELOCITY           | RE                  | DRAG CUEF             | RELAX TIME                      | .90 DIST                |
|-----------------------------|--------------------|---------------------|-----------------------|---------------------------------|-------------------------|
| 1.400*+02                   | 1,469,+02          | 1,354 <b>s+</b> 01  | 3,522,+00             | / <b>,</b> 498 <b>±</b> ≖0      | 4.4150+01               |
| 1.500++02                   | 1.600.+02          | 1,580,+01           | 3,179=+00             | 1,631.01                        | 5./70×+01               |
| 1.000++02                   | 1,731=+02          | 1,824=01            | 2,897=+00             | • /65 <b>•</b> • 0              | 6.088#+0                |
| 1.700++02                   | 1.862.+02          | 2,085+01            | 2,660=+00             | .899 <b>±</b> 0                 | 7.067+01                |
| 1.000+02                    | 1,993,+02          | 2,302.40            | 2,457,+00             | 2.032.01                        | 8.705++01               |
| 1+700x+02                   | 2.120.+02          | 2.050.0701          | 2.28/#+00             |                                 | 9.00.00                 |
| 2 100-+02                   | 2:2240402          | 3 294.+01           | 2.130.400             |                                 |                         |
| 2.200+02                    | 2,511+02           | 3.637.+01           | i 894 - + nn          | 2.560                           | 1.5410+02               |
| $2 \cdot 3 n n_{x} + n^{2}$ | 2.638.+02          | 3.996.+11           | 1,793,+nn             | 2.691.01                        | 1.4720+02               |
| 2.400*+02                   | 2,765,+12          | 4.370.+01           | 1.7n3#+nn             | 2.821                           | 1.008++02               |
| 2.500+02                    | 2.892+02           | 4,760==01           | 1.622++00             | 2,949, -01                      | 1,/49=+02               |
| 2,600+12                    | 3.017.+02          | 5, [65 <b>.</b> +0] | j,550∍*0n             | 3.077.01                        | 1.894=+02               |
| 2.700=+02                   | 3.142.+02          | 5,586st01           | 484=+00               | 3.204=01                        | 2. 143=+02              |
| 2,800#+02                   | 3,265+02           | 6,021=*01           | 1,425 <b>+</b> 00     | 3.3300-01                       | 2. 197 - 02             |
| 2.900=+02                   | 3,388,+02          | 6.470=+01           | 1.370×+00             | 3, 455∞" ()                     | 2. 355=+02              |
| 3.000=+02                   | 3.510+02           | 0,9350+01           | 1.321=+00             | 3, 28 (m = 0                    | 2,518++02               |
|                             | 3,0320+02          | 7 9 0 5 + 91        | 1,2/2=*00             | 3+/030701                       | 2.084#+02               |
| 3. 300++02                  | 3.871.+02          | 8.4.2.+.01          | 1.2000 00             | 3.948                           | 2.0340+02               |
| 3.4nn++02                   | 3.998.+02          | 8.932.+ni           | 1.159.+00             | 4.06901                         | 3.205**02               |
| 3.500*+02                   | 4.107.+02          | 9,466,+11           | 1.125.+00             | 4.1891                          | 3.385×+n2               |
| 3.600+12                    | 4.224,+02          | 1.001.+02           | 1.095.+00             | 4,308.01                        | 3. 57 1=+02             |
| 5.700++02                   | 4,340 + 02         | 1,057,0+02          | 1.060.+00             | 4.426.01                        | 3./57=+02               |
| 3.000x+12                   | 4,455+02           | 1,115,+02           | 1,039 <b>m+00</b>     | 4,543 <u>,</u> =01              | 3. y 48ø + 02           |
| 3,900x+02                   | 4,569,+02          | 1,173,+02           | , C 3∞+00             | 4.66001                         | 4.1410+02               |
| 4.000*+02                   | 4,683,+02          | 1,233,+02           | 9,59/#=01             | 4,/75,=01                       | 4.338#+02               |
| 4.100++02                   | 4.795±+02          | 1,295,02            | 9,6/4=0               | 4.09001                         | 4. 538=+02              |
| 4.200x+02                   | 4,70/0+02          |                     | 9,404»=0 <br>0 366 =0 |                                 | 4./40₽₹02<br>4.v46=+=02 |
| <b>₹</b> ∎000±≠02           | 5 128 + 02         | 1.486.*02           | 9,200,001             | 2+117#*01<br>5.229.e01          | 5 5700702               |
| A.500+02                    | 5.237.+02          | 1.552.+02           | 8.902m=01             | 5.340.00                        | 5.164##02               |
| 4.600+02                    | 5.342,+02          | 1.619.+02           | .8.735                | 5.45   0                        | 5.577=+ 12              |
| 4.700++02                   | 5,453=+02          | 1,688.+02           | 8,576p=01             | 5, 56  = 01                     | 5.1930+02               |
| 4,800++02                   | 5.560+02           | 1,757.+02           | · 8,425.* ()          | 5,669. 01                       | 6. yl   • + 02          |
| 4,900#+02                   | 5,660,+02          | 1.828.*02           | 8,282**01             | 5,778 <u>,</u> 701              | 6.2310+02               |
| 2.000=+02                   | 5,771+02           | 1,900++02           | 8, 140, = 01          | 5,885 <u>,</u> ≓01              | 6.453=+02               |
| 2.100=+02                   | 5,079,02           | - 1; 7/3= 02        | 8.010.01              |                                 | 0.0/8++02               |
| 2,200**02                   | 2+7/7±+02          | 2 197 × 102         | /•°¥≤==0 <br>7 /7×    |                                 | 7 . 74                  |
|                             | 6. 184. + 02       | 2,199,+n2           | 7.60                  | 0, c ( 2 x 7 ()  <br>6.306. = n | 7.1090002               |
| 5,5nn++a2                   | -6.286s+n2         | 2.276.+02           | 7.5526801             | 5.4t∩∞*∩l                       | ·7.598##02              |
| 5.600+02                    | 6.387 <b>.</b> +n2 | 2.355.+02           | 7,449,eni             | :6.513m=n1                      | 7.832**:02              |
| 5,700 <b>x</b> +02          | 6,487,+02          | 2,435,+02           | 7.350× ni             | · 6 · 6   5 » • n I             | 8. 169. + 12            |
| 5.800*+02                   | 6,586,+02          | 2,545=+02           | 7,25501               | 6,716.01                        | 8.308=+02               |
| 5 000 + 02                  | 6 685 +03          | 2-507 + no          | 7 163 01              | 6 817 01                        | 8                       |

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| DIAMETER                | AFTOCILA                            | RE                 | DRAG COEF                  | RELAX TIME                                      | ,98 DIST                                 |
|-------------------------|-------------------------------------|--------------------|----------------------------|---|--|
|                         | 4 793 + 00                          | 2 680.+02          | 7 07601                    | 6.917=01  | 8./90=+02                                |
| 0,000++02               | 6 980 + 02                          | 2 7 4 3 + 0 2      | A 002                      | 7.016.01  | 9  |
| ○•   0 0 <b>*</b> + 0 2 |                                     | 2 848. + 12        |                            | 7.115.01  | 9. 79 + 12                               |
| 0.200=+02               | 0,9//8+02                           |                    |                            | 7.212.01  | 9. 525=+ 12                              |
| 0.300=+02               | 7.0/3.+02                           | 2,7040402          |                            | 7.310.00  | 9. 174 + 02                              |
| 6,400+02                | 7.100,+02                           | 5,021.02           | 0,790m 01                  |   | 1  |
| 0,500=+02               | 7,263,+02                           | 3,100=*02          | 6,000,001                  | 7 5 5 7 = 0 1                                   | 1  |
| 6,600++02               | 7,35/#+02                           | 3, 19/#*02         | 0,0 0m*[]                  | 7 507 - 01                                      | 1. 1200 00                               |
| 6,700 = +02             | 7,450+02                            | 3,20/= 02          | 0,247,0 0                  | 7 690 -01                                       | 1  |
| 6,800*+02               | 7, 540,+02                          | 3, 3//#* 02        | 0,407.000                  |   | 1. 1.04=+03                              |
| 6.900=+02               | 7,632,+02                           | 3,469=*02          | 6,421.0                    | 7,700pe() <br>7,88, =01                         | 1. 104-* 03                              |
| 7.000=+02               | 7,72/0+02                           | 3,262=02           | 6,30 [#**[]                |   | 1. 129-103                               |
| 7,100×+02               | 7+8 8+02                            | 3,055=+02          | 6.3020 01                  |   | 1. 19                                    |
| 7,200**02               | 7,908,+02                           | 3,749=+02          | 6,240, 01                  | 0,000×001                                       |  |
| 7,300 <b>*</b> +02      | 7,998,+02                           | 3,845+02           | 6,19 ##10                  |   |  |
| 7,400++02               | 8,087 <b>,</b> +02                  | 3,941=02           | 6.130p•01                  | 0,24/9*01                                       | 1.2330+03                                |
| 7.500-+02               | 8, 176,+02                          | 4.038=+02          | 6.087=01                   | 8,338m 701<br>9,409 mol                         | [• ∠0 <u>0</u> <sup>∞</sup> • <u>0</u> 3 |
| 7,6 <sub>00=</sub> +u2  | 8:264:+02                           | 4.130.02           | 6,03/#*01                  | 0,420,00  | 1.200-03                                 |
| 7,700 <b>*</b> +02      | 8,352,+02                           | 4,235=+02          | 5,989.01                   | 8,2 /=*0  | 1.3 3#+03                                |
| 7.800=+02               | 8,439,*02                           | 4,334.+02          | 5.9420-01                  | 8,0 <sub>0</sub> 0,*01                          | 1.339#+03                                |
| 7.900=+02               | 8,525×+02                           | 4,435=+02          | 5.89/=*01                  | 8,094p70)                                       | 1.3000703                                |
| 8,000=+02               | 8,611,+02                           | 4,536=+02          | 5.853 <b>m</b> =0          | 8./82.00  | 1.3930+03                                |
| 8,100=+02               | 8,697,+02                           | 4,639.+02          | 5,° 0,**0                  | 8,00 <b>9,</b> *0                               | 1.420 03                                 |
| b,200=+02               | 8,782,+02                           | 4,742=+02          | 5,/07=01                   | 0, 7, 7, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, | 1.44/0+00                                |
| 8.300*+02               | 8,866,+02                           | 4,846=*02          | 5,/20,                     | 9.041   | 1.4/4=03                                 |
| 8,400++02               | 8,950,+02                           | 4,950++02          | 5,68 <b>9∞</b> ∎0          | 9,12/2-01                                       | 1.201**03                                |
| 8.500=+02               | 9 <sub>+0</sub> 33 <sub>0</sub> +02 | 5,056»*02          | 5.05  = 0                  | 9+2120*01                                       | 1.228 - 03                               |
| 8.600++02               | 9,110,+02                           | 5,162*+02          | 5.014.01                   | 9,296=01  | 1.226=+03                                |
| 0,700x+02               | 9,199 <sub>2</sub> +02              | 5,27 0×+ 02        | 5,578,*01                  | 9,3800 01                                       | 1.2830+03                                |
| 6,600±+02               | 9,2810+02                           | 5,378 <b>,</b> +02 | 5, 243, 01                 | 9,464,01  | 1.011+03                                 |
| 8,900++02               | 9,362,+02                           | 5,486,+02          | 5,50 <b>°∗</b> •01         | 9,547=01  | 1.0380+03                                |
| 9.000++02               | 9,443,+02                           | 5,596++02          | 5,476 <b>.</b> •01         | 9,629, -01                                      | 1.066#+03                                |
| 9.100.+02               | 9,523,+02                           | 5,706+02           | 5.444=01                   | 9./120-01                                       | 1.094+03                                 |
| 9,200+02                | 9,6 <sub>0</sub> 3 <sub>5</sub> +02 | 5,818+02           | 5,412=01                   | 9,793, 701                                      | 1.1220+03                                |
| 9.300=+02               | 9,683,+02                           | 5,930=+02          | 5,381,01                   | 9,074   |  |
| 9,400++02               | °9,762∞+02                          | 6,042=+02          | 5.3520 01                  | 9,955=01  | [.//8##[3                                |
| 9,500=+02               | 9,841,+02                           | 6,156=+02          | 5.322=01                   | 1 • 0 0 4 × + 0 0                               | [• 3 [ 6# + [ 3                          |
| 4.600x+U2               | 9,919,+02                           | 6,270=+02          | 5.294=01                   | 00+0100   | 1.834#+03                                |
| 9.700*+02               | 9,996 <u>s</u> +02                  | 6,385+02           | 5.266                      | 1,019x+00                                       | 1.562** 03                               |
| 9.800=+02               | 1.007=+03                           | 6,501#*02          | 5.239.01                   | 1.02/0+00                                       | 1.890=03                                 |
| 9.900*+02               | 1.015=+03                           | 6,617=+02          | 5,213=01                   | 1,0350+00                                       | 1.918=+03                                |
| 1.000++03               | 1,023,+03                           | 6,734=+02          | 5,187,01                   | 1,043,00  | 1.9470+05                                |
| 1.010++03               | 1,030,+03                           | 6,852=+02          | 5, 162-01                  | 1.0510+00                                       | 1.9/5++03                                |
| 1.020++03               | 1.038.+03                           | 6,971+02           | 5.137.01                   | 1,058±+00                                       | 2.004++03                                |
| 1,030+03                | 1,045 + 03                          | 7 <b>.090=</b> *02 | 5.13.01                    | 1.066.00  | 2. 135-+03                               |
| 1.040+03                | 1,053=+03                           | 7,210=+02          | 5.090#*01                  | I.074=+00                                       | 2.061**03                                |
| 1.050=+03               | 1.060.+03                           | 7,331=+02          | 5. <u>0</u> 67 <b>.</b> =0 | <b>00 * a</b>   8 <b>0 •</b>                    | 2•u89∞ <b>*</b> 03                       |

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| DDIAMETER                | VELOCITY                              | RĘ                       | DRAG COEF                 | RELAX TIME                                       | •98 DIST                   |
|--------------------------|---------------------------------------|--------------------------|---------------------------|--|----------------------------|
| 1.000×+00                | 1.815 12                              | 1.195.=05                | 1.944 <b>.</b> +06        | 1,851.0-05                                       | 9.123##07                  |
| 1.100.+00                | 2.19312                               | 1.589.=05                | 1.467.+06                 | 2,237, = 05                                      | 1.334=06                   |
| 1.200**00                | 2.607.02                              | 2.060.05                 | 1.134.+06                 | 2,059.05   | 1.0880-06                  |
| 1.300++00                | 3. 157. 12                            | 2,617,05                 | 8.946.+15                 | 3,117,0=05                                       | 2. 299 16                  |
| 1.400.+00                | 3.542.02                              | 3,265, = 05              | 7,182,+15                 | 3,612,05   | 3.493.000                  |
| 1.500.+00                | 4. 163 12                             | 4.013.005                | 5.852.+n5                 | 4.143  | 4.000=06                   |
| 1.600**00                | 4.619 12                              | 4.667.=05                | 4.832.+05                 | 4,711, = 05                                      | 5.95   # = 16              |
| 1.700.+00                | 5.212. 02                             | 5,834, - 05              | 4.036.+05                 | 5,315, - 05                                      | 7.580=06                   |
| 1.800+00                 | 5.840. 02                             | 6,922=15                 | 3.405++05                 | 5,955  | 9,521=16                   |
| 1,900#+00                | 6,5n4=02                              | 8,137.05                 | 2,899,+15                 | 6,632 <u>m</u> =05                               | 1.18                       |
| 2.000**00                | 7,203,02                              | 9,486,                   | 2,489,+05                 | 7,346,=05  | 1.45.00=05                 |
| 2.100++00                | 7.938 - n2                            | I. 098. mg4              | 2.153.+15                 | 8.095. 05  | 1. /610-05                 |
| 2.200=+00                | 8,719,12                              | 1,262                    | 1.874 <b>.</b> +n5        | 8,881,   | 2.120-05                   |
| 2.300++00                | 9.510.012                             | 1.441=14                 | 1.642=+15                 | 9,7n4=n5   | 2. 532== 15                |
| 2.400++00                | 1. n36. = n1                          | 1.637.= 04               | 1.446.+15                 | 1.056 04   | 3. 001#*05                 |
| 2.500*+00                | 1.124.01                              | 1.850.04                 | 1.281p+n5                 | 1.146= 04  | 3. 23   # 15               |
| 2.600.+00                | 1.215.01                              | 2.080.04                 | 1.139.+05                 | 1,239=04   | 4.130-05                   |
| 2.700 + 00               | 1.310.00                              | 2,329. 04                | .0 8 <b>±</b> +05         | 1, 336= 04                                       | 4.8010705                  |
| 2,800*+00                | 1,409==01                             | 2,597.=04                | 9,135=+04                 | 1,436p=04  | 5.550**05                  |
| 2,900++00                | 1,511=01                              | 2,885.04                 | 8.227 =+ 04               | 1,540×-04  | 6.384= 05                  |
| 3,000=+00                | 1.616=01                              | 3.193 <b>.</b> =04       | 7,436 <u>+</u> 04         | • 648 <u>×</u> •04                               | 7.309=05                   |
| 3.100++00                | 1.720. 01                             | 3,522 <b>=</b> *04       | 6,743 <b>.</b> +04        | <b>,</b> 76 <sub>0∞</sub> ≠04                    | 8. 31 = 05                 |
| 3,200=+00                | •838°•0                               | 3,8740 = 04              | 6,133m+04                 | 1.875 <b>.</b> +04                               | 9.456== 05                 |
| 3.300±+00                | <b>,</b> 955⊭≖0                       | 4,247±=04                | 5,595 <b>±+</b> 04        | 1,993×=04  | 1. 169 04                  |
| 5.400++00                | 2.075.01                              | 4,645=04                 | 5.110.+04                 | 2.116,-04  | 1.204==04                  |
| 3,500±+00                | 2, 198, - 01                          | <b>5, 066== 04</b>       | 4,094=+04                 | $2 \cdot 242 p = 04$                             | 1. 35.2= 04                |
| 3,600x+00                | 2,322=01                              | 5.512.04                 | 4.315+04                  | 2,37 1 04  | 1.213=04                   |
| 3.700±+00                | 2.450.01                              | 5,983=04                 | 3,970 m+ 04               | 2. 204 - 04                                      | 1.088=04                   |
| 3.00=+00                 | 2,590,00                              | 0,481.04                 | 3.0/2.+04                 | 2.04   04  | 1.877#=04                  |
| 3,400x+00                | 2,728=01                              | /+005=04                 | 3,398=+04                 | 2. /82. 04                                       | 2,082=04                   |
| 4.000=+00                | 2.069.01                              | / 257 . 04               | 3.150.+04                 | 2.920= 04  | 2.303##04                  |
| 4.100±+00                | 3.014=01                              | 0,130,07                 | 2,920,+04                 | 3 <b>,0/4∞=04</b><br>7,005 = 04                  |                            |
| 4.200=+00                | 3, 100 = 01                           | 0,/4/»*[]4               | 2,7230+14                 | 7 48 4   | 2. / 90 8 0 04             |
| 4,300=+00                | 3•3[2ø≂0]<br>4 470 - •↓               | 7,000,04                 | $2, 230 \pm 04$           | ວ,ວດ []⊯≖ []=<br>ເຮັດເພື່ອດ 4                    | 3. 1/40 . 14               |
| 7.700×+00                | 3,4/0,01                              |                          | 2,3/0=+04                 | <b>3</b> + <b>7 3</b> + <b>5 5</b> = <b>0 4</b>  | 3,309#*104                 |
| 4.200**00                |                                       |                          | 2,210##04                 | - 3,/ [] [m] <sup>#</sup> [] 4<br>- 3 - 867 - 64 | 3.003#*[]4                 |
|                          | 3,/9∠ <u>m</u> ≠[] <br>2 0⊑9 - ni     | 1 177 00                 | $2 \cdot 0 / 2 \cdot 0 4$ |  | 4. 02300 04                |
| <b>4</b> •7.00±+00       | · · · · · · · · · · · · · · · · · · · | 1,2298 00                |                           |  | 4,304##04                  |
|                          | 4 3 0 2 - 0 1                         | 1,388_=03                | +°∠/₩▼04<br>  / 8=+04     | 4.38704  | 5.77                       |
| ™∎⊼UU#▼UU<br>ከ 000 +00   | 4 479 -01                             | 140000-00                | 1 × 1 × 1 × 1 × 1 ×       | 4.568  | 5 61144                    |
| ✓•UUU#**UU               | 7 • 7 / 1 • 7 U  <br>4 · 660 - 61     | 1+7/28703                | 1.524.404                 | 4.752-+ 14                                       | - 2•0  ₽♥104<br>6.u70⊮=64  |
|                          |                                       |                          | 1 438.404                 |  | 6 <b>5</b> 60 <b>- 5</b> 4 |
|                          | 9109707UI                             | 1.756                    | • 100 m ≠ 04<br>  • 59    | 5, 131   | 7 .80                      |
| ະ∙ບມູມະ≂ຸມມ<br>5.400-+00 | 2+UUE##UI<br>5.223ni                  | 1.857                    | 1.285±±n4                 | 5.326.+04  | 7.628=04                   |
| ★★▼IJU#▼UU<br>5 500.400  | 5 418 - ni                            | 1.962                    | 1+4928707                 | 5,525. = n4                                      | 8 20704                    |
| ~ • ~ \\U#~\\U           |                                       | 19 - O <b>E B</b> ·· U O | 1,4 ~ 1 ~ ~               | ~ * ~ ~ ~ <b>/ #</b> ~ U ~                       |                            |

| PIAMETER             | AFFACILA               | RE                     | DRAG COEF                                     | RELAX TIME                               | ,98 DIST                              |
|----------------------|------------------------|------------------------|---|--|---------------------------------------|
| 5,600*+00            | 5,61 <sup>6</sup> *01  | 2,071=03               | . 52 <b>s</b> +04                             | 5,727=04                                 | 8.019## 04                            |
| 5.700x+00            | 5,8 8,01               | 2.184.03               | 1.093=+04                                     | 5,933,04                                 | 9.464=04                              |
| 5,800×+00            | 6.024.01               | 2.3010-03              | 1,038=+04                                     | 6, 143p=04                               | 1.1140-03                             |
| 5,900x+00            | 6,233,01               | 2,421=03               | 9,860,+03                                     | 6,356. 04                                | 1.186==03                             |
| 6,000=+00            | 6,446 <sub>p</sub> =0  | 2,547.03               | 9,376,+03                                     | 6,573,=04                                | 1.161=03                              |
| 0.100=+00            | 6,662,=01              | 2,676 <b>.</b> g3      | 8,924=+03                                     | 6,794, = 04                              | 1.2410003                             |
| 6,200=+00            | 6,882,-01              | 2,809.03               | 8,501++03                                     | 7,018,#04                                | 1.324==03                             |
| h,300±+00            | 7.105.01               | 2,947=03               | 8,104=+03                                     | 7,245 <b>.</b> =04                       | 1.411=03                              |
| 6,400=+00            | 7,3320+01              | 3,090=03               | 7,731++03                                     | 7,477,=04                                | 1.203**03                             |
| 6,500 <b>=</b> +00   | 7,562∞*0               | 5,237=03               | 7,381#+n3                                     | 7,7120004                                | . »98#* <u>0</u> 3                    |
| 6,600**00            | 7,796 <sub>m</sub> +01 | 3,388,*03              | 7.052+03                                      | 7,95 <sub>0=0</sub> 4                    | 1.099## 03                            |
| 6.700=+00            | 8 <b>.</b> 034.=01     | 3,544₽™03              | 6.741.+03                                     | 8, 193, = 04                             | 1.004=03                              |
| 6,800++00            | 8,275 - 01             | 5.705.03               | 6,449=+03                                     | 8,439p=04                                | 1.414=03                              |
| 6+900 <b>*</b> +00   | 8,520==01              | 3,871∍≖03              | 6 + 174 + 03                                  | 8,688 <sub>2</sub> =04                   | 2. 128 03                             |
| 7.000=+00            | 8,768 <sub>0</sub> +01 | 4,0410=03              | 5,914+13                                      | 8,94   <b>p</b> =04                      | 2.148=03                              |
| /+100#+00            | 9.020=-01              | 4,217=03               | 5,668,+03                                     | 9,198 <b>, *</b> 04                      | 2.273==03                             |
| 7.200×+00            | 9,275.01               | 4,397.03               | 5,430 <b>,+</b> 03                            | 9,459 <b>∞</b> ⇒ <sub>0</sub> 4          | 2.404**03                             |
| 7,300=+00            | 9,534,=01              | 4.283.03               | 5,2  <sup>7</sup> #*03                        | 9,723 <b>,=</b> 04                       | 2.2400=03                             |
| 7.400=+00            | 9,79701                | 4.774×03               | 5,009#+03                                     | 9,99 <sub>00</sub>                       | 2.082=03                              |
| /.500*+00            | 1.000+00               | 4,969,=03              | 4.012#+03                                     | 1.026.=03                                | 2.0290003                             |
| 7.00±+00             | 1,033 <b>,</b> +00     | 5,1710=03              | 4,025=+03                                     | 1.0540=03                                | 2,483==03                             |
| /./00#+00            | + 06 l++ 00            | 5, <u>377∎°</u> 03     | 4,440=+03                                     | , <u>0</u> 8  ∞≖ 03                      | 3.142=03                              |
| 7.800=+00            | 1.088.+00              | 5,589.03               | 4,279,+03                                     | 1+110#*03                                | 3.308**03                             |
| /•900=+00            | 1.110-+00              | 5,806=73               | 4,120=+03                                     | , 38 <u>¤</u> 03                         | 3.48 **03                             |
| ו000≠+00             | 1.142-+00              | 6,029=03               | 3,967±+03                                     | + 67 <b>⊭</b> ∎03                        | 3.06ე∞≖ე3                             |
| ¢•100≠+00            | 1.173=+00              | 6,258=03               | 3.023.+03                                     | 1.196 <b>.</b> =03                       | 3,046=03                              |
| 0,200x+00            | 1+505+00               | 0,492=03               | 3,685,+03                                     | ,226 <b>∞</b> ∞03                        | 4.j39.=03                             |
| 0. 200×+00           | 1.232+00               | 6,/32, 03              | 3,554,+03                                     | 1,256=03                                 | 4.2390003                             |
| 0,400x+00            | 1.2020+00              | 0,9/8,903              | 3,429=+03                                     | 1,28/0=03                                | 4.4470=03                             |
| 5•500 <b>*</b> +00   | 1+292+00               | (+230+*03              | 3.310=+03                                     | • 3 7 <u></u> = 03                       | 4.062#703                             |
| -2 + 0 = 0 = + 0 = 0 | 1.322=+00              | 7,488=03               | 3, 190,+03                                    | 1,348,703                                | 4.884=*03                             |
|                      |                        | 7.752=*03              | 3,000,003                                     |  | 2.112=03                              |
|                      | 1.3070700              | 9 + Û∑ Ini⇔ ÛS         | 2,20 404 [3                                   |  | 5.354#*[3                             |
|                      |                        | 0,290be03              | 2+002#*[]3                                    |  | 2,000×03                              |
|                      |                        | 8 869.eo7              |   | 1, 4/0g = 03                             | 5.000 F (3                            |
| 9.200**UU            |                        | 9.164.203              | 2.100 - 03                                    | 1 543 = 03                               | 0.120±≠03                             |
| 7.300-+00            | 1,540,±00              | 9.465.03               | 2.0100+10                                     | 1.576.=03                                | 6. 0740703                            |
| -γ.400±+00           | 1,579,+00              | 9.773.003              | 2,200-03                                      | 1.610.00                                 |                                       |
|                      | 1,513,+00              |                        | 2,374.+03                                     | 1.645                                    | 7 266 = 04                            |
|                      | 1.647+no               | 1+007="04<br>1.041==02 | 2,07 THT ()0                                  | 1,670                                    | 7. 774== 2                            |
| 9.7nn+++             |                        |                        | 210011=100                                    | 1.7.4                                    | 7. x0 6 mm n 4                        |
| 9.000-00             | 1,716+00               | 1. 1n7                 | 2.2010=*(10                                   | 1.75 m                                   | 2+07947000<br>8 2025404               |
|                      | 1.751.+00              |                        | 2 • FQTET []3<br>3 - 199_+ 17                 | 117200703                                | 0,2/7#7 ())<br>8. 56555 57            |
|                      | 1.786.+00              | 1.176                  | 2.037.403                                     | 1,822.**03                               | 8.4166202                             |
| 1.100.0#1.01         | 2.160.400              | 1.565                  | 2+007#+00<br>(533++03                         | 2.203.03                                 |                                       |
| •••UU#••U1           |                        |                        | <u> 1</u> • • • • • • • • • • • • • • • • • • | 2, 20, 20, 20, 20, 20, 20, 20, 20, 20, 2 | !•• <b>•</b> 0 <b>*</b> **• <b>0∠</b> |

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| DIAMETER  | VELOCITY           | RE                 | DRAG COEF     | RELAX TIME        | .98 DIST            |
|-----------|--------------------|--------------------|---------------|-------------------|---------------------|
| 1.200 +01 | 2,569,+00          | 2,03002            | 1.182=+03     | 2,019=03          | 1.045=02            |
| 1.300**01 | 3,012,+00          | 2,578.02           | 9,317=+02     | 3,072,03          | 2.740=02            |
| 1.400*+01 | 3,490,+00          | 3,2170-02          | 7,475=+02     | 3,559,-03         | 3.4140=02           |
| 1.500++01 | 4,002+00           | 3,953.02           | 6.091=+02     | 4.081.03          | 4.495==02           |
| 1.600*+01 | 4,548,+00          | 4,792,02           | 5,031+02      | 4,638,=03         | 5;016e=02           |
| 1.700=+01 | 5,127=+00          | 5,740,*02          | 4,206,+02     | 5,229. 03         | 7.407**02           |
| 1,800×+01 | 5,740,+00          | 6,803#=02          | 3,554=+02     | 5,853p=03         | .9.305×=02          |
| 1.900x+01 | 6,385 <b>s+</b> 00 | 7,988.02           | 3.032=+02     | 6,511,003         | 1.154=01            |
| 2.000±+01 | 7,062,+00          | 9.300=02           | 5.003.+05     | 7,201,=03         | .4 7 <b>#</b> #0    |
| 2.100=+01 | 7,770=+00          | 1.074=01           | 2,263+02      | 7.924.03          | 1.121=01            |
| 2.200+01  | 8.510+00           | 1.2330 = 01        | 1,970=02      | 8,0/8,*03         | 2.072**01           |
| 2.300*+01 | 9,279 <b>,+</b> 00 | 1,400000           | 1.138.+05     | 9,402=03          | 2.474=01            |
| 2.400++01 | 1.008*+01          | 1,593.01           | 1.53/=+02     | 1.028.02          | 2,932=01            |
| 2,200x+01 | 1.091.0+01         | ,/.9 <b>2</b> ∎*0  | 1.3000+02     | 1.112="02         | 3.47                |
| 2,600+01  | 1.170.00           | 2.013.01           | 1.2230+02     | 1.199.02          | 4. 136**11          |
| 2,/00=+01 | 1,264,+01          | 2,248=*01          | 1.097#*02     | 1.382-02          | 4.07   = []         |
| 2.000+01  |                    | 2, 766, 201        | 9,922,00      |                   | 6 39 01             |
|           |                    | 2,7000-01          |               | 1.575.802         | 7. 40.00            |
| 3.100+01  | 1.642.+01          | 3.352 mi           | 7.48 n. + n i | 1.075. n2         | 8. 189 m n i        |
| 3.200++61 | 1.742.+01          | 3.671              | 6.858»+ni     | 1.777. • n2       | 9                   |
| 3.3nn±+61 | 1.845.+01          | 4.009.01           | 6.310+01      | 1,881,.02         | 1.116**00           |
| 3.400++01 | 1.948,+11          | 4,362. 01          | 5,832+01      | 1,987,02          | 1.13n+00            |
| 3.500+01  | 2. 154 + 01        | 4,735=*01          | 5, 399 = 01   | 2,095=02          | 1.251=+00           |
| 3,600+01  | 2, 163,+01         | 5, 126, 01         | 5.012=+01     | 2,205.02          | 1. 378== 00         |
| 3,700x+01 | 2.272.+01          | 5,536×*01          | 4,0650+01     | $2, 3 7_{\mu}=02$ | 1. 7   3 = + 00     |
| 3,800x+UI | 2,384.+01          | 5,964. 01          | 4, 554n+ 01   | 2,431=02          | 1.655=+00           |
| 3.900++01 | 2,496_+0           | 6,411=701          | 4.074=+01     | 2,546,=02         | 1.004=+00           |
| 4•000≠+0I | 2.611.+01          | 6,876 <b>.</b> -01 | 3,821=+01     | 2,0620702         | 1. 401=+00          |
| 4.100×+81 | 2.726 + 01         | 7,360. 01          | 3.591=+01     | 5.180× - 05       | 2.126=+00           |
| 4.200*+01 | 2,843,+01          | /,003="()          | 3,3820+01     |                   |                     |
| 4.300#+01 | 2,901.0            | 0,000±700          | 3, 1768701    | 3,0200702         | 2.4/90+00           |
| 4,400±+01 | 3, [0]»*[]         | 9 485              |               | 3. 264. • 02      | 2.463.400           |
|           | 3,2010701          | 1. 906 m t 00      | 2, 7, 3, + 0, | 3.388.+02         | 3                   |
|           | 3,0245+01          |                    | 2.579.+01     | 3.5.3.*02         | 3. 8                |
|           | 3 568              | 1.128.+00          | 2.454.+01     | 3.639.*02         | 3.200**00           |
| 4,000±+01 | 3,693.+n1          | 1. 19 in + 00      | 2. 539 + 11   | 3.766m = n2       | 3./29 <b>≈</b> + nn |
| 5.000++01 | 3.818.+01          | 1.257.+nn          | 2.233=+11     | 3,894. 12         | 3.966∞+nn           |
| 5.100±+01 | 3,945_+11          | 1,325±+0n          | 2.133.+11     | 4.023. 02         | 4.211=+10           |
| 2.200x+01 | 4,073,+01          | 1,395 + 00         | 2.041=+01     | 4.153.002         | 4,465=+00           |
| 5.300=+91 | 4,202.+01          | 1,466.+00          | 1,954=+01     | 4,285,02          | 4./27.+00           |
| 5.400+11  | 4,332=+01          | 1,540.+00          | 1.873=+01     | 4.4180=02         | 4.998++00           |
| 2.500x+01 | 4,464,+01          | 1,617.+00          | 1,797,+01     | 4,552.02          | 5.277=+00           |
| 5.000++01 | 4,597 +01          | 1,695=+00          | 1.725 + 01    | 4,688=02          | 5.565*+00           |
| 5.700×+01 | 4,732.+01          | 1,776=+00          | 1,657#401     | 4,825.02          | 5.86j#+00           |

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| DIAMETER   | VELOCITY   | RE  | DRAG COEF   | RELAX TIME  | . y8 DIST   |
|--|--|---|---|---|---|
| DIAMETER<br>5.800x+01<br>5.900x+01<br>6.000x+01<br>6.100x+01<br>6.200x+01<br>6.200x+01<br>6.400x+01<br>6.400x+01<br>6.500x+01<br>6.500x+01<br>6.700x+01<br>7.000x+01<br>7.100x+01<br>7.200x+01<br>7.200x+01<br>7.300x+01<br>7.400x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+000x+01<br>7.500x+01<br>7.500x+01<br>7.500x+01<br>7.500x+00x+01<br>7.5 | VELOCITY<br>4,868 = $0$  <br>5,006 = $0$  <br>5,146 = $0$  <br>5,288 = $0$  <br>5,288 = $0$  <br>5,279 = $0$  <br>5,779 = $0$  <br>5,777 = $0$  <br>5,777 = $0$  <br>5,777 = $0$  <br>5,777 = $0$  <br>6,029 = $0$  <br>7,270 = $0$  <br>8,342 = $0$  <br>8,483 = $0$  <br>8,260 = $0$  <br>7,270 = $0$  <br>8,342 = $0$  <br>9,342 = 0  <br>9,342 = $0$  <br>9,342 = 0  <br>9,342 = 0  <br>9,342 = 0 | RE<br>1.859.00<br>1.945.00<br>2.033.00<br>2.124.00<br>2.218.00<br>2.218.00<br>2.218.00<br>2.218.00<br>2.218.00<br>2.314.00<br>2.314.00<br>2.314.00<br>2.314.00<br>2.413.00<br>2.515.00<br>0.520.00<br>2.520.00<br>2.520.00<br>2.520.00<br>3.066.00<br>3.183.00<br>3.066.00<br>3.183.00<br>3.302.00<br>3.422.00<br>3.422.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.543.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.550.00<br>3.500.00<br>3.500.00<br>3.500.00<br>3.500.00<br>3 | DRAG COEF<br>1, 593 $\pm$ 01<br>1, 532 $\pm$ 01<br>1, 475 $\pm$ 01<br>1, 475 $\pm$ 01<br>1, 420 $\pm$ 01<br>1, 420 $\pm$ 01<br>1, 368 $\pm$ 01<br>1, 378 $\pm$ 01<br>1, 270 $\pm$ 01<br>1, 225 $\pm$ 01<br>1, 225 $\pm$ 01<br>1, 182 $\pm$ 01<br>1, 192 $\pm$ 01<br>1, 192\pm 01 | RELAX TIME<br>4.964 $ = 02$<br>5.105 $ = 02$<br>5.248 $ = 02$<br>5.248 $ = 02$<br>5.393 $ = 02$<br>5.689 $ = 02$<br>6.148 $ = 02$<br>6.148 $ = 02$<br>6.23 $ = 02$<br>6.23 $ = 02$<br>6.464 $ = 02$<br>6.623 $ = 02$<br>6.943 $ = 02$<br>6.943 $ = 02$<br>7.103 $ = 02$<br>7.260 $ = 02$<br>7.414 $ = 02$<br>7.563 $ = 02$<br>7.563 $ = 02$<br>7.563 $ = 02$<br>7.563 $ = 02$<br>7.838 $ = 02$<br>7.931 $ = 02$<br>8.075 $ = 02$<br>8.362 $ = 02$<br>8.362 $ = 02$<br>8.507 $ = 02$<br>8.507 $ = 02$<br>8.796 $ = 02$<br>8.796 $ = 02$<br>8.796 $ = 02$ | . 98       DIST         6. 166#+00       6. 480#+00         6. 802#+00       7. 133#+00         7. 133#+00       7. 473#+00         7. 473#+00       7. 821#+00         8. 178#+00       8. 919#+00         8. 344#+00       8. 919#+00         9. 302#+00       9. 695#+00         1. 010#+01       1. 051#+01         1. 02#+01       1. 35#+01         1. 239#+01       1. 35#+01         1. 269#+01       1. 362#+01         1. 352#+01       1. 362#+01         1. 352#+01       1. 362#+01         1. 352#+01       1. 364#+01         1. 309#+01       1. 364#+01         1. 309#+01       1. 364#+01         1. 309#+01       1. 364#+01         1. 309#+01       1. 3709#+01         1. 309#+01       1. 3709#+01         1. 309#+01       1. 3709#+01         1. 309#+01       1. 3709#+01         1. 309#+01       1. 3709#+01         1. 3060#+01       1. 3709#+01         1. 3709#+01       1. 3709#+01         1. 3709#+01       1. 3709#+01         1. 3709#+01       1. 3709#+01         1. 3709#+01       1. 3709#+01         1. 3709#+01 |
| 0,200=+01<br>8,300=+01<br>8,400=+01<br>8,500=+01<br>8,500=+01<br>8,500=+01<br>8,700=+01<br>9,000=+01<br>9,100=+01<br>9,200=+01<br>9,300=+01<br>9,500=+01<br>9,500=+01  | $8, 342 \pm 01$<br>$8, 483 \pm 01$<br>$8, 626 \pm 01$<br>$8, 768 \pm 01$<br>$8, 768 \pm 01$<br>$8, 911 \pm 01$<br>$9, 054 \pm 01$<br>$9, 197 \pm 01$<br>$9, 340 \pm 01$<br>$9, 484 \pm 01$<br>$9, 628 \pm 01$<br>$9, 772 \pm 01$<br>$9, 772 \pm 01$<br>$9, 9, 16 \pm 01$<br>$1, 006 \pm 02$<br>$1, 021 \pm 02$<br>$1, 035 \pm 02$  | $4 \cdot 5 \cdot 0 + 3 \cdot 0 = 0 + 0 +$   | 7.6720 = 00 $7.5080 = 00$ $7.3500 = 00$ $7.1980 = 00$ $7.0520 = 00$ $6.9100 = 00$ $6.7740 = 00$ $6.6420 = 00$ $6.5150 = 00$ $6.3920 = 00$ $6.2730 = 00$ $6.1580 = 00$ $6.1580 = 00$ $6.0460 = 00$ $5.9390 = 00$ $5.9390 = 00$ $5.9390 = 00$   | $\begin{array}{c} 0 & 0 & 0 & 0 \\ 8 & 0 & 5 & 0 & 0 \\ 8 & 7 & 9 & 6 & 0 & 0 \\ 8 & 7 & 9 & 6 & 0 & 0 \\ 8 & 9 & 4 & 0 & 0 & 0 \\ 9 & 0 & 8 & 7 & 0 & 0 \\ 9 & 0 & 8 & 7 & 0 & 0 \\ 9 & 0 & 8 & 7 & 0 & 0 \\ 9 & 0 & 8 & 7 & 0 & 0 \\ 9 & 0 & 5 & 25 & 0 & 0 \\ 9 & 5 & 25 & 0 & 0 & 0 \\ 9 & 5 & 25 & 0 & 0 & 0 \\ 1 & 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 26 & 0 & 0 \\ 1 & 0 & 4 & 1 & 0 & 0 \\ 1 & 0 & 55 & 0 & 0 \\ 1 & 0 & 55 & 0 & 0 \\ \end{array}$   | 1.012*01<br>1.064*01<br>1.72*01<br>1.72*01<br>1.883*01<br>1.988*01<br>1.998*01<br>2.16*01<br>2.16*01<br>2.16*01<br>2.38*01<br>2.36*01<br>2.36*01<br>2.36*01<br>2.36*01<br>2.36*01   |
| 9,700±+01<br>9,800±+01<br>9,900±+01<br>1,000±+02<br>1,100±+02<br>1,200±+02<br>1,200±+02  | $\begin{bmatrix} 1 & 0 & 5 & 0 & + & 0 & 2 \\ 1 & 0 & 5 & 0 & + & 0 & 2 \\ 1 & 0 & 6 & 4 & + & 0 & 2 \\ 1 & 0 & 7 & 9 & + & 0 & 2 \\ 1 & 0 & 9 & 3 & + & 0 & 2 \\ 1 & 2 & 3 & 9 & + & 0 & 2 \\ 1 & 3 & 8 & 7 & 0 & + & 0 & 2 \\ 1 & 5 & 3 & 5 & 9 & + & 0 & 2 \\ 1 & 5 & 3 & 5 & 9 & + & 0 & 2 \end{bmatrix}$  | 6,703,*00<br>6,866,*00<br>7,031,*00<br>7,198,*00<br>8,978,*00<br>1,096,*01<br>1,314,*01   | 5,733 + 00 $5,635 + 00$ $5,540 + 00$ $5,448 + 00$ $4,662 + 00$ $4,662 + 00$ $3,593 + 00$  | $  \cdot 070 = 0 $ $  \cdot 085 = 0 $ $  \cdot 100 = 0 $ $  \cdot 15 = 0 $ $  \cdot 264 = 0 $ $  \cdot 414 = 0 $ $  \cdot 565 = 0 $   | 2.49 =+0 <br>2.57=+0 <br>2.57=+0 <br>2.623=+0 <br>2.69 =+0 <br>3.4 2=+0 <br>4.2 7=+0 <br>5.104=+0   |

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| DIAMETER      | VELOCITY               | RE                       | DRAG COEF               | " RELAX TIME                     | .y8 ÚIST                     |
|---------------|------------------------|--------------------------|-------------------------|----------------------------------|------------------------------|
|               |                        |                          | 9                       | -7                               |                              |
| 1.400=+02     | 1.083*+05              | 1+221+401                | 3.218*00                | [ • / [ 6 <b>#</b> 0 ]           | 6.071#+01                    |
|               | • 0 7 9 · • 0          | 1,009,01                 | 2,912=+00               | 0 0 / p = 0                      | /•1 6#+0                     |
| 1,000#+02     |                        | <b>2,000,0</b>           | 2,032*00                | 2.018=01                         | 8.237=+01                    |
|               | 2,12/#+02              | 2,98,940                 | 2,44/.+00               | 2. 109. 01                       | 9.430=+01                    |
|               | 2+2/7+402              | 2 0 9 9 m + 0 1          | 5,200p+[[]              |                                  | 1.009#+02                    |
|               |                        |                          | 2.114#*00               |                                  | 1.203=+02                    |
| 2.100++02     | 2,711,+02              | 3,749,*01                | <b>, 970⊭</b> ♥[][      | 2 764 -01                        | 1.343=+02                    |
| 2.200++02     | 2.855.+02              | 4.136.+01                | 757.+00                 | 2,9(1,*0)                        |                              |
| 2.300++02     | 2.998.+02              | 4.540.+01                | 1.066                   | 3.057                            | 1.002=02                     |
| 2.400**02     | 3.140+02               | 4.962.+ni                | 1.585µ+00               | 3.2026701                        | 1. 465=+ 52                  |
| 2.500++02     | 3.281 + 02             | 5.402.+01                | 1.512n+no               | 3.346                            | 2.135.02                     |
| 2.600++02     | 3.421.+02              | 5.858.+01                | 446.***                 | 3.489                            | 2.100+02                     |
| 2.700+02      | 3.561.+02              | 6.330.+01                | 1.387.00                | 3.631.001                        | 2.4910+02                    |
| 2.800+02      | 3.699.+02              | 6.819.+01                | 1.333m+nn               | 3.772. • ni                      | 2.677+02                     |
| 2.900++02     | 3.836 <sub>m</sub> +n2 | 7. 324.+ 01              | i.283.+nn               | 3.911m=n1                        | 2.068## 02                   |
| 3.000=+02     | 3,972+02               | 7.846.+01                | 1.238.+00               | 4.05n="n                         | 3. n64#+n2                   |
| 3.100++02     | 4,107+02               | 8,383.+01                | 1.197#+nn               | 4, 188, • n i                    | 3.264+12                     |
| 3,200++02     | 4.240.+02              | 8,935++01                | 1,159,+0.0              | 4.324.01                         | 3,469=+ 12                   |
| 3,300=+02     | 4,373 <sub>0</sub> +02 | 9,503+01                 | 1,123 <b>,+</b> 00      | 4,460,                           | 3.678++ 12                   |
| 3,400=+02     | 4,505,+02              | 1.009=+02                | 1.091.+00               | 4,594=01                         | 3.891++02                    |
| 3,500=+02     | 4,636,+02              | 1.068.*02                | 1.060.+00               | 4.727.=01                        | 4,109=+02                    |
| 5,000++02     | 4.765.+02              | 1.130.+02                | 1.032.+00               | 4,860,=01                        | 4.330=+02                    |
| 3.700=+02     | 4,894 <sub>0</sub> +02 | 1.192++02                | •80° <b>∺</b> +00       | 4,99   = 0                       | 4.555=+02                    |
| 3.000+12      | 5,0220+02              | 1,257=+02                | 9,810=01                | 5, 121, = 01                     | 4. 1840+02                   |
| 3,400=+12     | 5, 148 + 02            | 1.322++02                | 9.579.01                | 5,250,*01                        | 5. u17++02                   |
| 4.000*+02     | 5,274,+02              | 1,389=+02                | 9,362.01                | 5. 578, -01                      | 5.253++02                    |
| 4.100=+02     | 5,399=+02              | 1,457=+02                | 9,158.01                | 5,205,01                         | 5.492=+02                    |
| 4+200=+(12    | 5.522#+02              | 1.25/2+05                | 8,900,00                | <b>⊅</b> ₊♥३ ₽⁼0                 | 5./35#+02                    |
| 4.300+112     | 5,0420+02              | 1,298,02                 | 8,/82,=0                | 5,/5/#*0                         | 2. 48 1 . 405                |
| 4 400×+02     | 5 488 + 52             | 1+0/1+02                 | 8.0 4.5 2               | 5,08   # = []  <br>5,08   # = [] | 6.230**02                    |
| 4 6 9 6 4 9 2 |                        | 1+/420702                | 0,42297())<br>9 008     | 6 U 0 4 9 7 0 1                  | 6.4020+02                    |
| 4 7 0 0 + 22  |                        |                          | 0.270#*[]]<br>8.153#*01 | 6 247 = 01                       | 6 995 + 02                   |
| 4.8no++o2     | 6.244.+.02             | 1.974.+02                | 8 015-001               | 6.368.m.n.                       | 0,999∎♥ 02<br>7: 456 n ≠ 0.2 |
| 4.900****     | 6.361.+02              | 2. 152. + 12             | 7.583#*01               | 6.487.*                          | 7. 7200+02                   |
| 5.000++02     | 6.478.+02              | 2.133.+02                | 7 758 - 11              | 6.6.6.                           | 7 1850+02                    |
|               | 6.593.+02              | $2 \cdot 2 \cdot 4 + n2$ | 7.039                   | 6.723.01                         | 8. 54+ 02                    |
| 2.200x+02     | 6.7.7.+                | 2.297.+12                | 7.525.00                | 6.04 nn - n l                    | 8. <b>125</b> # 02           |
| 5.3nn±+12     | 6.021.+02              | 2.38                     | 7.417.0701              | 6.956 m = n l                    | 8.398++ n2                   |
| 5,400±+02     | 6,934 <b>.</b> +n2     | 2,465=+02                | 7.313, -01              | 7,07,±•01                        | 8.874=+ 12                   |
| 5,500++12     | 7,046,+02              | 2,552+02                 | 7.213                   | 7,185,-01                        | 9,152=+02                    |
| 2.600++12     | 7,157,+02              | 2,639.+02                | 7, 1180 m m i           | 7,298, • n i                     | 9.432++ 12                   |
| 5.700++12     | 7,267,+02              | 2,727++02                | 7.027.001               | 7,410,                           | 9./15++12                    |
| 5,800x+82     | 7,376,+02              | 2,817=+02                | 6,940 <b>.</b> •ni      | 7,522,01                         | 9.999#+n2                    |
| 5.900+02      | 7.485.402              | 2.908++02                | 6.050-01                | 7.633 11                         | 1                            |

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| DIAMETER    | VEFOCILA           | RE                 | DRAG COEF                    | RELAX TIME                 | ,90 DIST                  |
|-------------|--------------------|--------------------|------------------------------|----------------------------|---------------------------|
| 6.000x+02   | 7,593 <b>.+</b> 02 | <b>3,000+</b> 02   | 6,776±+01                    | 7,743=01                   | 1. 157=+ 03               |
| 6.100±+02   | 7,7n0m+n2          | 3,093=+02          | 6,698#mm                     | 7,852m#01                  | 1.186=+03                 |
| 6.200+02    | 7,806,+02          | 3, 187,+02         | 6,624                        | 7,96  == 0                 | 1.116=+03                 |
| 6.300+12    | 7,9 2.+02          | 3,282.+02          | 6,552.01                     | 8,068,01                   | 1. 145=+ 03               |
| 0,400++(12  | 8.017++02          | 3,378=+02          | 6,483=01                     | 8,175=01                   | 1. 175#+ 03               |
| 6,500x+112  | 8,121,+02          | 3,476=+02          | 6.417.01                     | 8,281,*01                  | 1.204=+03                 |
| 6,600x+02   | 8,224+02           | 3,574=+02          | 6,353m=01                    | 8,387p=01                  | 1.234=+ <u>0</u> 3        |
| 6,700x+02   | 8,327=+02          | 3,674=+02          | 6,291⊭≞ <u>0</u> 1           | 8,49 ,=0                   | 1.264#+03                 |
| 0,800#+02   | 8,429,+02          | 3,774×*02          | 6.231=01                     | 8,595,701                  | 1.295**03                 |
| 6.400x+02   | 8,530+02           | 3,876m+02          | 6,174× 01                    | 8,699, <b>-</b> 0          | 1.325**03                 |
| 7.000=+02   | 8,631,+02          | 3,978=+02          | 6,118,*01                    | 8,8 <sub>0</sub>  #"0      | l• 355#* 03               |
| 7.100++02   | 8,731=+02          | 4.082.02           | 6,064=01                     | 8,903#=0                   | •386 <b>=</b> +03         |
| 7.200++02   | 8,830=+02          | 4,186=+02          | - 6,0 2 <b>=</b> =0          | 9,004p=01                  | 1.417=+03                 |
| 7.300x+02   | 8,928 <b>s+0</b> 2 | 4,292+02           | 5,962.01                     | 9 <b>,</b>  05 <b>,</b> =0 | 1.448 <b>**</b> 03        |
| 7.400*+02   | 9,020,+02          | 4,398=+02          | 5,913=01                     | 9,205,01                   | <b>.</b> 479∎+ <u>0</u> 3 |
| 7,500x+02   | 9,124=+02          | 4,5060+02          | 5,866 <b>±</b> •0            | 9,304,01                   | 1.210=+03                 |
| 7,600x+02   | 9,220+02           | 4.614#+02          | 5,8200001                    | 9,402=01                   | 1.242=+03                 |
| 7.700*+02   | 9,310=+02          | 4,724=+02          | 5,776,001                    | 9,200,=01                  | 1.273=+03                 |
| 7.800=+02   | 9,412=+02          | 4,834=+02          | 5,733×=01                    | 9.298=01                   | 1.002**03                 |
| 7.900++02   | 9,500+02           | 4.945.+02          | 5,691=01                     | 9.094.01                   | 1.636*+03                 |
| 6,000=+02   | 9,601=+02          | <b>5.057.+02</b>   | 5.651=01                     | 9,790=01                   | +068 <b>≈</b> *03         |
| b.100++02   | 9,694.+02          | <b>5,170,*02</b>   | 5,0  =*0                     | 9,886,01                   | 1./00=+03                 |
| p.200=+02   | 9,/8/,+02          | 2,284=+02          | 5,2/3=01                     | A* 29 0* 0 1               | 1./32**03                 |
| 8.300=+02   | 9,8/9,+02          | 2.399#*02          | 5,230⊭●01                    | 1.00/.00                   | 1.104#*03                 |
| 8,400=+02   | 9,9/10+02          | 2.212++02          | 5.200.00                     |                            | 1.790**03                 |
| 0.200+02    |                    |                    | 5,402 m T                    |                            | 1.0290+03                 |
|             |                    |                    |                              |                            | •00 #+03                  |
| 0,100±+02   |                    | 5 987.+ 02         | 5.390                        |                            | 1. 426m+n3                |
|             |                    |                    | 5,00000001<br>5,350000       | 1.063.+00                  | 1. 959                    |
|             |                    | 6 229.+02          | 5,00000000                   | 11072+10                   | 1. 9920+03                |
| 7+UUU#+UZ   |                    | 6.351.+02          | 5.274                        |                            | 2                         |
| 5.200 + 02  | 1. 062.+03         | 6.473+12           | 5,245, 11                    | 1.09 n.+ 00                | 2. 158+13                 |
| 9.300+02    | 1.077.+03          | 6.597.+02          | 5.217.***                    | 1.099+00                   | 2.1910+03                 |
| 9.4n0x+02   | 1. n86.+n3         | 6.721.+02          | 5.19001                      | 1 1 1 1 7 + 0.0            | 2.124+13                  |
| 9.590++02   | 1.n94.+n3          | 0.047.+02          | 5.163.=11                    | 1.116.+00                  | 2.157=+13                 |
| 9.600x+02   | 1.103#+03          | 6,973.+02          | 5.137.0.01                   | 1.125.+00                  | 2.190++03                 |
| 9.700x+02   | 1.112.+03          | 7,099.102          | 5.1110-01                    | 1,133,+00                  | 2.224=+03                 |
| 9.800+02    | 1.120.+03          | 7.227. + 02        | 5, (87=0)                    | 1.1420+00                  | 2.257=+03                 |
| Y, Y00*+112 | 1.128 + 03         | 7,356.+02          | 5:062=01                     | 1,151,00                   | 2.29 <b>0</b> #+03        |
| 1+000=+03   | - 1. 137 =+ 03     | 7,485=+02          | 5.0390-01                    | 1: 159+00                  | 2. 324=+03                |
| 1.010=+03   | 1.145.+03          | 7,615=+02          | 5.010=*01                    | , 68 <b>p</b> +00          | 2.358=+03                 |
| 1.020++03   | 1.153.+03          | 7,746=+02          | 4,993==01                    | 1.476=+00                  | 2:391=+03                 |
| 1.030=+03   | 1.161=03           | 7,877.02           | 4:971=01                     | 1.184.+00                  | 2.425*+03                 |
| 1.040=+03   | 1.170.+03          | 8 <b>:009:</b> *02 | -4 <b>.</b> 950 <b>.</b> ₹01 | 1.193±+00                  | 2.459#+03                 |
| 1.050+03    | 1 + 178 + 03       | 8, 43, 02          | 4.929=01                     | 1,201=+00                  | 2.493**03                 |



| DIAMETER  | VEFOCILA      | RE                        | DRAG COEF           | RELAX TIME                     | ,98 DIST                              |
|---|---------------|---------------------------|---------------------|--------------------------------|---------------------------------------|
| 1.000=+00   | 2.118 = 02    | 1,395.=05                 | 1,666,+06           | 2,160,=05                      | 1.348#=06                             |
| 1.100**00   | 2,55902       | 1.854 05                  | 1,257,+06           | 2,610,=05                      | 1.471#=06                             |
| 1.200**00   | 3.042.02      | 2,403.05                  | 9.7 9 + 05          | 3,102,-05                      | 2.189=06                              |
| 1.300.+00   | 3,566         | 3,053,=05                 | 7.068.+05           | 3,637=05                       | 3.039==06                             |
| 1.400**00   | 4.132. 02     | 3,809,=05                 | 6.150.+05           | 4,2 4,=05                      | 5.160**06                             |
| 1.500**00   | 4,740,02      | 4,682=05                  | 5,010.+05           | 4.834.=05                      | 6.195##06                             |
| 1.600.+00   | 5.38902       | 5,678,=05                 | 4,142=+05           | 5,496 <b>±</b> =05             | 8,/9 ##06                             |
| 1.700**00   | 6,080,-02     | 6,806,*05                 | 3,459.+05           | 6,201=05                       | 1.120**05                             |
| 1,800**00   | 6,813,-02     | 8,075 <b>.</b> •05        | 2,9190+05           | 6,948,=05                      | 1.406**05                             |
| 1.900=+00   | 7,588. 02     | 9,493=05                  | 2,485++05           | 7,738=05                       | 1. /45= 05                            |
| 2.000++00   | 8,404,02      | 1,107,04                  | 2,134,*05           | 8, <b>5</b> 7 <sub>0=0</sub> 5 | 2.141=05                              |
| 2.100**00   | 9,261#*02     | I•28  <b>∍</b> ≖04        | 1,8420+05           | 9,444=*05                      | 2.002**05                             |
| 2.200=+00   | 1.010=01      | 472=04                    | 1.007.+05           | 1,036,04                       | 3.132=05                              |
| 2,300=+00   | 10100001      | <b>,</b> 68  <b>,=</b> 84 | 1.407=+05           | , 32 <b>=</b> 04               | 3.140-05                              |
| 2.400**00   | 1,20801       | 1.910.04                  | 1.240+05            | 1.232=04                       | 4,432=05                              |
| 2.500*+00   | 1.311=01      | 2,158.04                  | 1.098.+05           | <b> ,337</b> ∎• 04             | 5.216** 05                            |
| 2.600**00   | 1.4  8 01     | 2.427.04                  | 9.766.+04           | 1.446=04                       | <u>د</u> و • • • 00 • • 6             |
| 2.700**00   | 1.520         | 2.117.04                  | 8,/2/0+04           | 1,259=04                       | <u><u></u></u>                        |
| 5.800*+00   | 1.643.01      | 3.030×*04                 | 7,830⇒+04           | 1,070,004                      | 0.1330000                             |
| 5,900=+00   | 1./62##01     | 3,365 <u>⊭</u> * []4      | 7.022=+04           | 1.19/= 04                      | 9.431000                              |
| 3, 000 = + 00   | 1.88001       | 3,/25,*Q4                 | 6,374=+04           | 1,723 <u>m</u> =04             | 40**04                                |
| 3.100**00   | 2,013=01      | 4.109.04                  | 5./80=*04           |                                | 1.2310004                             |
| 3,200=+00   | 2.1420.01     | 4,2 9,04                  | 5.27/0+04           | 2 10/ 10/ 14                   | 1.3978804                             |
| 3.300**00   | 2+280=01      |                           | 4, / 90, * 04       |                                | 1. 579## [4                           |
| 3,400±+00   | 2,420,01      | 2,4/95704                 | 4,00/b704           | 2,400 - 04                     | · · · · · · · · · · · · · · · · · · · |
| 3,500++00   | 2, 202, 01    |                           | 7 699 + 04          | 2,766, 204                     | 2. 35 . 04                            |
| S.C(()≠+()()  | 21/192701     |                           | 3,0994404           | 2,922, 04                      | 2. 4930 - 04                          |
| $\mathbf{v} \cdot \mathbf{v} = \mathbf{v} \cdot \mathbf{v} + \mathbf{v} \cdot \mathbf{v}$ | 2,002,001     | 7 56 1 = 04               | 7 47 + 04           | 3.082.204                      | 2. 1730 - 04                          |
| <b>○</b> •○[]#+[][]   | 3 122         | 8 472 +04                 |                     | 3.245 04                       | 3 0760004                             |
| 3,900=+00   | 3 10 4 5 7 11 | 3 3 7 n A                 |                     | 3.414.=04                      | 3.4030=04                             |
| 4 100 ± 00  | 3,347,8701    | 9,494.*04                 | 2.508.404           | 3. 586 04                      | 3. /55** 64                           |
|   | 3.69801       | 1. 0.20 0.3               | 2: 334 + 04         | 3.763 04                       | 4.134== 04                            |
|   |               | 1.095.03                  | 2.170.+14           | 3.944.= 14                     | 4.54 1                                |
| 4.400++00   | 4. n49 n1     | 1.173. 03                 | 2.031.+04           | 4.129 = n4                     | 4. 977 04                             |
| 4.500+00  | 4.23501       | 1.255.*03                 | 1.099.+14           | 4.318.=04                      | 5.444= 14                             |
| 4.600+00  | 4.424.        | 1.34 nm = n3              | 1.779=+14           | 4.512=04                       | 5. 430- 14                            |
| 4.700*+00   | 4.618         | 1,429.03                  | 668 . + 04          | 4,7.10=04                      | 6.4750004                             |
| 4.600.+00   | 4.817.01      | 1.222== 03                | 1.566.+14           | 4,912=04                       | 7. 14300 04                           |
| 4.900**00   | 5.019.01      | 1,619.03                  | 1.472=+14           | 5,118,=04                      | 7.0470+04                             |
| 2,000x+110  | 5,220,01      | 1,720 <b>#</b> =03        | 1,386 <b>"</b> + 04 | 5.329 04                       | 8.288**04                             |
| 5.100×+00   | 5,430,-01     | 1,826.*03                 | 1.307.+14           | 5,544 <u>,</u> •04             | 8. 77 0 7 04                          |
| 5.200****   | 5,651.0001    | 1.935=03                  | 1,233.+04           | 5.7630=04                      | 9.092 04                              |
| 5.300x+00   | 5,870,=01     | 2,049,03                  | 1.165.+04           | 5,986 <sub>0</sub> •04         | 1. 146= 03                            |
| 2,400x+00   | 6,093,-01     | 2,167∍≖03                 | 1.101.+04           | 6,214=04                       | 1.127=03                              |
| 5,500=+00   | 6.321.=01     | 2,289,=03                 | 1.043.+04           | 6.446 04                       | 1.2120003                             |

| DIAMETER   | VELOCITY   | RE  | DRAG COEF                              | RELAX TIME   | .y8 DIST  |
|--|--|---|--|--|---|
| Þ,600≠+00<br>Þ.700≠+00<br>Þ.800≠+00                          | 6,552m=0 <br>6,788m=0 <br>7,027m=0   | 2,4 6#=03<br>2,548#=03<br>2,684=*n3                     | 9,679±+03<br>9,370±+03<br>8,895±+03    | 6,682≠•04<br>6,922≠=04<br>7.166⊨=04  | •303¤=03<br> •398¤=03<br> •499¤=03                    |
| 5,900=+00<br>6,000=+00                                       | 7.271.01<br>7.519.01   | 2,825=03<br>2,971=03                                    | 8,452,+03<br>8,038,+03                 | 7,415,=04<br>7,668,=04   | 1.004×=03   |
| 6,200×+00<br>6,300×+00                                       | 8,028,01<br>8,289,01   | 3,122=*03<br>3,277=*03<br>3,438∍*n3                     | 7,287,∞+03<br>7,287,∞+03<br>6,947,∞+03 | /, >2⊃, = 04<br>8,  87, = 04<br>8, 452, = 04                                     | 1.955×=03<br>1.955×=03<br>2.184×=03                   |
| 6,400++00<br>6,500++00                                       | 8,553±=01<br>8,822±=01   | 3,6 <sub>0</sub> 5 <sub>03</sub><br>3,776 <sub>03</sub> | 6,628×+13<br>6,327×+13                 | 8,722=04<br>8,996=04   | 2.219##03<br>2.361##03                                |
| 6,7 <u>00</u> ≠00<br>6,7 <u>00</u> ≠00<br>6,8 <u>00</u> ≠+00 | 9,0900+01<br>9,3720+01<br>9,6540+01  | 3, 753≠03<br>4, 135≠*03<br>4, 322≠*03                   | 6,04⊅∎+03<br>5,779⊭+03<br>5,529∎+n3    | 9,275⊳∓04<br>9,557⊭≈04<br>9,844⊭≖04  | 2• >09** 03<br>2• 665** 03<br>2• 827** 03             |
| 6,900++00<br>7.000++00<br>7.100++00                          | 9,939,01<br>1,023,+00  | 4,516,=03<br>4,715,=03                                  | 5,293±+03<br>5,070±+03                 | $1 \cdot 0 + 4_{p} = 03$<br>$1 \cdot 0 + 3_{p} = 03$<br>$1 \cdot 0 + 3_{p} = 03$ | 2. 996==03<br>3. 173==03                              |
| 7.200=+00<br>7.300=+00                                       | 1.082±+00<br>1.112±+00   | 5, 130=*03<br>5, 346=*03                                | 4,661=+03<br>4,472=+03                 | • 03∞=03<br> • 34∞=03  | 3, 352## 83<br>3, 25   ## 83<br>3, 752## 83           |
| 7,400#+00<br>7,500#+00<br>7,600#+00                          | 1.143=+00<br>1.174=+00<br>1.205=+00  | 5,569.*03<br>5,797.*03<br>6.032.*03                     | 4.294=+03<br>4.125=+03<br>3.965=+03    | , 65±=03<br> , 97±=03<br> ,229==03   | 3,96   # = 03<br>4,179 # = 03<br>4,406 # = 03         |
| 7,700=+00<br>7,800=+00<br>7,800=+00                          | 1,237 m+00<br>1,269 m+00   | 6,272,*03<br>6,520,*03<br>6,777 = 07                    | 3,8 3=+03<br>3,669=+03                 | 1,262 <b>.</b> =03<br>1,294 <b>.</b> =03   | 4.0420003   |
| 8,000=+00<br>8,100=+00                                       | 1,335±+00<br>1,335±+00<br>1,369±+00  | 7,033=03<br>7,300=03                                    | 3,4 <u>0</u> 2=+03<br>3,278=+03        | ,362∞=03<br> ,362∞=03<br> ,396∞=03   | 5,406##03<br>5,681##03<br>5.681##03                   |
| 8,200±+00<br>8,300±+00<br>8,400±+00                          | 1.403=+00<br>1.437=+00<br>1.472=+00  | 7,573#=03<br>7,853==03<br>8,14n==03                     | 3, 160≠+03<br>3, 047≠+03<br>2,940≠+03  | 1,430p=03<br>1,465p=03<br>1,501=03   | 5.766## [3<br>6.262## [3<br>6.268## [3                |
| 8,500*+00<br>8,600*+00<br>8,700*+00                          | 1,507,+00<br>1,542,+00   | 8,434. = 03<br>8,734. = 03                              | 2, d 38 + 03<br>2, 74 + 03             | ,537∞=03<br> ,573∞=03  | 6.086×03<br>7.215×03                                  |
| 8,800×+00<br>8,900×+00                                       | 1,615±00<br>1,652±00   | 9,357 = 0.3<br>9,679 = 0.3                              | 2,559 ± 03<br>2,559 ± 03<br>2,474 ± 03 | ,6 0, = 03<br> ,647, = 03<br> ,684, = 03   | 7. > 555∞ = 03<br>7. > 08∞ = 03<br>8. 273∞ = 03       |
| 9:000=+00<br>9:100=+00<br>9:200=+00                          | •689≠+00<br> •726×+00<br> •764∞≠00   | 1.001=02<br>1.034=02<br>1.069=02                        | 2,393=+03<br>2,315=+03<br>2,241=+03    | ,722≠•03<br> ,760≠•03<br> ,799≖•03   | 8,05 <u>0</u> ##03<br>9.04 <u>0</u> ##03<br>9.443##03 |
| 9,300=+00<br>9,400=+00                                       | $1 \cdot 8 \cdot 3 + 0 \cdot 0$<br>$1 \cdot 8 \cdot 4 \cdot 2 + 0 \cdot 0$ | 1.104="02<br>1.140="02                                  | 2,169±03<br>2,101±+03                  | ,838 <u>∞</u> ∞03<br> ,878 <u>∞</u> ∞03  | 9. 859#= 03<br>1. u29#= 02                            |
| 9,600++00<br>9,700++00<br>9,700++00                          | 1+921++00<br>1+921++00   | 1.214=02<br>1.252=02                                    | 2, 0,30≠03<br>1,973≠03<br>1,973≠03     | , 7   0 # {] 3<br> , 959   | •  /3⊭♥ 02<br> •   9⊭♥ 02<br> •  66≖♥ 02              |
| 9,800≠+00<br>9,900≠+00<br>1,000≠+01                          | 2+001#+00<br>2+042#+00<br>2+083#+00  | ,29 »*02<br> ,33 »*02<br> ,372»*02                      | ,655∞+93<br> .000×93<br> .747∞+n3      | 2,04   = 03<br>2,083= 03<br>2,125= 03  | 1.215==02<br>1.265==02<br>1.317==02                   |
| • 00#+0  | 2.519-+00  | 1,825.02  | 1.315=+03                              | 2,569=03   | 1. 726 - 02   |

| DIAMETER                    | VELOCITY                   | RE                                   | DRAG COEF                   | RELAX TIME                  | ,98 DIST                        |
|-----------------------------|----------------------------|--------------------------------------|-----------------------------|-----------------------------|---------------------------------|
| 1.200=+01                   | 2,995,+00                  | 2,36702                              | 1.014=+03                   | 3 <b>,</b> 055 <b>,</b> ∗03 | 2./26#+02                       |
| 1.300x+01                   | 3,512,+00                  | 3,006,02                             | 7,995 <u>#</u> +02          | 3,58 լա≖ ը3                 | 3./52==02                       |
| 1+400++01                   | 4,069,+00                  | 3,751#=02                            | 6,410=+02                   | 4,149,03                    | 5. <sub>0</sub> 42¤ <b>¤</b> 02 |
| 1+500#+01                   | 4,662.+00                  | 4.608.=02                            | 5,230=+02                   | 4.757.03                    | 6.540002                        |
| 1.000=+01                   | 5+300+00                   | 2,284.02                             | 4,321+02                    | 5.405.=03                   | 8.3910#02                       |
| <b>  • / () () = + ()  </b> | 5,974=+00                  | 0,088,*02                            | 3,614=02                    | 6.092p=03                   | 1.094=01                        |
| ••00 <b>=</b> +0            | 0,000,+00                  | / • 725» = 02                        | 3,022+02                    | 6,0 9µ=03<br>7 507 - 7      | 1.374=01                        |
|                             |                            | *••00»*02                            | 5.0000005                   | 7,200p=00<br>9 394 - 03     | 1,702==01                       |
|                             | 0,222,04                   | 1.050.00                             | 2.2420402                   |                             | 2.093**01                       |
| 2.200++01                   |                            |                                      | 1.703.402                   | 7,2200 ()0                  | 2.242.01                        |
| 2•200±+01<br>2 300±+01      | 7 7 7 9 1 9 7 9            | 634 = 01                             |                             |                             | 3.00[#*0]                       |
| 2 400 ± + 01                | 11072 + 01                 | 1.852.*01                            |                             |                             |                                 |
| 2.500w+01                   | 1.267                      | 2.086.∞01                            | 1. JB/ # 02                 |                             | 4.33[##[]]                      |
|                             | 1 + 207 + 01               | 2.339                                | - 1.1010∓02<br>1.058µ≠02    | 1:6720 12                   | 5 46                            |
| 2.700 <b>.</b> +01          | 1.468.+01                  | 2.610.001                            |                             | 1.497                       | 5,901=+UL                       |
| 2.000+01                    | 1.572.+01                  | 2.899. 11                            | 8,596m+ni                   | 1.6n4m=n2                   | 8.05**01                        |
| 2,980+01                    | 1.680.+01                  | 3,2n8="n                             | 7.8ni=+ni                   | 1.713 12                    | 9. 142#*n1                      |
| 5,000±+01                   | 1,790+01                   | 3, 536, 701                          | 7. 1 n <sup>0</sup> . + n i | 1.825p=n2                   | 1. n35**nn                      |
| 3.100x+01                   | 1,902,+01                  | 3,883.*01                            | 6,502++01                   | 1,940,-02                   | 1.165=+00                       |
| 3.200x+01                   | 2+017+01                   | 4.251=01                             | 5,969,+01                   | 2,057,-02                   | 1.303#+00                       |
| 3.300x+01                   | 2,135,+01                  | 4,638.01                             | 5,498=+01                   | 2, 177. 02                  | 1.4500+00                       |
| 3.400x+01                   | 2,253,+01                  | 5,044=01                             | 5,088 <b>m+0</b>            | 2,297 <b>, =</b> 02         | 1.006+00                        |
| 3.500±+01                   | 2,374=+01                  | 5,47  s = 0                          | 4.717#+01                   | 2,421=02                    | ./7 #+00                        |
| 3.600x+01                   | 2.49/=+01                  | 2+920=*0I                            | 4, 382=+01                  | 2,547,02                    | 1. 460+00                       |
| S, / () () x + ()           | 2.022=+01                  | 0,089,00                             | -4.00/∍+0                   | 2,0/4=*02                   | 2.131=+00                       |
|                             |                            | 0,0/0m*[] <br>7 300 - 01             | 3,820m+01                   | 2.003.02                    | 2.325=+00                       |
|                             | 2+0//#+01                  | 7 9 9 9 9 9 9 1 1<br>7 9 9 9 9 9 9 1 | 3,2/70*[]                   | 2,7340=02                   | 2, 529=+00                      |
| ⊐•UUU≭≭U!<br>4.100∞≠01      | 3   38 + 0  <br>3   38 + 0 | 8.471                                | 3.00 m - 01<br>3.163 - + 01 | 3,00 <u>,</u> ∎02           | 2.1430400                       |
| 4.200-+sl                   | 3. 270.+01                 | 9.044                                | 3,100±01                    | 3.335.=02                   |                                 |
| 4. SIInx + II               | 3.404+01                   | 9.637. ni                            | 2.019.+11                   | 3.47 lp= 02                 | 3.446≥+nn                       |
| 4.4nn±+n1                   | 3.539.+11                  | J• <b>∏25</b> ≠ ∩ ∩                  | 2.069.+01                   | 3.6 9                       | 3./11.++10                      |
| 4.500=+11                   | 3,675,+n1                  | 1.089 <b>.</b> + nn                  | 2. 231=+11                  | 3,747p+12                   | 3,967=+00                       |
| 4,600#+01                   | 3,812+01                   | 1,155.+00                            | 2.404.+01                   | 3,887,02                    | 4.∠43∞+∩∩                       |
| 4,700++01                   | 3,9510+01                  | 1.223.+00                            | 2.287.+01                   | 4.029.02                    | 4. 229 *****                    |
| 4,800=+01                   | 4.090=+01                  | 1,293=+00                            | 2.179.0+01                  | 4.171=02                    | 4.827**00                       |
| 4.900++01                   | 4,2310+01                  | 1,365.+00                            | 2.0790+01                   | 4.5150 - 02                 | 5.135=+00                       |
| Þ•000≠+01                   | 4,374,+01                  | 1.440=+00                            | .985 <b>±+</b> 0            | 4,46 (p= 02                 | 5.4540+00                       |
| 2.100x+01                   | 4,518.+01                  | 1,517=+00                            | <b>,</b> 898 <b>⊭</b> +0    | 4.007.02                    | 5.184=+00                       |
| 2.200x+01                   | 4,663+01                   | 1,597=+00                            | 1.010-+01                   | 4,756,*82                   | 6.125=+00                       |
| 2.300x+01                   | 4.811.+01                  | 1,679,+00                            | 1.739=+01                   | 4.906.02                    | 6.476=+00                       |
| <b>7.400×+01</b>            | 4,960,0+01                 | 1./04.+00                            | ,05/ <u>»</u> +0            | <b>5,0</b> 58 <b>,•</b> 02  | 6,839=+00                       |
| 2,500x+01                   | 5.111.+01                  | 1,051=+00                            | 1.599.+01                   | 5,212=02                    | 7.2130+00                       |
| 2.000++01                   | 5,263,+01                  | 1.741=+00                            | ,53 <b>2±+0</b>             | 5.368=02                    | 7.598++00                       |
| <b>&gt;,/</b> 00=+(         | 0+פעץ 4,5                  | 2.034**00                            | 1,475×+01                   | 5.550×402                   | 7,994∞♦႐႐                       |

| DIAMETER   | VELOCITY  | RE   | DRAG COEF   | RELAX TIME  | ,98 DIST  |
|--|---|--|---|---|---|
| DIAMETER<br>5,800+01<br>5,900+01<br>6,000+01<br>6,100+01<br>6,200+01<br>6,200+01<br>6,300+01<br>6,400+01<br>6,500+01<br>6,600+01<br>6,700+01<br>6,800+01 | VELOCITY<br>5,576±+01<br>5,736±+01<br>5,898±+01<br>6,063±+01<br>6,230±+01<br>6,399±+01<br>6,570±+01<br>6,743±+01<br>6,917±+01<br>7,091±+01<br>7,091±+01<br>7,264±+01<br>7,436±+01 | RE<br>2, 130=+00<br>2, 228=+00<br>2, 330=+00<br>2, 435=+00<br>2, 543=+00<br>2, 543=+00<br>2, 654=+00<br>2, 769=+00<br>2, 886=+00<br>3, 006=+00<br>3, 128=+00<br>3, 253=+00<br>3, 379=+00 | DRAG COEF<br>1.417±+01<br>1.362±+01<br>1.310±+01<br>1.261±+01<br>1.261±+01<br>1.26±+01<br>1.169±+01<br>1.169±+01<br>1.086±+01<br>1.048±+01<br>1.012±+01<br>9.787±+00<br>9.478±+00 | RELAX TIME<br>5,686p=02<br>5,849p=02<br>6,015p=02<br>6,183p=02<br>6,353p=02<br>6,525p=02<br>6,525p=02<br>6,700p=02<br>6,876p=02<br>7,053p=02<br>7,231p=02<br>7,408p=02<br>7,583p=02 | <pre>,90 DIST 8.401**00 8.020**00 9.249**00 9.090**00 1.014**01 1.061**01 1.108**01 1.157**01 1.206**01 1.257**01 1.257**01 1.257**01 1.309**01 1.362**01</pre> |
| 7,100=+01  | 7.605 + 01  | 3,505++00  | 9,193±+00   | 7,755,02  | 1.416=+01   |
| 7,200=+01  | 7.768 + 01  | 3,632++00  | 8,936±+00   | 7,922,02  | 1.472=+01   |
| 7,200=+01  | 7.925 + 01  | 3,757++00  | 8,708±+00   | 8,081,02  | 1.728=+01   |
| 7,300±+01  | 8 :: 07 1 = + 0   | 3,880,+00  | 8,5110+00   | 8,23 #*02   | , 386#+   |
| 7,400±+01  | 8 : 2 0 5 = + 0   | 3,998,+00  | 8,3500+00   | 8,367,#*02  | , 645#+   |
| 7,500±+01  | 8 : 3 2 9 = + 0   | 4,113,+00  | 8,212=+00   | 8,493,#*02  | , / (5#+  |
| 7,600±+01  | 8 : 4 8 5 = + 0   | 4,246,+00  | 8,018u+00   | 8,653,#*02  | , / 66#+  |
| 7.700=+01  | 8,641=+01   | 4,38 =+00  | 7,632=+00   | 8,8 2,0*02  | .828#+0   |
| 7.800=+01  | 8,798=+01   | 4,5 9=+00  | 7,653=+00   | 8,972=02  | .89 #+0   |
| 7.900=+01  | 8,956=+01   | 4,659=+00  | 7,482=+00   | 9,132=02  | .956#+0   |
| 8.000=+01  | 9,113=+01   | 4,851=+00  | 7,317=+00   | 9,293=02  | 2.42 #+0  |
| δ. 00±+0 <br>δ.200±+0 <br>δ.300±+0 <br>δ.400±+0  | 9 + 27   = + 0  <br>9 + 429 = + 0  <br>9 + 588 = + 0  <br>9 + 588 = + 0  <br>9 + 746 = + 0  | 4,945,00<br>5,091,00<br>5,240,00<br>5,391,00   | 7,158,+00<br>7,005,+00<br>6,058,+00<br>6,717,+00  | 9,454,02<br>9,615,02<br>9,777,002<br>9,939,02   | 2 • 188 • • 0  <br>2 • 155 • • 0  <br>2 • 224 • • 0  <br>2 • 294 • • 0  |
| $b_{0} = 0 = 0$<br>$b_{0} = 0 = 0$<br>$b_{0} = 0 = 0$<br>$b_{0} = 0 = 0$<br>$b_{0} = 0$  | 9,905m+01<br>1,006m+02<br>1,022m+02<br>1,038m+02<br>1,038m+02   | $5.544_{B} + 00$<br>$5.699_{B} + 00$<br>$5.857_{B} + 00$<br>$6.017_{B} + 00$   | 6, 580 + 00 6, 448 + 00 6, 321 + 00 6, 199 + 00   | ,0 0=0 <br> .026=0 <br> .043=0 <br> .059=0  | 2.366#+0 <br>2.438\$*0 <br>2.5  \$*0 <br>2.586#*0   |
| 5,900±+01  | 1 • 054 • + 02  | 6,179=*00  | 6,080=+00   | 1 • 075 • * 0   | 2.06   # + 0  |
| 5,000±+01  | 1 • 070 • + 02  | 6,344=*00  | 5,966∍+00   | • 09 2 • * 0  | 2./38 # + 0   |
| 5,100±+01  | 1 • 086 • + 02  | 6,510=*00  | 5,855∍+00   | •   08 • * 0  | 2.8   6 # + 0   |
| 5,200±+01  | 1 • 1 03 • + 02   | 6,679=*00  | 5,748∞+00   | •   24 • * 0  | 2.8 9 5 # + 0   |
| 9,300±+01  | 1 • 1 9 • + 02  | 6,850,24,00  | 5,645±+00   | • 4 ₽ <sup>■</sup> 0  | 2,975=+0  |
| 9,400±+01  | 1 • 1 35 • + 02   | 7,024,200  | 5,544±+00   | • 57¤■0   | 3,156=+0  |
| 9,500±+01  | 1 • 1 5 1 • + 02  | 7,199,200  | 5,447±+00   | • 74¤■0   | 3,138=+0  |
| 9,500±+01  | 1 • 1 67 • + 02   | 7,377,200  | 5,353±+00   | • 90₽■0   | 3,221=+0  |
| 9.700 + 01 9.800 + 01 9.900 + 01 1.000 + 02 1.100 + 02 1.200 + 02 1.200 + 02 1.300 + 02 1.300 + 02   | 1 183 + 02<br>1 199 + 02<br>1 216 + 02<br>1 232 + 02<br>1 395 + 02<br>1 558 + 02<br>1 558 + 02<br>1 723 + 02  | 7,557#+00<br>7,740#+00<br>7,924#+00<br>8,111#+00<br>1,010=+01<br>1,231#+01<br>1,475#+01  | 5,262++00<br>5,174+00<br>5,089+00<br>5,00+00<br>4,295+00<br>3,753+00<br>3,327+00  | 1 • 207 • 7 01<br>1 • 223 • 7 01<br>1 • 24 0 • 7 01<br>1 • 256 • 7 01<br>1 • 422 • 7 01<br>1 • 589 • 7 01<br>1 • 757 • 7 01   | 3. 306 * 0  <br>3. 39   * 0  <br>3. 478 * 0  <br>3. 566 * 0  <br>4. 502 * 0  <br>5. 543 * 0  <br>6. 688 * 0   |

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| DIAMETER                | AFFOCITA                      | RE                     | DRAG COEF               | RELAX TIME                | ,98 DIST            |
|-------------------------|-------------------------------|------------------------|-------------------------|---------------------------|---------------------|
| 1.400++02               | 1,887,+02                     | 1,739=+01              | 2,987=+00               | :  •924p=0                | 7. 431 =+01         |
| 1.500x+02               | 2,051,+02                     | 2,026,*01              | 2,/08,+00               | 2+092==01                 | 9.2/[#+]]           |
|                         | 2,2,2,2,+02                   | 2,2330+01              | 2,470,00                |                           | 1+0/04+02           |
| 1.800++02               | 2.540.+02                     | Z,002⊅*UI<br>3.011+≠01 | 2,207#400               | 2,590,01                  | 1.384+02            |
| 1-900-+02               | 2.762.+02                     | 3.38n.+01              | 2+11/2=+00              | 2.755.*01                 | 1. 253#+02          |
| 2.000**02               | 2.862.+12                     | 3.769.+01              | 1.854 <b>.</b> +nn      | 2.919.01                  | 1./31#+02           |
| 2,100**02               | 3,022,+02                     | 4,178=+01              | 1.747.+00               | 3,081,001                 | 1.916+02            |
| 2.200++02               | 3,180+02                      | 4,607=+01              | 1,052.+00               | 3,243,=01                 | 2.109+02            |
| 2,300*+02               | 3,337,+02                     | 5,054,+01              | j,568,+00               | 3,403,01                  | 2.309=+02           |
| 2.400#+02               | 3,494,+02                     | 2.2510+01              | 1,494,+00               | 3,263=*01                 | 2.216=+02           |
| 2.500=+02               | 3,649,+02                     | 0,006,*01              | 1.420.00                | 3+/2 #*0                  | 2./30=+02           |
| 2.000+02                | 3,0000+02                     | 7 071 + 01             | 1.30000000              | 0,077##[]<br>4 033 = 01   | 2. 77               |
| 2 200-+02               | 3,997=+02                     | 7.571.+01              | - <b> </b> +J  #♥[]]    | 4•U330*U1<br>4-187.**01   | 3.41on+02           |
| 2,900++02               | 4.256+02                      | 8,128,+01              |                         | 4.34mm=n1                 | 3.649##02           |
| 5. nnn#+n2              | 4.405+02                      | 8,7n2+11               | 1.174=+00               | 4,492=11                  | 3,893=+12           |
| 3.100++02               | 4,553.+02                     | 9,294,+01              | 1.130 + nn              | 4.643.0 = 01              | 4. 144** 02         |
| 3,200=+02               | 4,699=+02                     | 9,902=*01              | 1.101.**00              | 4,7920-01                 | 4.399=+02           |
| 5.300++02               | 4,845,+02                     | 1.053.+02              | 1.068.+00               | 4,940,01                  | 4.659=+02           |
| 3.400=+02               | 4,989+02                      | 1.117#*02              | 1:038=+00               | 5,087. 0                  | 4. 725 ** 02        |
| 3,500x+02               | 5+131s+02                     | 1.183a+02              | <b>1.010+*00</b>        | 5,233p ()  <br>5,377 - 01 | 5. 1950+02          |
| $3 \cdot 0 0 0 x + 0 2$ | 5,2/3+12                      | 1,220=+02              | 9,037##[] <br>0 590-#81 | 5.520.+01                 | 5 (5 an + 62        |
| 3 800.+02               | 5.553.+02                     | 1,389.+02              | 9.361                   | 5.662 - ni                | 6. 034+02           |
| 3.9nnx+02               | 5.691.+02                     | 1.461.+02              | 9.147. ni               | 5,8n3. nl                 | 6. 322=+ 12         |
| 4.000++82               | 5,828,+02                     | 1,535,+02              | 8,94001                 | 5,943,01                  | 6.0140+02           |
| 4.100++02               | 5, 963 + 02                   | 1.6100+02              | 8,757.01                | 6,081=01                  | 6.911=+02           |
| 4 <b>,200≠+</b> 02      | 6, <u>0</u> 98,,+ 02          | 1.686#+02              | 8,578×*0                | 6,219,01                  | 7.211=+02           |
| 4,300#+02               | 6,232,+02                     | 1.164.+02              | 8,410==01               | 6, 355p = 0               | 7. 215=+02          |
| 4.400++02               | 6,364,0+02                    | 1.044+02               | 8,2210=01               |                           | 7.822**02           |
| $4 \cdot 200 + 02$      | 6,490 ± 02                    | 1+722#*U2<br>2.007++02 | 7 958                   | 6.757 <sub>m</sub> e 01   | 8. 447⊭+ n2         |
| 4.700++62               | 6.755 + n2                    | 2, n9 is+ n2           | 7.823×=01               | 6.889 11                  | 8.765±+n2           |
| 4.800+02                | 6.884 <u></u> +02             | 2,176=+02              | 7.094 <u>#</u> # []     | 7.020.*01                 | 9. 186=+ 02         |
| 4.900++02               | 7.011.+02                     | 2,262++02              | 7,572=01                | 7. 149. 01                | 9.410**02           |
| 2.000x+02               | 7:137:+02                     | 2.35 g+ 02             | 7.455=01                | .7,278 <b>∞</b> =01       | 9,/37=+02           |
| 2.100#+82               | - 7:262.+02                   | 2,439+02               | 7,344=01                | 7,406=11                  | 1.007×+03           |
| 2.200=+02               | $7,387_{w}+02$                | 2,529,+02              | 7,239.00                | 7,533,0701                | I• u4 <u>0</u> ≠+03 |
| 5.500x+12               | 7,510=+02                     | 2.021.0+02             | 7, 130, 01              |                           | 1. 1/3**03          |
| 2.400x+02               | 7 764 +02                     | 2.808-+02              | /+ []♥ ₽♥ []↓<br>6   48 | . 7.9.70                  | 1.10/==03           |
| 2.500±+02               | · / + / ジェルテ U2<br>7 - 874エロク | 2,904-+02              |                         | 7+7U/#7U)<br>8-83n4#01    | 1. 176              |
| 5.7n0++02               | 7.994.+12                     | 3.0n <b>n+</b> n2      | 6,775 <sub>m</sub> =ni  | 8.152 <u>m</u> =01        | 1.210**03           |
| 2.000x+02               | 8.112.+02                     | <b>3, 698•+ 62</b>     | 6.094 <b>n</b> =n1      | 8+273#*ni                 | 1.245=+n3           |
|                         |                               | 3 197.+02              |                         | 8.393.01                  | 1 2800+03           |

| BIAMETER                             | VELOCITY                    | RE                                       | DRAG COEF             | RELAX TIME                  | ,95 DIST           |
|--------------------------------------|-----------------------------|--|-----------------------|-----------------------------|--------------------|
| ¢., 000±+02                          | 8.347±+02                   | <b>3,298±</b> +02                        | 6,541m=11             | 8,5 20=01                   | 1.3 15=+ 13        |
| 0+100=+112                           | 8,463,+02                   | 3,399=+02                                | 6,469.0001            | 8,630,0 = 01                | 1. 3510+13         |
| 0,200++02                            | 8,578,+02                   | 3,5n2=*n2                                | 6.399=nj              | 8,748. 01                   | 1. 386#+ 13        |
| 6,500+112                            | 8,693,+02                   | 3,606.+02                                | 6.33301               | 8,864,-01                   | 1.422++03          |
| 6.400 + 02                           | 8,8n6,+n2                   | 3.7110+02                                | 6.268.=01             | 8,980,                      | ,458 <b>⊭</b> +ŋ3  |
| 6,500++02                            | 8,919,+n2                   | 3,817=+02                                | 6.200m=01             | 9,095.0-01                  | 1.495=+n3          |
| 6.600x+02                            | 9. n31. + n2                | 3,925,+02                                | 6.147,=01             | 9,209,01                    | 1.231=+13          |
| 0.700+02                             | 9,142,+02                   | 4,033,+02                                | 6, n89, = n j         | 9, 323p=01                  | 1. 268=+ 13        |
| 0,8 <u>00x+</u> 12                   | 9,252,+02                   | 4, 143, + 02                             | 6,034 <u>m</u> #01    | 9,435 <u>p</u> +01          | 1.004=+03          |
| 6,900+112                            | 9,362++02                   | 4,253.+02                                | 5,980∍≖01             | 9,547 <u>.</u> •01          | 1.041++03          |
| 1.000++02                            | 9,470=+02                   | 4,365=+02                                | 5,928. 01             | 9,658=01                    | 1.079=+03          |
| /.100=+02                            | 9,578,+02                   | 4,478=+02                                | 5,878.• 0             | 9,768.01                    | 1.116=+03          |
| 7,200++02                            | 9,686,+02                   | 4,592+02                                 | 5,829 <b>.</b> = []   | 9,877,01                    | + 153×+ 03         |
| 7.300=+02                            | 9,792,+02                   | 4,707+02                                 | 5,782=01              | 9,986m=01                   | 1.1910+03          |
| 7,400x+ú2                            | 9,898,+02                   | 4,823,02                                 | 5,737∎∎0∣             | i.009#+00                   | 1. 829** 03        |
| 7,500=+02                            | 1:000+03                    | 4,940+02                                 | 5,093.001             | 1+020+00                    | 1.067=+03          |
| 7.600++02                            | 1.011.+03                   | 5,058 <b>.</b> +02                       | 5,650±=01             | 1.031.+00                   | 1.9050+03          |
| 7.700+12                             | 1.021.+03                   | 5,177=+02                                | 5,60 <sup>9</sup> ¤=0 | 1.041.+00                   | 1. 43 * 03         |
| 7 <b>.</b> 800x+02                   | 1.031.+03                   | 5,297.+02                                | 5,269=01              | l+052=+00                   | 1. 48   # 03       |
| 7,900*+02                            | 1.042.+03                   | 5,4190+02                                | 5,2300=01             | 1,062,+00                   | 2·u/9=+03          |
| 8.000*+02                            | 1,052,+03                   | 5,54 x+02                                | 5,493 <b>∞</b> #0∣    | 1.073=+00                   | 2. 158 -+ 03       |
| 8,100++92                            | 1.062=+03                   | 5,664.*02                                | 5,450∍≖∏∣             | 1+083=+00                   | 2.097#+03          |
| $b_{*}200 + 02$                      | 1.0720+03                   | 5,788,+02                                | 5.4200=01             | l.093±+00                   | 2.135=+03          |
| 8 <b>.</b> 300±+02                   | l+082 <b>+</b> +03          | 5,913+02                                 | 5,386 <b>.</b> -DI    | 1.103.+00                   | 2 <b>.</b> ₁74⊭+03 |
| 8.400×+02                            | •092 <b>±</b> +03           | 6 <b>.039</b> *02                        | 5,352.01              | <u>1+1 3+10</u>             | 2+2 3=+03          |
| 8.500±+02                            | l+l02±+03                   | 6,166=+02                                | 5,320≖01              | 1+1230+00                   | 2•252**os          |
| 8.600=+02                            | 1.111.03                    | 6,294,+02                                | 5,288,4701            | • 33 <b>∞</b> +00           | 2.292**03          |
| 8,/00++02                            | 30+م121 و1                  | 6,423+02                                 | 5.25/0-01             | 1.143×+00                   | 2. 331=+03         |
| 8.800x+02                            | + 3  <b>+</b> +03           | 6,552+02                                 | 5,22/##01             | 1.153.+00                   | 2.370+03           |
| 8,900±+82                            | • 40 <b>+</b> +03           | 6,683 <b>s</b> +02                       | 5,198±=01             | 1,163,+00                   | 2.410**03          |
| 9+000 <b>+</b> +02                   | 1.150.+03                   | 6,815.+02                                | 5.170.01              | 1.1/3.+00                   | 2.449#+03          |
| A 100 + 05                           | 1.15% + 03                  | 0,94/#*02                                | 5.142.01              | 1.182=+00                   | 2.489++03          |
| 9.200++02                            | 1,167±+03                   | 7,080,02                                 | 5.112.001             | 1,192,00                    | 2.529=+03          |
| 7.300x+()2                           | • /°±*()3                   |  | 5.00% 0               | [• ≤ 0   ∞ <sup>+</sup> 0 0 | 2.309**03          |
| <b>7.400*+02</b>                     |                             |  | 5,000                 |                             | 2.0 <u>0</u> 9⊭+03 |
| 7.200**02                            | 1+ 19/10 - 03               | 7, 4000 702                              | 5.037# 01             | + < < 0 p T [] []           | 2.049**03          |
| 9.000x+02                            | 1.200.+03                   | 7 76 + + + + + + + + + + + + + + + + + + |                       |                             | 2.0090000          |
| 7 + 7 () () # * () 4                 |                             |  | 4 7 7 1 10 7 []]      |                             | 2, / 29= 03        |
| 5 0 0 0 x + 0 ∠                      | 1 227 = 1 0 3               |  | 4,70/                 | 1,259 + 00                  | 2.7095+03          |
| 7 # 7 ().() # † () <b>4</b>          | 1 242 LAZ                   | 8, 170, + 02                             | 4,742070)<br>A 993    | 1.267 ±00                   | 2.017**            |
| i+UUU#▼US                            | U 1:27497UJ                 | 94.177#102<br>8.395.+02                  |                       | 1144778788                  |                    |
|                                      |                             |  | 4+701#701             |                             |                    |
|                                      |                             | 8.605.+00                                | ·4.00 ₽▼0 <br>4.860   |                             | 2. 70 1 7 13       |
|                                      | 1+ 4078 - 10<br>1 1278 - 12 | 8.748-+00                                | 4. UUUUU<br>4. SAA    | 1. 507 ±00                  | 2. 7/ 1 . 0        |
| I I U T U E T U O<br>I O D O = + 0 4 | 1 286 + A4                  | 8.807.+00                                | 4.407U#7U             | 1.3.0.400                   | 3. 60m+ 03         |
| 1.0.0.8.4.0.2                        | 1+200=+03                   | 0,0730,05                                | 4+921#*[]             | + 4   <b>2 # * U U</b>      | S• U25.ª▲ QS       |

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| DIAMETER                                  | AFFACILA      | ĸE                | DRAG COEF                    | RELAX TIME                          | ,98 DIST                                |
|---|---------------|-------------------|------------------------------|-------------------------------------|---|
| 1.000++00                                 | 2.42102       | 1.594.=05         | 1 458-+06                    | 2.468                               | 1. 1360=06                              |
| 1.100.4.00                                | 2,925         | 2.118.05          | 1. 100. *06                  | 2,982-05                            | 2.539==06                               |
| 1.200++00                                 | 3.476         | 2.747.*05         | 8 504-+05                    | 3.545                               | 2.909=000                               |
| 1.300.408                                 | 4.076         | 3.489             | 6 7 9 4 + 05                 | 4.156                               |   |
|   | 4.722         | 4.363.*05         | 5,707==05<br>5,386,±05       | 4.8.6                               | 4.9430000                               |
| 1.500-+00                                 |               |                   |                              | 5 504 -05                           | 0.04/=-00                               |
|   | 6.159         | 6.489.mm05        | 4,0076+05<br>7 694.+05       |                                     | 0./934#00                               |
| 1.700-+00                                 | 6.949         | 7.779.05          | 3.027.+05                    | 7.086.=05                           | 1. 02=-05                               |
| 1.500+100                                 | 7.786         | 9.229.505         |                              | 7,940,=05                           | 1.4420403                               |
| 1.900+100                                 | 8.671         | 1.085.=04         | 2 175 4 05                   | 8.843.805                           | 2 48 - 5                                |
|   | 9.604.=02     | 1.265.504         | 2+1/20-02                    | 9.794                               | 2.2.000000                              |
| 2.100**00                                 | 1 058-01      |                   | [,007±+05                    |                                     | 2.750==05                               |
| 2 200 ±00                                 |               |                   |                              |                                     | 3.35 4.05                               |
| 2•200**00<br>2 300**00                    |               | 1,002=*04         |                              |                                     | 4,0050000                               |
| 2.400-+00                                 | 1 381 = 01    | 2.183.=04         | 1.2010-07                    | • <b>८७</b> 4 <b>»</b> • • • •      | 4.0 0 0 0 0 0 0                         |
|   |               |                   |                              | 1.508 - 04                          | 5./09##05                               |
| 2:200#+00<br>2:500 +00                    | 1 + 4 7 0 + 0 | 2,774 = 04        |                              | 1 220 14                            | 0.//9#=05                               |
|   | 1.0200 01     | 3.105.204         |                              | 1,052,04                            |   |
|   | 1 878 - 61    |                   |                              |                                     | 7. 100 m U J                            |
| ∠•♥UU≇♥UU<br>2.900++00                    |               | 3.846. = 04       |                              | 1,7,054.mm 04                       | 1.02020204                              |
| 3.000++00                                 | 2,155.e.01    | 4.257.204         |                              | 2, 198, 5, 04                       |   |
| ¥∙UUU≢≁00<br>3 100≖+00                    |               | 4 696             |                              | 21 1 20 8 - 04                      | 1. 37 1. 4                              |
| 4•100¥∓00<br>3.200+★00                    |               | 5, 165, x n4      |                              |                                     | 1,000##04                               |
| O + ∠ () () ≠ + () () A ≤ () () ≠ + () () |               |                   |                              |                                     |   |
| 3 400 ± 00                                |               | 6 103 = n4        |                              | 2;0,00,0 m 04                       | 2. 0. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| 4,700 <b>⊭</b> +00<br>Δ,500 <b>μ</b> +00  | 2,700,00      | 6.755 m 04        | 3.530.404                    | 2,921,07                            | 2, 27 20 - 04                           |
| 0,200±≁00<br>১.600±+00                    | 212010-01     | 7.549.=04         | 3,220,404                    | 3 162 - 04                          | 2. 7. 37 34 - 04                        |
| 0.000∎+00<br>∴ 700±+00                    | 3 274 - 01    | 7 978. = 04       | 0,2000+04                    |                                     | 2.0/984 [4                              |
| - V€/UU¥*UU<br>- 5 800±+00                | 3 453 -01     | 5.541.mm04        | 2.754.+04                    | 3.522.04                            | 3 5705 54                               |
| 3 900 + 00                                | 3 637 - 01    | 9 54 0 7 0 4      | 2.7258505                    | 3 7 9 04                            | 3 460                                   |
| 4.000 + 00                                | 3,826,=01     | 1.008-=03         | 2, 540 64 14                 | 3.901-=04                           | 4 +87 m = 0.4                           |
| **UUU#*UU                                 |               | 1.085             | 2,000#+04                    | 0, r0, m − 0, 7<br>4 n0, 8 m = 0, 4 | 4.3039-04                               |
| 7•100#▼00<br>4 200-+00                    |               |                   | 2.1720+04                    | 4.300.004                           | 5 435-5 44                              |
| 4 \$00-+00                                |               | 1,251.70          |                              |                                     | 5 4494-04                               |
| 4 4 10 - + 00                             | 4 627         | 1.341.03          |                              |                                     | 5.049#=04                               |
| 4.500++00                                 | 4 839 - 01    | 1.434.=03         | 1 662 + n4                   | 4.935                               | 7 10                                    |
| 4 0 0 0 + 0 0                             |               |                   | 556.+04                      | 5 156 - 04                          |   |
|   | 5 278 - 01    | 1.633.003         |                              | 5 380 = 04                          |   |
|   |               |                   |                              | 5 6 3 - 04                          | 0.34   4                                |
| <b>¬.∪</b> UUx+UU<br>4 Goo ⊬oo            | 5 736 - ni    | 1,740,2703        | 1,370,404                    | 5,013p+04                           | 9.0720=04                               |
| 5.000++00                                 | 5 972 - 01    | 1.966.703         | 1 2 3 4 04                   |                                     | <b>7.050×004</b>                        |
| -+UUU#+UU<br>5.1nn+un                     | 6.213nl       | 2.08603           | 1 143.404                    | 6.33504                             | 1.1000000000                            |
|   | 6 468 - ni    | 2.211             |                              | 6 586 - 54                          |   |
| ✓: <uu#▼uu<br>5 300.±00</uu#▼uu<br>       |               | 2.341             | 1.U/7.0 - U4<br>1.DU/7.0 - 1 | 0,200,8∓U4<br>6 840 – nA            | 1 - 54Am 02                             |
|   | 6 963 01      | 2.476             | 1+U1/#TU4<br>0 638.4/#2      | <sup>™</sup> 7. in i                | 1.077/2200                              |
|   |               |                   |                              | 7 366 - 04                          | 1.40 47 87 03                           |
| ~•~UUx+UU                                 | ╱╻╱╱╜╸╿╿      | 5 + 4 1 0 H = (12 | ¥,129#₹[]3                   | / 2000 # 04                         | 1.205%=03                               |



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| UIAMBTER                               | VELOCITY                 | RE                          | DRAG COEF           | RELAX TIME                  | ,95 DIST          |
|--|--------------------------|-----------------------------|---------------------|-----------------------------|-------------------|
| 5.600x+00                              | 7,488 <sub>0</sub> =01   | 2,761.03                    | 8,045,+03           | 7,636 <b>,</b> •04          | 1.078==03         |
| 5.700.+00                              | 7.757.01                 | 2,911.03                    | 8.199.+03           | 7,910,-04                   | 1.0010003         |
| 5.8nn+0n                               | 8.031.=01                | 3,067=03                    | 7,784=+03           | 8.190.*04                   | 1.730==03         |
| 5.900.+00                              | 8.310.01                 | 3,228,03                    | 7,396#+03           | 8,474 <b>.</b> -04          | 2. 07. 03         |
| 6.000 <b>*</b> +00                     | 8.59301                  | 3,395,03                    | 7,034=+03           | 8,763p#04                   | 2.2100003         |
| 6.100.+00                              | 8,881,                   | 3,567.03                    | 6,695,+03           | 9,057p <b>=</b> 04          | 2.361=03          |
| 0.2n0x+00                              | 9. 174 01                | 3,745.*03                   | 6,377 <u>⊨</u> +∏3  | 9,356m•04                   | 2.519=03          |
| 6.3nn+nn                               | 9,472,=01                | 3,929. 03                   | 6.079 <b>.</b> +03  | 9,659. 04                   | 2.085=03          |
| 6.4nn=+nn                              | 9,775=01                 | 4,119=*03                   | 5 <b>.8</b> 00≠+03  | 9,968. 04                   | 2.059-03          |
| 6,500**00                              | 1.008.+00                | 4,315,=03                   | 5,537#+D3           | 1, <u>028</u> , <b>-</b> 03 | 3• u4 i = 03      |
| 6,608**08                              | 1.039.+00                | 4.517.03                    | 5,290=+03           | <b>∣, 06 0∞™ 03</b>         | 3.2320005         |
| 6.7nn++n0                              | 1.071.00                 | 4,725.*03                   | 5,058 <b>.</b> *03  | 1.092=03                    | 3.432 - 03        |
| 6,8 <u>00</u> *+00                     | 1.103.+00                | 4,940,03                    | 4,8 <b>39,0</b> +03 | 1.1250-03                   | 3.64 ==03         |
| 6,900×+00                              | 1.136.+00                | 5, 160. 03                  | 4,032=+03           | 1,158.*03                   | 3. 80 0           |
| 7,000++00                              | 1.169=+00                | 5,388,03                    | 4,437=+03           | 1.192.03                    | 4. 088 03         |
| 7.100=+00                              | 1.202.+00                | 5,621, 03                   | 4,253,+03           | 1.220. "03                  | 4.3200=03         |
| 7,200**00                              | 1,236,+00                | 5,862, 03                   | 4.079.03            | 1.20   = 03                 | 4.5/4**03         |
| 7,300=+00                              | 1.271.+00                | 6 <b>,</b>  09 <b>,</b> "03 | 3,914=+03           | 1.296.03                    | 4.8330=03         |
| 7,400++00                              | 1,306=+00                | 6,363=03                    | <b>3.</b> 758∍+ე3   | 1.332.03                    | 5.103**03         |
| 7.500++00                              | 1,341,+00                | 6,624, 03                   | 3.610.+03           | 1,368,=03                   | 5.383#*03         |
| 7.600.+00                              | 1.377.+00                | 6,893=03                    | 3,470=+03           | 1,405=03                    | 5.6/50003         |
| 7,700×+00                              | 1.414=+00                | 7,168,03                    | 3.33/#+03           | 1.442. 03                   | 2.9/90003         |
| 7.800x+00                              | 1.451.+00                | 7,450,03                    | 3.211=+03           | 1.4/9#100                   | 0.295**03         |
| 7,900±+00                              | 1,488 <b>,+</b> 00       | /,/40=03                    | 3,0910+03           | 03 * 01/0* 03               | 0.023**03         |
| 8,000×+00                              | I.526∍+00                | 8,037.03                    | 2.97/+03            | 1.200 - 03                  | 0.904##03         |
| 8.100±+00                              | 1.564.+00                | 8,342=03                    | 2.009=*03           | ,295m ■ ()3                 | 7.585             |
| 8.200*+00                              | 1,603 <b>+00</b>         | 8,054. 103                  | 2. 100 . + 03       | 1.0340-03                   | 7,009 <b>0</b> [3 |
| 8,300 <b>=</b> +00                     | 1,642=+00                | 8,974n=03                   | 2,00/=+03           | 1,0/4,00                    | 8 46              |
| b,400±+00                              | 1,682+00                 | <b>7</b> , 30   <b>2</b> 03 | 2,2700 03           | 1 7 5 6 - 3                 | 8 87 0            |
| b,⊃00≠+00                              | 1,722±+00                | ♥,03/p♥()3                  | 2,404#*03           | 1,700,000                   | 0.07000000        |
| 6,600=+00                              | 1.762.+00                | <b>A A A A A A A A A A</b>  | 2.097.03            | 1.839.*03                   | 9. /330#03        |
| 8,/00=+00                              | 1.004+00                 |                             | ···2.01/ ■+ 03      | 1.882.03                    | 1. 19#* 02        |
| 0,000 <b>x</b> +00                     | 1,04 <sup>2</sup> p + 00 |                             | 2.2.45.+03          | 1.924.03                    | 1. 166## 02       |
| 0,700 <b>±</b> +00                     |                          |                             |                     | 1.968. • 03                 | 1.114=12          |
| 7.000×+00                              |                          | 1 182-#02                   | 2.020403            | 2.012.03                    | 1.164×= n2        |
| 7 • 100×+00                            |                          | 1.221.02                    | 2.0202 00           | 2.056.03                    | 1.216== 02        |
| 7,200×*00                              |                          | 1.261.702                   | . 899 <b>.</b> +n3  | 2.101.03                    | 1.27 1= 02        |
| 7.5UU±+UU<br>9.400±+00                 |                          | 1.303+*02                   | 1.839±+n3           | 2.14.6 3                    | 1.325=02          |
|  |                          | 1.344.*02                   | 782+13              | 2. 192 13                   | 1.383== 02        |
| 9 600 + 00                             | 21195.+00                | 1.387                       | 1.727±+n3           | 2.238 13                    | 1.441==02         |
| 9,700±+00                              | 2.24 n.+ n.n             | 1.431 n2                    | . 675.+n3           | 2,285. 33                   | 1.202**02         |
|  | -2+2-0=-00<br>-2-287     | 1.476. * 02                 | 1.024=+03           | 2.332                       | 1.565== 02        |
| .************************************* | 2.333                    | 1.521.02                    | 1,570s+n3           | 2,379.*13                   | 1.030**02         |
| ኖቁ ኖህዐም። ህህ<br>1. በበበ⊶ልበ               | 2,380 <u>+0</u> 0        | 1.567. 02                   | 1.529.+03           | 2,428.03                    | 1.096=02          |
| 1.100+01                               | 2,878,+0n                | 2.085.02                    | 1.151m+n3           | 2,935. 03                   | 2.481=02          |
| 19100#**91                             |                          |                             |                     |                             |                   |



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| DIAMEETER                  | VELOCITY                     | RE                   | DRAG COEF                               | RELAX TIME             | • 48 UIST               |
|----------------------------|------------------------------|----------------------|---|------------------------|-------------------------|
| 1.200++01                  | 3,422,+00                    | 2,704,=02            | 8,085,+02                               | 3,489,=03              | 3.511#*02               |
| 1.300++01                  | 4.011.+00                    | 3,434,-02            | 7.004.+02                               | 4.09103                | 4.833==02               |
| 1.400+01                   | 4.647                        | 4.283.002            | 5.022++12                               | 4.73813                | 6.495=02                |
| 1.5nn++01                  | 5.327.+00                    | 5.261                | 4.584.+02                               | 5.432                  | 8.554=02                |
| 1.600-+01                  | 6.051.+00                    | 6.375.02             | 3 /89_+02                               | 6.171.003              | 0,22424UZ               |
| 1,200 + ol                 | 6.819.+00                    | 7.633.482            | 3 1704402                               | 6.954                  | 1+10/#=01<br>1 AnOmi=01 |
| 1.800.+01                  |                              | 9 844                | 0 681.400                               | 7 78 - 03              |                         |
|                            | 7,000µs+00<br>8,483 ± no     |                      | 2,00i∌≠02                               | 8 65 J = 03            |                         |
|                            | 0,400,000                    | 1.935                | 2,2700402                               | 0,0010000<br>0,563.=03 | 2.17/0001               |
|                            |                              |                      | 715 + 70                                |                        | 2.07001                 |
|                            | 10010-01                     | 1,4200*01            | 1.100 02                                | 1.0220-02              | 3.2/50=01               |
| 2.200=+01                  | + ∠?¤♥()                     | 1+039=11             | 1.490.02                                | 1.17                   | 3.9430001               |
| ∠•380#+01                  | 1.230.+01                    | 1.0050.00            | 1.3190+02                               | 1.2240-02              | 4./08==01               |
| <b>4+400*+</b> 01          | +334m+0                      | 2+109=*01            | 1.169.402                               | 1,36   02              | 5.579**01               |
| 2+200x+01                  | • 443m+0                     | 2,3750*01            | 1.0420+02                               | 1,4710=02              | 6,566##01               |
| 2.600*+01                  | +555a+0                      | 2,06   0             | 9,3330+01                               | · 1. 285» • 02         | 7.079==01               |
| 2.700=+01                  | • 67 Q <b>•</b> + 0          | 2,968.01             | 8,403m+01                               | 1,703=02               | 8,906=01                |
| 2,800*+01                  | 1,788,+01                    | 3,296, 01            | 7,601×+01                               | 1.823.=02              | l•u2  <b>=</b> ≠00      |
| 2+900#+01                  | 1,909+01                     | 3,645±*01            | 6,905+01                                | 1,947,02               | + i6 <u>0</u> ##00      |
| 3.000**01                  | 2.033=+01                    | 4.016.01             | 6,299=+01                               | 2.073.02               | 1.309+00                |
| 3.100x+01                  | 2+159+01                     | 4,408,-01            | 5,768,+01                               | 2,202**02              | 1.468##00               |
| 3.200=+01                  | 2,288,+01                    | 4,822=01             | 5.301#*NI                               | 2,334.02               | 1.038=+00               |
| 3,300x+01                  | 2,420.+01                    | 5,258.01             | 4,889∎+0∣                               | 2,468,*02              | 1.819**00               |
| 3,400×+01                  | 2,552 <b>±+0</b> 1           | 5,714,01             | 4,5300+01                               | 2,60302                | 2. 010++00              |
| 3,500x+01                  | 2.688.+01                    | 6, 195 <b>,</b> = 01 | 4,204=+01                               | 2,741=02               | 2.213=+00               |
| 3,600x+01                  | 2, 826, +01                  | 6,699 <b>,</b> =U    | 3.9130+01                               | 2,882,-02              | 2.428=+00               |
| 3,700=+01                  | 2,965,+01                    | 7,225.01             | 3,652.+01                               | 3,02402                | 2,0530+00               |
| 3,800x+01                  | 3.107.+01                    | 7.174. 01            | 3,4 8+01                                | 3, 168, = 02           | 2.891=+00               |
| 3,900+01                   | 3,250,+01                    | 8,345, -01           | 3.2000+01                               | 3.314. = 02            | 3.141=+00               |
| 4.000=+01                  | 3.394.+01                    | 8,939m=01            | 3.014.+01                               | 3,461,02               | 3,402++00               |
| 4.100#+01                  | 3,540,+01                    | 9,557.01             | 2.040.+01                               | 3.610.02               | 3.675++00               |
| 4.200+01                   | 3.687.+11                    | 1.020.+00            | 2.082p+ni                               | 3,760,=02              | 3.961#+00               |
| 4.308++01                  | 3.836.+11                    | 1.086.+00            | 2.537.+01                               | 3,912= 12              | 4.259**00               |
| 4.400x+01                  | 3.980,+01                    | 1,155,+00            | 2.404+01                                | 4,065, 12              | 4.270**00               |
| 4.500++01                  | 4.137.+ni                    | 1.226.+00            | 2.282 + ni                              | 4.219= 02              | 4.893++ nn              |
| 4.6 004+61                 | 4.29 Da+ DI                  | 1,300+00             | 2.169.+11                               | 4.375 n2               | 5.228 ** 00             |
| 4.700++01                  | 4.445.+ 01                   | 1.376.+00            | 2 65.+                                  | 4. 533 02              | 5. 376 + 00             |
| 4.8nn++ ol                 | 4.6 n l + n i                | 1.454.+00            | 1.968.+01                               | (4.092. Th2            | 5. ¥37#+ 00             |
| 4.900+01                   | 4.758.+01                    | 1.235.+00            | . i. 878 . • ni                         | 4.852. 02              | 6.11## nn               |
| 5.000++01                  | 4 9 18 + 01                  | 1.619-+00            | 1. /94                                  | 5.015.02               | 6 698×+00               |
| -+UUU=-U+<br>5.100-→∩1     | 5. 079                       | 1.706-+00            | · ; • • • • • • • • • • • • • • • • • • |                        | 707                     |
|                            | 5.245.401                    | 1.795.+00            | 1 642.4 AL                              |                        | 7                       |
|                            |                              | 1.888-+nn            | 1, 5737441                              | 5 516 -00              | 7                       |
|                            | ン#マリア#マリト<br>5 577 ± 01      | 1983.+0-             |   |                        |                         |
| 2 • "UU#*() <br>5 500 • 01 | ->+>//#*[] <br>5 748 ± n     | 2 082 + ne           |   | 5 861 - 50             | 0.3/4**00               |
|                            | J + //∀∀⊎≠ ()  <br>5 001 - 5 |                      | , 742₩₹[]<br>, 786                      |                        | 0.029#+00               |
|                            | 2+721#+01                    | · <; [53»*())        | 1,050×+[]]                              |                        | A • 5 A D = + 0 D       |
| <b>?./00±+0</b> ↓          | 0.09/#+01                    | 2,289 <b>#*</b> 00   | ,351m+01                                | 0,218,02               | <b>7./68#+00</b>        |

| DIAMETER                       | VELOCITY           | RE                 | DRAG COEF                 | RELAX TIME  | .98 DIST             |
|--------------------------------|--------------------|--------------------|---------------------------|-------------|----------------------|
| Þ,8∪0≠+∪I                      | 6.276 <b>.+</b> 01 | 2,397 <b>±</b> +00 | ,278 <b>≠</b> +0          | 6,400=02    | , <sub>u</sub> 26¤+0 |
| 5+900×+01                      | 6,458 <u>,</u> +0j | 2,509+*00          | .228 <b>.</b> +0          | 6,586,=02   | 1.176**01            |
| 6.000×+01                      | 6,642,+01          | 2,624,+00          | 1,180,+01                 | 6,774, 02   | 1.128=+01            |
| 6, 100±+11                     | 6,829,+01          | 2,743,+00          | 1. 1350+11                | 6,964, 12   | 1. 18 [.+0]          |
| 6,200=+01                      | 7.017.+01          | 2.865.+00          | 1. n93.+n1                | 7,156, n2   | 1.236++n1            |
| 6.3nn+ n1                      | 7.2n7.+ni          | 2,990,+00          | 1. 053 <b>+</b> 01        | 7.350       | 1.291.0+01           |
| 6.4nn#+n1                      | 7.398 + ni         | 3.118.+10          | 1.015.+01                 | 7.544 n2    | 1.348+11             |
| <b>6.5</b> nn#+01              | 7.587.+01          | 3.247.+nn          | 9.0nle+nn                 | 7.737. 02   | 1.407+1              |
| 0.6nn=+n                       | 7.775.+11          | 3.379_+nn          | 9,476 + nn                | 7.929. 12   | 1.466=+ni            |
| 6.7nn+++1                      | 7.96 n. + n i      | 3.512.+00          | 9.180m+00                 | 8.117. • n2 | 1. 27#+n1            |
| $6.8n_{m} + n_{l}$             | 8.138.+ni          | 3.644.+00          | 8.913.+00                 | 8.299.02    | 1. 590**01           |
| 6.9ns+nl                       | 8.308.+01          | 3.775.+00          | 8.678 <sub>m</sub> +nn    | 8.472. 12   | 1.654#* 01           |
| 7. nne+el                      | 8.466_+ni          | 3.902.+00          | 8.478.+00                 | 8.633.mn2   | 1./19##11            |
| Z. 100#*81                     | 8.583.+ni          | 4.013.+00          | 8.367 <b>.</b> +nn        | 8.752. 702  | 1./85=+01            |
| 7.200± 01                      | 8,753,+11          | 4.150.+00          | 8.157.+00                 | 8.926       | 1.453#+01            |
| 7.300+01                       | 8.924.+01          | 4.290+100          | 7 957.+00                 | 9.100.002   | 1, 422++01           |
| 7.400+01                       | 9,095,+01          | 4.432.+0.0         | 7./65.*00                 | 9.275. 02   | 1.992**01            |
| 7.500++01                      | 9.267.+01          | 4.576.+00          | 7.581.***                 | 9.450.02    | 2                    |
| 7.6nn+01                       | 9.439.+01          | 4.723.+00          | 7.405.+00                 | 9.625.*02   | $2 \cdot 137 + 01$   |
| 7.700++01                      | 9.611.+01          | 4.873.+00          | 7.230.+00                 | 9.8ni       | 2,210,20,00          |
| 7.800++01                      | 9.784.+01          | 5.025.+00          | 7,200,400                 | 9,977       | 2+211++01            |
| 7.9nn+01                       | 9,957.+01          | 5.180.+00          |                           | 1.015-201   | 2. 164               |
| 8 - 000 - 01                   | 1.013.+02          | 5.336.+00          | 6 767 we op               |             | 2.442=+01            |
| 8.100=01                       | 1.030-+02          | 5.496-+00          | 6 522-+00                 | 1.051.401   | 2. 12. 14            |
| 6 + 100 = - 01<br>6 - 200 + 01 |                    | 5.658.+00          |                           |             | 2.5030401            |
| 8.300++01                      | 1,065,+02          | 5.822.***          | 6 549 + 00                | 1.086       | 2,0002-+01           |
| 0∓000≢×01<br>8-400×+01         | 1.085.402          | 5.989.+00          | 6 220 m = 00              | iiu⊴oa⊭≉oi  | 2.168## 01           |
| 8,500++01                      |                    | 6.158.+00          |                           | 1.122       | 2 +53++              |
| 8.600×*01                      | 14100502           | 6.330.+00          | 5 975 + 00                |             | 2. 439 + 01          |
| 8.700+01                       | 1.135.+02          | 5,504±+00          | 5 059 + 50                | 1,158,401   | 3                    |
| 8 8 00 + 01                    | 1 153 + 02         | 6.680.+00          | 5 748 + 00                | 176         | 3 1 5 4 4 1          |
| b.900.+01                      |                    | 6.859.+00          |                           |             | 3 105+01             |
|                                | 1.188.+02          |                    | 5.535.+00                 | 1.212.01    | 3. 296#+01           |
| 9.100-+01                      | 1.205.+02          | 7.225.400          | 5 434 + 00                | 1.230       | 3. s89.+ m 1         |
| 9.200++01                      | 1.223.+02          | 7.411.++00         | 5.336.+00                 | 1.248.*01   | 3.483#+01            |
| 9.300++01                      | 1.241.+02          | 7.600.+00          | 5.242.00                  | 1.266.401   | 3. 378##01           |
| 9.400+01                       | 1,259.+02          | 7.791.+00          | 5.150++00                 | 1.284.01    | 3. 5750+01           |
| 9,500++01                      | 1.276.+02          | 7.985.+00          | 5.061++00                 | 1.302.*01   | 3.7720+01            |
| 9.600++01                      | 1.294.+02          | 8.181.+00          | 4 975 + 00                | 1.320.401   | 3.87.04              |
|                                | 1.312.+02          | 8.379.*00          | 4 592 + 00                | 1.336 01    | 3. 472++01           |
| -++∪u+01<br>9_80n++s1          | 1.330-+02          | 8.58n±+an          | 4.011.400                 | 1.356       | 4                    |
| 9,900++01                      | 1.347+ 02          | 8.784 h + nn       | 4.733±+nn                 | 1.374m*n1   | 4. 76.0              |
| +-uu-;U<br>L.nnnu+c2           | 1.365-+ 02         | 8.99.0.+00         | 4. 657-+ 00               | 10 m        | 4. 28 min + 6 i      |
| I. In∩+ 02                     | 1.544.+.02         |                    | . ¬a ∨⊮r≡ru∐<br>4.600∞♦∩∩ | 1.574       | 5.390=+01            |
| -1. 200±+32                    | 1.723 + 12         | 1.362=+ 01         | 3.500++00                 | 1.757. ni   | 6.02 M + 01          |
| 1.300++52                      | 1.903.+02          | 1.629.+01          | 3.117.+00                 | 1.94        | 7.472=+01            |
|                                | 1977 - U.S. M. 196 | 11 - CAN 01        |                           | TT - U₩ UI  | /**/G=*UI            |

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| DIAMETER                  | VELOCITY               | RE                | DRAG COEF                 | RELAX TIME              | 98 DIST                                |
|---------------------------|------------------------|-------------------|---------------------------|-------------------------|--|
| 400=+02                   | 2,082,+02              | 1.919=+01         | 2,803,+00                 | 2,123,001               | 9.437#+01                              |
| 1.500=+02                 | 2,261,+02              | 2,233+01          | 2,546 <b>"</b> +00        | 2,306,01                | 1.101=+02                              |
| 1.600 + 02                | 2.440.+02              | 2,570,01          | 2,333 <u>,</u> *00        | 2,488,#01               | 1.269#+02                              |
| 1.700=+02                 | 2.617.+02              | 2,930++01         | 2,154.+00                 | 2,669, =01              | 1.448=+02                              |
| 1.800*+02                 | 2,794,+02              | 3,312=+01         | 2,001=+00                 | 2,849.01                | 1.036=+02                              |
| 1.900++02                 | 2.970=+02              | 3,715#+01         | 1.870+00                  | 3,028,-01               | 1.034=+02                              |
| 2.000*+02                 | 3,144,+02              | 4,141,+01         | <b>,</b> 756 <b>,</b> +∩0 | 3,20601                 | 2.042=+02                              |
| $2 \cdot 100 \times + 02$ | 3.318.+02              | 4,287=+0          | 1,650=+00                 | 3, 383, = 01            | 2,258#+02                              |
| 2.200=+02                 | 3,490,+02              | 2,055=+01         | 1,568=+00                 | 3, 258. • 01            | 2.482.+02                              |
| 2.300*+02                 | 3,000*12               | 2,243,0           | 1.490.00                  | 3./33.0*01              | 2.115=+02                              |
| 2.400×+02                 | 3,030,0+02             | 0,0520*01         | 1,421=+00                 | 3,70×=01                | 2.956**02                              |
| 2.200 = + 02              | 3.99/=+02              | 0,281=+01         | 1,358=+00                 | 4.076.01                | 3.2050+02                              |
| 2,000#+02                 | 4.104.+02              | /,129,+01         | 1.302++00                 | 4,24601                 | 3.461+02                               |
| 2.700=+02                 | 4,329,+02              | /,09/#+01         | 1.521=+00                 | 4,415,000               | 3, 124=+02                             |
|                           | 4,495,+02              | 0,284#*()         | 1.204=+00                 | 4,282.01                | 3,994+02                               |
| 2,700=+02                 | 4,052,0+02             | 0,090,00          | 1, 162+00                 | 4,/4/2=01               | 4.270++02                              |
|                           | 4,0 0 0 0 0 2          | ♥♥₽  <b>4</b> ₽₹Ŭ | ,  20**00                 | 4.711.01                | 4.553#+02                              |
| 3 200 + 02                | 4,770×12               |                   | 1.00/                     | 2 + U / 4 ≥ 8           | 4.843++02                              |
| 3.300 + 02                | 5 291 +02              | 11020002          | 1.003.405                 |                         | 5,138#*02                              |
| 3.400+02                  | 5.446.+02              |                   |                           | 5.554.0                 | 5,4394402                              |
| 3.500 + 02                |                        | 1 201             | 9,7210-01                 | 5, 7, 4, -01            | 5. /45ª (2                             |
| 5.600+02                  | 5,753,+02              | 1.364.+02         | 9,000                     | 5 867 - 01              | 0.07/##02                              |
| 3.700+02                  | 5.9 n4 + n2            | 1.438.+ 12        | 9,9420401                 | 6.021                   | 6. 696+12                              |
| 3.600.+02                 | 6.054.+02              | 1.515.+02         | 8 999                     | 6. 174 01               | 7 23                                   |
| 3,900++02                 | 6, 2n 3 + n2           | 1. 593. + 12      | 8.798                     | 6. 326 01               | 7. 355=+ 02                            |
| 4.000**02                 | 6.351±+n2              | 1.673=+n2         | 8.010.01                  | 6. 476 ni               | 7. 69 1#+ 12                           |
| 4.100++02                 | 6,497,+02              | 1.754.+12         | -8.432. ni                | 6. 625 = DI             | 8.1310+02                              |
| 4.200=+02                 | 6,642.+02              | 1.837.+02         | 8,265. 1                  | 6,773 m n j             | 8. 376=+ 12                            |
| 4,300*+02                 | 6,785,+02              | 1,921=+02         | 8,107,11                  | 6,920,01                | 8.125 + 12                             |
| 4,400=+02                 | 6,928.+02              | 2,007=+02         | 7,9580                    | 7,065,001               | 9. 178 + 12                            |
| 4.500=+02                 | 7.069.+02              | 2,095,+02         | 7,810,01                  | 7,2 <sub>0</sub> 9, • 0 | 9.435=+02                              |
| 4.608=+02                 | 7,2 <sub>0</sub> 9,+02 | 2,184=+02         | 7,682.01                  | 7,352×*01               | 9.195=+02                              |
| 4.700=+02                 | 7,348 + 02             | 2,274+02          | 7,555×= []                | 7.494. 01               | 1.016=+03                              |
| 4.000=+02                 | 7,486,+02              | 2,366.+02         | 7,435∍★0                  | 7,634. 01               | 1. y53=+ 03                            |
| 4.900**02                 | 7,623,+02              | 2,46 0= 02        | 7.320**01                 | 7,774. 01               | 1 · u <sup>9</sup> 0 <sup>#</sup> + 03 |
| 2.000+402                 | 7,759=+02              | 2,554.+02         | 7,210×*01                 | 7,912,*01               | 1.127++03                              |
| 2+100**02                 | 7,893,+02              | 2,051=+02         | 7.∣0°∍≖⊓∣                 | 8.049 01                | 1.165=+03                              |
| >,200x+02                 | 8,020,+02              | 2,/48,+02         | 7.007.01                  | 8,185,-01               | 1.203=+03                              |
| ≥.300x+02                 | 8,159,+02              | 2,847,+02         | 6,912=01                  | 8,320=01                | 1.2410+03                              |
| 2.400++02                 | 8,290,+02              | 2.948.+02         | 6.021.001                 | 8.454.01                | .280 <b>⊳</b> +03                      |
| 2,200=+02                 | 8,420+02               | 5.049.+02         | 6,/34.01                  | 8,287, 11               | 1.319=+03                              |
| 2,000x+02                 | 8.547.+02              | 3, 153=+02        | 6,651.01                  | 8,/18,•01               | 1.358=+03                              |
| 2./00**02                 | 8+0/0*+05              | 3,25/=+02         | 6,271#=01                 | 8,84901                 | 1.3980+03                              |
| 2+000=+02                 | 0.002*+02              | 3, 3630+02        | 6.494                     | 8,979,*01               | 1.437=+03                              |
| 2,700*+02                 | 8.931#+02              | <b>3,470≖</b> *02 | 6,421**01                 | 9,108, 01               | 1.477=+03                              |

| DIAMETER                        | VELOCITY                   | RE           | DRAG CØEF           | RELAX TIME                | ,98 DIST               |
|---------------------------------|----------------------------|--------------|---------------------|---------------------------|------------------------|
| 6,000±+02                       | 9,056,+02                  | 3,578s+02    | 6,350=01            | 9:235=01                  | 1. 2 18#+ 03           |
| 6,100*+02                       | 9,181,+02                  | 3,688,+02    | 6,282×01            | 9,362,01                  | 1.558=+03              |
| 0,200++02                       | 9,304+02                   | 3,798,+02    | 6.217.01            | 9,488 <u>,</u> ≠01        | 1, 599 * 03            |
| 6,300=+02                       | 9,420,+02                  | 3,910+02     | 6,155e=01           | 9,613,=01                 | 1.040+03               |
| 6,400 + 02                      | 9,548,+02                  | 4.024=+02    | 6,094=01            | 9,737.0                   | 1.081##03              |
| 0,500±+02                       | 9,669 <b>.</b> +02         | 4,138,+02    | 6,036∍=0            | 9,860p=01                 | 1./22=+03              |
| 6,600×+02                       | 9,788,+02                  | 4,254=+02    | 5,98 <u>0</u> =91   | 9,982.01                  | 1. 164 .+ 03           |
| 6,700×+02                       | 9,907,+02                  | 4,37   0+ 02 | 5,925.00            | 1+010++00                 | 1.005#+03              |
| 6,800=+02                       | 1.00 <sup>3</sup> **03     | 4,489,02     | 5,873 <b>≈</b> ≖0   | 1.022++00                 | 1.847=+03              |
| 00 <b>**</b> 02                 | 1+014=+03                  | 4,608=+02    | 5,d23=*n            | `l⊧o34 <b>∍⁺</b> oo       | ∙¢89⊭≠ŋ3               |
| /•000×+02                       | 1+02 <u>9</u> *03          | 4,728,+02    | 5,774,01            | +046 <b>∞</b> +00         | 1. 43   * 03           |
| 7 + 100 = + 02                  | 1.037.+03                  | 4,850+02     | 5,727 <b>.</b> •01  | , <b>0</b> 58µ≠00         | 1. 474=+ 03            |
| 1+200++02                       | 1.049.+03                  | 4,973=+02    | 5,681               | 1.070=+00                 | 2.016=+03              |
| /.300x+02                       | 1+0 <sup>6</sup> 0x+03     | 2,096=+02    | 5,03/==01           | 1+0 <sup>8</sup> 1=+00    | 2. <sub>0</sub> 59⊳≠03 |
| 1.400*+02                       | 1.072=+03                  | 2+221++02    | 5,594=01            | 1.093 <b>#</b> +00        | 2.102**03              |
| 7.500*+02                       | • <u>0</u> 83 <u></u> + 03 | 5,347=+02    | 5,553× 01           | 1.104=+00                 | 2. 145=+03             |
| 7.600=+02                       | 1+094+03                   | 5,474.+02    | 5.513=01            | 1.116#+00                 | 2. 188 + 03            |
| /./00#+02                       | 1.102+03                   | 5.603+02     | 5,474=01            | I+127=*00                 | 2,232**03              |
| 7,800*+02                       | 1,110,+03                  | 5./32.+02    | 5.430.00            | + 38 <u>*</u> *00         | 2.275=+03              |
| /+900++02                       | 1 + 12/ = + 0.5            | 5,862+02     | 5,400==01           | 1+149=+00                 | 2.319=+03              |
| 8.000×+U2                       | , 38 <b>_+</b> 03          | 5,994=*02    | 5,364±=01           | 1.160=+00                 | 2.362=+03              |
| b, 100x+02                      | 1. 149 = 03                | 6,126×+02    | 5.3300 01           | 1 • 1 / 1 <b>» +</b> 0 D  | 2.406**03              |
| <b>0,200=+</b> 02               | 1.157.+03                  | 0,259#+02    | 5.29/==01           | 1.182=100                 | 2.4>0++03              |
| 0.300=+02                       | 1.170=+03                  | 0,394=+02    | 5,204#=01           | 1.193+00                  | 2.494=+03              |
| $9 \cdot 4 0 0 \times 10^{2}$   | 1. 180. + 03               | 0,229=+02    | 5,233=*01           | 1.204=+00                 | 2, 239 = 13            |
| 0,200x+02                       | 1.191.0403                 | 0,066,02     | 5.2020-01           | 1+2   4 = 0 0             | 2,583**03              |
| <b>□</b> • <b>□□□□□□□□□□□□□</b> | • < [ 1 m + [] 3           | 0,000,02     | 5,1/2=01            | 1.2220+00                 | 2.62/=+03              |
|                                 | +2 2m+03                   | 7 9942 + 02  | 5,  43⊯≖ <u>0</u>   |                           | 2.0/2=+03              |
|                                 | 1.2240+00                  |              | 2,1 2⊎♥ } <br>5 -95 |                           | 2.//0#+03              |
|                                 | ± ∠ 3 ∠ ± + [] 3           | 7 367 400    | 5. joup = []        | [+ 257 ± 00]              | 2,70 0 0               |
|                                 | 1 + 24 4 = 00              | 7,000,0702   |                     |                           | 2.0000000              |
| 9.200+02                        | 1 263 + 03                 | 7.649.+02    |                     | 1,288,+00                 | 2.091=+03              |
| 9.300++02                       | 1.273.+03                  | 7.793.+02    | 4 985               | 1,298,100                 | 2.44.44.3              |
| 9.400+02                        | 1.282.+03                  | 7.938.+02    | 4.961               | 1.368+10                  | 2. 986 - 13            |
| 4.500×+02                       | 11202 + 03                 | 8.084.+02    | 4.938.mni           | 1,318-+00                 | 331##03                |
| 9.600-+02                       | 1.502+03                   | 8.231.+02    | 4.915.00            | 1. 328.+00                | 3. u77++03             |
| 9.700+02                        | 1.3(2.+03                  | 8.379.+02    | 4.893.01            | 1.338.+00                 | 3.122=+03              |
| 9.8nn+ 02                       | 1. 322.+ 13                | 8.528 + n2   | 4.07 is= ni         | 1.348.+00                 | 3. 168×+ n.            |
| 9.9nn+n2                        | 1.331.+03                  | 8.677.+02    | 4.05001             | 1.357.+00                 | 3.×13=+n3              |
| ]•000±+03                       | 1.341_+n3                  | 8,828.+02    | 4,829 <b>∍</b> ≢∩i  | <b>.</b> 367 <b>.</b> +nn | 3.259≠+n3              |
| 1.010x+03                       | 1.350.+03                  | 8.98n.+n2    | 4.8n9.mmni          | 1.377 <u>.</u> +nn        | 3.314#+13              |
| 1.020++03                       | 1.360.+03                  | 9.132.0+02   | 4.79Ω∞=∩I           | 1.387±+nn                 | 3.35n×+n3              |
| 1.030+03                        | 1.369.+03                  | 9.285. 12    | 4.770=ni            | 1.396 <sub>10</sub> +nn   | 3.396++13              |
| 1.040=+113                      | 1.378.+03                  | 9,439.+02    | 4,752ו∩i            | 1,406,+00                 | 3.442=+13              |
| 1.050++03                       | 1, 388 + 03                | 9,594=+02    | 4,733=01            | 1.415+00                  | 3.487**03              |



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| <b>UIAMETER</b>                | AFFOCILA                 | RE                                  | DRAG CUEF                               | RELAX TIME                           | ,98 DIST           |
|--------------------------------|--------------------------|-------------------------------------|---|--------------------------------------|--------------------|
| I.000#+00                      | 2,723, <b></b> 02        | 1,793,=05                           | 1,296=+06                               | 2,777,=05                            | 2.223==06          |
| 1.100#+00                      | 3,290,02                 | 2,3830=05                           | 9,/78,+05                               | 3,377,870                            | 3.25 #=06          |
| 1.200**00                      | 3,9 1.702                | 3,090,05                            | 7,559×+05                               | 3,988m+05                            | 4.00   ##06        |
|                                |                          | 0,725m405                           | 5,704=+05                               | 4,0/0,000                            | 6, 332==06         |
|                                |                          | 4 090 m 05                          |   |                                      | 8.510#=06          |
|                                |                          |                                     | 3,904,05                                | 0 + ≤   ⊃p = () ⊃<br>7 - p ≤ 5 - p 5 | 1.121##05          |
|                                | 7 8 18 - 02              | 8 751                               | 0,221⊭≠()2<br>2,691,+55                 | 7,000±000<br>7,972 = 05              | 1.4208902          |
| 1.800++00                      | 8.760                    |                                     | 2.071                                   | 8.933.em5                            | 1.07/#010          |
| 1.900+00                       | 9.755                    | 1.220.04                            | 2.2.0                                   | 9.948. 05                            | 2.478**05          |
| 2.000×+00                      | 1.080                    | I•423∎*n4                           | 1.659.+15                               |                                      | 3.932005           |
| 2.100**00                      | 1.191.01                 | 1.647.=14                           | 1.435.+15                               | 1.214                                | 4.291##05          |
| 2.200=+00                      | 1.3n6n1                  | I.892 <b>.</b> ■14                  | i.25n.+n5                               | 1.33214                              | 5. 166# 15         |
| 2,300++00                      | 1,427,01                 | 2,162.04                            | 1, <u>0</u> 95∎+ <u>1</u> 5             | 1,456, - 04                          | 6.168== 15         |
| 2.400++00                      | 1.554 <u>m</u> =01       | 2,455,=04                           | 9,643.+94                               | 1.584. 04                            | 7.310#* 15         |
| 2,500++00                      | 1,68501                  | 2,775##04                           | 8,538++04                               | 1.719.04                             | 8.003==05          |
| 2.600*+00                      | 1.823.01                 | 3, 120== 04                         | 7,596 <sub>**04</sub>                   | 1.859 <b>.</b> =04                   | 1.006==04          |
| 2.700*+00                      | <b>,</b> 965 <b>∍</b> ≢0 | 3,493,04                            | 6,788,+04                               | $2 \cdot 004 = 04$                   | 1. 70              |
| 2,800*+00                      | 2.13.01                  | 3,89504                             | 6.090=+04                               | 2,154,04                             | 1.352##04          |
| 2+900++00                      | 2,200,01                 | 4,32/04                             | 5,485,+04                               | 2.511=04                             | 1.5550=04          |
| 3.000×+00                      | 2+424#*01                | 4,/89,*04                           | 4, 75/0+84                              | 2,472=04                             | 1.1810-04          |
| 3.100x+00                      | 2,280                    | 2,283,∞=04                          | 4,492±+04                               | 2,039,,*04                           | 2.030==04          |
| 3,200x+00                      |                          | 2+0  <b>0</b> ≠* <b>0</b> 4<br>6 37 |   |                                      | 2.304=04           |
| 3 400 + 00                     | 2,702m*() <br>3 112 - 01 | 6 967                               | 3./3U≞≠04<br>7.412 +04                  | 2 + 7 7 0 + 0 4                      | 2,003#*04          |
| 3.500++00                      | 3. 297                   | 7,599.mn4                           | 3,7120-07                               | 3.362.=04                            | 2.904mm/04         |
| 3.600±+00                      | 3,488. • 11              | 8.268. 7.14                         | 2.877.+14                               | 3.557m=14                            | 3.086#* 14         |
| 3.7n0x+nn                      | 3.68401                  | 8.975. * n4                         | 2.651.+14                               | 3.757. = 04                          | 4. 112#***         |
| 3.800=+00                      | 3,885,=01                | 9,721=04                            | 2.446.+04                               | 3,962,=04                            | 4. 573= 14         |
| 3.900x+00                      | 4, 192, = 01             | 1.051.03                            | 2.265.+ 14                              | 4. 173. 04                           | 5. 173 = 14        |
| 4.000=+00                      | 4.304.01                 | 1,134=03                            | 2.100=+04                               | 4,389 <sub>0</sub> +04               | 5.6 2 = 04         |
| 4.100=+00                      | 4,521,=01                | 1,221##03                           | 1.951=+04                               | 4,610,0=04                           | 6,193==04          |
| 4.200++00                      | 4,744,01                 | 1,312.03                            | 1.815=+04                               | 4,838,=04                            | 6.818=04           |
| 4,300=+00                      | 4,972,=01                | 1,408,=03                           | 1,092#+04                               | 5,070×=04                            | 7.489 <b>**</b> 04 |
| 4.400*+00                      | 5,200,01                 | 1.508.03                            | 1.580+04                                | 5.30804                              | 8.208=04           |
| 4,200=+00                      |                          | •0 3m*03                            | ],4//±+04                               | 5, 252±= 04                          | 8.978=04           |
| 4 7 0 0 0 = + 0 0              |                          | 1.478 - 07                          | ,003±+04<br> 007 + •4                   |                                      | 9.801==04          |
|                                | 5,700 = UI               | i 957 m n 7                         |   |                                      | 1.000000           |
| 4.900**00                      | 6 453 - 01               | 1,797,87 U3<br>2,080, = 03          | ],2]0∌♥[]4                              | 6.580.04                             | 1.1020=03          |
| 9 * * UU# * UU                 | 6.7(8)                   | 2.212.003                           | + =≠#+[4<br>  078⊶+c4                   | 6.851.+04                            | 1+20 #= 03         |
| - • ມມມູ≢ • ມມ<br>ວຸ່ໄກຄ⊭ + ແກ | 6.989                    | 2.347                               | 1 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + | 7.127.+04                            | 1.479mmn3          |
| 5.2nn±+nn                      | -7.265_eni               | 2.488.*13                           | 9,598±+n3                               | 7.4n9. n4                            | 1.399 ma           |
| 2.3nn±+nn                      | 7,547.=ni                | 2,634. n3                           | 9.n6n=+n3                               | 7,696 <b>.</b>                       | 1./25##n3          |
| 5,400++00                      | 7.834 <u>.</u> .01       | 2,785, 03                           | 8,568,+13                               | 7,988 <sub>m</sub> =n4               | 1.858 <b>**</b> n3 |
| 5,500++00                      | 8.120.01                 | 2,943. 03                           | 8.110.+03                               | 8,286=-04                            | 2.000**03          |

| DIAMETER                                      | VELOCITY                 | RE                     | DRAG COEF               | RELAX TIME                     | .98 DIST                                |
|---|--------------------------|------------------------|-------------------------|--------------------------------|---|
| 5 600 100                                     | 8 403 01                 | 1 1 - 6                | 2 695 4 - 2             | 9 60 4                         | <b>1</b> 0                              |
| 5 700+00                                      | 0+429##UI<br>8 796 - 01  | 3,075,∎o7              |                         | 0+290 <u>0</u> *04             | 2, 49, 03                               |
| 5.800++00                                     | 9.034                    | 3.450-303              | /, <u>2078</u> 403      | 0,213,404                      | 2.300**03                               |
| 5.900++00                                     | 9.348                    | 3.632.e03              | 6 575 + e3              | 9.533.=04                      | 2.4/ 10003                              |
| 6.000±+00                                     | 9.667.*01                | 3.819.=03              | 6.253.403               | 9.858.*04                      | 2. 429                                  |
| 0.100+00                                      | 9.991.01                 | 4.013.003              | 5.952.+03               | 1.019-03                       | 3                                       |
| 6.2nn+00                                      | 1.032.+00                | 4.213. 03              | 5.669.+03               | ,0)/≞ 00<br> ,052∍≠03          | 3. 225                                  |
| 6.3nn++nn                                     | 1. n66 <sub>0</sub> + nn | 4.42n=*n3              | 5.405.*03               | i, n87∎≖ n3                    | 3.438×*n3                               |
| 0,400++00                                     | 1.100+00                 | 4,634. 13              | 5, 150, +n3             | 1.121.03                       | 3.06                                    |
| 6,500x+00                                     | 1.134.+00                | 4,854.=03              | 4.9230+03               | 1, 157, - 03                   | 3. 8940 - 13                            |
| 6,600x+U0                                     | 1,169,+00                | 5,081.03               | 4,7030+03               | 1.192=03                       | 4. 13900 03                             |
| 0,700=+00                                     | 1,205,+00                | 5,315=03               | 4,496 <sub>#</sub> +03  | •1,229,=03                     | 4.395==03                               |
| 6.800×+00                                     | 1.241=+00                | 5,557,=03              | 4.302++03               | <b>,</b> 265 <b>,</b> ∎ŋ3      | 4,062=03                                |
| 6,900 <b>*</b> +00                            | 1+278 <sub>#</sub> ±00   | 5,805,-03              | 4,118,+03               | <b> ,</b> 3 <sub>0</sub> 3µ∞03 | 4. 9420 03                              |
| 7+000 <b>++</b> 00                            | 1,315+00                 | 6,061#=03              | 3,945=+83               | 1.341.=03                      | 5,234==03                               |
| /.100=+00                                     | 1,353 <u>+</u> 00        | 6,324 <u>m</u> =03     | 3./81=+03               | 1, 3790=03                     | 5. >39== 03                             |
| /+200=+00                                     | 1.391.+00                | 6,594 <u>p</u> =03     | 3,626=+03               | 1,418,*03                      | 5,856==03                               |
| 7.300×+00                                     | 1,430=+00                | 6,872,03               | 3,480,03                | 1,458,03                       | 6.188##03                               |
| /•400 <b>*</b> +00                            | 1.469.+00                | / 158 = 03             | 3.341.03                | 1.498.=03                      | 6.333**03                               |
| /+200#+00                                     | 00+4404                  | / 452=03               | 3.210.00                | 1,239==03                      | 6.892##03                               |
| / • • 0 0 = + 0 0                             | • 54¥ • + 0 0            | /,/53#*03              | 3.082.00                | <b>,</b> 280 <b>,</b> ,∎03     | /.206#=03                               |
| /•/00×+00                                     | 1,290,+00<br>(,27),+00   | 0,003#¶03<br>8 38 = 87 | 2,90/#*83               | 1.022.03                       | /,050**03                               |
| 7 + P U U = + U U                             |                          | 0,300±03               | 2,0000 03               | 1 7 7 = 7                      | 8•u80**03                               |
|   |                          | 0,/00,03               | 2, / 40                 | •/[/»▼[]3                      | 8.480**03                               |
| 0,000±+00                                     |                          | 7+U40#=U3<br>9 397 =07 | 2.04/#*[]3              |                                | 0.9//##03                               |
|   | 1+/27±+UU                | 9 734                  | 2,0010+03               | 11/74#*US                      | 9.3/0**03                               |
| 8.300++00                                     |                          | 1.009.00               | 2+732=*03               | ,030g ≈ []3<br> ,883,∞=n3      | 7 · 0 · 0 · · · · · · · · · · · · · · · |
| ₩,000x+00                                     | 1.892.+00                |                        | 2,07284.00<br>2,2884.03 | 1,000,000                      | 1830=02                                 |
| 8.5nn+++1                                     | 1,937.+00                | i. n84 <b>.</b> ≂n2    | 2.209.+03               | 1.97503                        | 1.136##02                               |
| 8,6nn+H0                                      | 1.982.+00                | 1.123.=02              | 2.133=+n3               | 2.022.=03                      | 1.190##02                               |
| 6,700x+00                                     | 2+029+00                 | 1.162.02               | 2.061.+03               | 2,069,=03                      | 1.246= 02                               |
| 8,800x+00                                     | 2,075,+00                | 1,203=02               | 1,992=+03               | 2.110=03                       | 1.304=02                                |
| 8,900x+U0                                     | 2,123,+00                | 1,244. 02              | 1,925.+03               | 2,165.03                       | 1.364#=02                               |
| 7+000×+00                                     | 2.170+00                 | 1.286.02               | 1,062.+03               | 2.213.03                       | 1.427#702                               |
| 9+100#+00                                     | 2+219+00                 | 1.329= 02              | 1.02=+03                | 2,263=03                       | 1.491=02                                |
| 7+200×+00                                     | 2,268,+00                | 1.374= 02              | 1,744.03                | 2.312.03                       | 1.557=02                                |
| 7.300×+00                                     | 2.31/=+00                | 1.419=02               | 1.689.+03               | 2,363m - D3                    | 1.626==02                               |
| 7.400x+00                                     | 2.36/#+00                | 1.405.02               | 1,030=+03               | 2.4 4. 4. = 0.3                | 1.09/==02                               |
| 7.200#+00                                     | 2+4//#+00                | 1.712#*02              | 1.202.+03               | 2,405,03                       | 1.//0#=02                               |
|   | 2,400,+00                | I,200∎¶02              | , 230 <b>p</b> € []3    | 2,21/0*03                      | 1.046. 02                               |
| 7∎/UUx+UU<br>9 800 - 00                       |                          | 1,0090-02              | 1.4070 03               | 2,2/0=03                       | 1.924#*02                               |
| 7,0 <u>00x+00</u>                             | 2, 2/20+00               |                        | 1.4920+93               | 2.023=03                       | 2.004**02                               |
| <pre> f # F U U # F U U f. n n n + n + </pre> | 2.677.+00                | 1+11="UZ               | 1. 360-+03              | 2, 730, = 03                   | 2. 10/2 02                              |
| /•∪∪∪#⊤Ul<br>1.100⊶el                         | 3. 237. + 00             | 2.344.402              | 1.0000703               | 2.301-03                       | 2+1/2**02                               |
| ••I00#±01                                     | 0,20,94.00               | 2077B-UZ               | 1+8<70703               | 24 20 18-03                    | 3.1//##02                               |

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| DIAMETER           | VELOCITY               | RE                           | DRAG COEF  | RELAX TIME                       | .90 DIST       |
|--------------------|------------------------|------------------------------|--|----------------------------------|----------------|
| 1.200*+01          | 3,848 <sub>0</sub> +00 | 3,040,02                     | 7,905++02  | 3,924=+03                        | 4.496**02      |
| 1.300*+81          | 4,510+00               | 3,861.02                     | 6.233 + n2                                       | 4.599. = 13                      | 6.187×12       |
| 1,400++01          | 5,224,+00              | 4,815,02                     | 5.005+02   | 5,327,03                         | 8.316##02      |
| 1.500×+01          | 5,987,+00              | 5,914=02                     | 4.082.+02  | 6.1n6.=n3                        | 1.095#=01      |
| 1.600x+01          | 6,8n0 <b>,</b> *nn     | 7,164m=02                    | 3.375.+12  | 6,935, 13                        | 1.417=01       |
| 1.700+11           | 7,662,+DD              | 8,577,02                     | 2.825.+02  | 7.813. = 13                      | 1.805=01       |
| 1.000.+01          | 8,571,+00              | 1.016.01                     | 2.39 + 12  | 8.740.03                         | 2.267.001      |
| 1.900=+01          | 9,527,+00              | 1.192.01                     | 2.043.+02  | 9,715, +n3                       | 2.013.001      |
| 2.000++01          | 1+053+01               | ,386 <u>"</u> "0             | 1,761 <b>u+</b> n2                               | 1.074.02                         | 3.451.0011     |
| 2.100=+11          | 1,157,+01              | 1,600,001                    | 1,530++02  | 1,180,0702                       | 4.19311        |
| 2.200**01          | 1,266 p+ DI            | 1,834m=n1                    | 1.339 »+n2                                       | 1,291,** 02                      | 5. 48          |
| 2.500x+01          | 1.379 m+01             | 2.089.01                     | 1.180.+12  | 1.4n6m=n2                        | 6+u28#*01      |
| 2.400+01           | 1,496 <sub>p</sub> +11 | 2.364.•ni                    | 1.046.+02  | 1.526                            | 7. 144# 01     |
| 2,500=+01          | 1.617.+01              | 2,662.01                     | 9.332m+ni  | 1,64912                          | 8.407#*01      |
| 2.600*+01          | 1+741=+01              | 2,981.01                     | 8.367.+01  | 1,776= 02                        | 9,8n9##ni      |
| 2.700++01          | +869 <b>#</b> +0       | 3,324,01                     | 7.540+ni   | 1,916 12                         | (.i3n#+nn      |
| 2.800**01          | 2,001=01               | 3,689,01                     | 6,827+01   | 2.040=02                         | 1,29 n# + n n  |
| 2.900=+01          | 2. 35.+01              | 4.077==01                    | 6,208,+01  | 2, 177, = 02                     | 1.461**00      |
| 3.000++01          | 2,273=+01              | 4,489.01                     | 5,669=+01  | 2,318. 02                        | 1.045=+00      |
| 3,100#+01          | 2,413,+01              | 4,925,01                     | 5,197,+01  | 2,46   02                        | 1.042=+00      |
| 3.200*+01          | 2:556:+0               | 5,385                        | 4,782**01  | 2,006==02                        | 2. 15 1** 00   |
| 3.300x+01          | 2,70 <u>1</u> m+01     | 5,869,=01                    | 4.415.+01  | 2,754,02                         | 2.274=+00      |
| 5.400±+01          | 2.847#+01              | 6,375 <u>,</u> =01           | 4.095.+01  | 2,904,02                         | 2.509++00      |
| 3.500±+01          | 2,99/0+01              | 6,907×=01                    | 3,805+01   | 3,056."02                        | 2,/59#+00      |
| 3,600±+01          | 3, 149 + 01            | / <b>,</b> 464 <b>∞</b> ■ 01 | 3,546,+01  | 3.211#*02                        | 3. u22#+00     |
| 3./00x+01          | 3, 302+01              | 8,046=01                     | 3,313+01   | 3, 368. 7 02                     | 3. soo⊳+ oo    |
| 3,800±+01          | 3,458,+01              | 8,652==01                    | 3,104+01   | 3, 226= 7 02                     | 3: 29   # + 00 |
| 3.900x+81          | 3.017.+01              | 9,283∍⁼01                    | 2.94.4.  | 3,086p•02                        | 3.897=+00      |
| 4.000**01          | 3,774,+01              | 9,939,01                     | 2./43=*01  | 3,848, = 02                      | 4.217=+00      |
| 4.100*+01          | 3,9340+01              | 1.062.00                     | 2,28/#*01  | 4,012==02                        | 4. 252*+00     |
| 4.200*+01          | 4,090,+01              | • 33 <b>±</b> +00            | 2,442,+01  | 4.177.02                         | 4.401=+00      |
| 4.308=+01          | 4.257.401              | 1.200=00                     | 2.312.401  | 4,343p=02                        | 5.265#+00      |
| 4•400×+01          | 4+42*#*01              | 1.2820 00                    | 2, 192, ≠ []                                     | 4,212,02                         | 5.045++00      |
| 4,200x+01          | 4 • 29   » + []        |                              | 2.082=*01  | 4,082                            | 0. 039 ** 00   |
| 4,000x+01          | 4 . / 27 + []          | 1.742.700                    | [• <b>703</b> ₽●[]                               | 4,073,02                         | 0.448*+00      |
| ***********        | 4,730,0+01             | 1.220.00                     | 1.002#401  | 2+02/**05                        | 6.0/3**00      |
| **••••••           | 2 • 1 0 4 × 1 1        | 1,013=*00                    | <b>₽</b> ₽ <u>0</u> <b>₽</b> ₽ <b>₽</b> <u>0</u> | 2,203=02                         | 1.312=+00      |
| H • Y [] [] + [] [ |                        | 1+/02**00                    |  | 2,201,0702                       | /./08**00      |
|                    |                        |                              |  |                                  | 8.2380+00      |
|                    |                        | 1.401 ±05                    | 1,27Ux*01  | 2 € 47 = 02                      | 0./24#+00      |
|                    |                        |                              |  |                                  | Y.225=+00      |
|                    |                        | 2 200 too                    | 4 30 m + []  <br>  277 4 - 1                     |                                  | y./42++00      |
|                    | $0, 100 \pm 0$         |                              |  |                                  | 1.059=+01      |
|                    | ひょい/アルギリー<br>ム ドブイ ・ヘー |                              | 1,02U#T01  |                                  | 1.0020+01      |
|                    |                        | 6+769#7UU<br>2 541 - 554     | 1.200  | 0,1.(J3m™ (J∠)<br>6 0,10 mm (J∠) | 1.139#+DI      |
| ~•/UU≠+{           | ○★//!#♥U!              | <,74[b7()                    | .< * <b>*</b> *[]                                | 0,704#02                         | + Y7#+0        |

| DIAMETER                       | VELOCITY               | RE                       | DRAG COEF             | RELAX TIME                | ,98 DIST                       |
|--------------------------------|------------------------|--------------------------|-----------------------|---------------------------|--------------------------------|
| ⊳,8լ(±+Ս                       | 6,971 <u>m</u> +01     | 2,662#+00                | ,  6ó <b>±+</b> 0     | 7,108,-02                 | 1,256#+01                      |
| 2.900=+01                      | 7,173,+01              | 2,787=+00                | 1.120=+01             | 7,315,=02                 | 1.317#+01                      |
| 6.000x+01                      | 7.378.+01              | 2.915+00                 | 1.070×+01             | 7,524,02                  | 1.380#+01                      |
| 6,100+01                       | 7,583,+01              | 5,046,+00                | 1,036+01              | 7,733==02                 | [,444#+ ] [                    |
| 6.200±+81                      | 7.789.+01              | 3,180+00                 | 9,979.+00             | 7.943,=02                 | 1.510**01                      |
| 6,300x+01                      | 7,994,+01              | 3,316,+00                | 9,628.+00             | 8,152,02                  | 1. 278++01                     |
| 6,400=+01                      | 8,195,+01              | 3,454.+00                | 9,300,+00             | 8,357,=02                 | 1.047##01                      |
| 6,500#+01                      | 8,391,+01              | 3,591=+00                | 9,015 <b>**</b> 00    | 8,557=02                  | 1.117=+01                      |
| 6,600±+01                      | 8,579,+01              | 3,728,+00                | 8,755×00              | 8,748,•02                 | <b>. /89#</b> #0               |
| 0,700#+UI                      | 8,754,+01              | 3,862=+00                | 8, 530 + 00           | 8,927,=02                 | 1.063#+01                      |
| 0,800x+01                      | 8+913+01               | 3,991+00                 | 8,358 <b>∞</b> +∩n    | 9.0900=02                 | 1. 938=+01                     |
| 0.900×+01                      | 9,062,+01              | 4,117,+00                | 8,200=+00             | 9,24 ==02                 | 2.015=+01                      |
| 7+000 <b>*</b> +01             | 9,240,+01              | 4,262=+00                | 7,996.+00             | 9,4290-02                 | 2. 094=+01                     |
| ∕•luo⊭+nl                      | $9,431_{p}+01$         | 4,409=+00                | 7,795×+00             | 9,618,*02                 | 2. 74=+01                      |
| /.200×+01                      | 9,617,+01              | 4,559,+00                | 7.603.+00             | 9,8 <sub>0</sub> 7,•02    | 2,255×+01                      |
| 7.300#+01                      | 9,8 <sub>0</sub> 3,+01 | 4,712=+00                | 7.418.+00             | 9,997, •02                | 2,339=+01                      |
| 7,400±+01                      | 9,989ø+0i              | 4,867,+00                | 7,242,+00             | 1+019 <b>=</b> 01         | 2.423=+01                      |
| 7,500x+01                      | 1,0  <sup>8</sup> ,+02 | 5,026 <b>**</b> 00       | 7,073 <b>+110</b>     | ₊038₽≖0                   | 2.210**01                      |
| 7.600#+01                      | 1.036 + 02             | <b>5.186.+00</b>         | 6.910+00              | 1.057.01                  | 2,398**01                      |
| 7.700±+01                      | ,055 <b>_+</b> 02      | 5,350**00                | 6.755 <u>+</u> 00     | , <u>0</u> 76 <b>,</b> •0 | 2.087#+0                       |
| 7,800 <b>±</b> +01             | 1.074.+02              | 5,516#+00                | 6.00**00              | •095 <b>=</b> •0          | 2.178+01                       |
| 7,900±+01                      | 1+095+02               | 5,684,+00                | 6,461,+00             | I+114=01                  | 2.871=+01                      |
| 8+000 <b>*</b> +01             | 1+1+2++02              | 5,856,+00                | 6.322=+00             | [•   34 <b>∞</b> ≖ 0      | 2,965#+01                      |
| ρ•100¤+01                      | 1.131.+02              | <b>¢,</b> 030∞*00        | 6.189.400             | 1.153.01                  | 3. 16 [ # + 0 ]                |
| 8.200=+01                      | 1.149=+02              | 6,206,+00                | 6.061=+00             | 1,172,01                  | 3,158=+01                      |
| 8,300×+01                      | 1.168.+02              | 6,386=+00                | 5.53/=+00             | 1.191.01                  | 3.257#+01                      |
| 0.400±+01                      | 1.18/.+02              | 0,268**00                | 5.010=+00             | 10 * 11 5 1               | 3,357#+01                      |
| 0,200=+01                      | 1.200 = + 02           | 0,/52,+00                | 5,/03=+00             | [+ <3 () <b>→</b> () [    | 3,459=+01                      |
| 0.000±+01                      | 1,225.+02              | 0,739,00                 | 5,793=+00             | + ≤2 () <b>=</b> = (      | 3.302#+81                      |
| <b>♀</b> ∎ <b>/ 00 ≠</b> + 0 I | 1,244+02               | 1.129.+00                | 5,480.*00             | 1+207=01                  | 3,007#+01                      |
| <b>○,○))≠</b> +()              | 1,204,02               | 7.522+00                 | 5,0°∠=*00             | • ≤0 ¥ p ₹ []             | 3,//4=+01                      |
|                                | 1,200,0+02             | 7,715,400                | 5,202=7(0             | 1 1 2 () 0 p 7 () 1       | 3,882#*[]                      |
| 7 • UUU# • UI                  |                        | 7 9 5 + 00               | 5.1000+00             | 1,347 = 01                | 3,992##D1                      |
| 7 • 100×*01<br>9.200×+01       | 1. 340. +02            | /.** ;2**UU<br>8.119.+00 | 5.0708400<br>5.02×+00 | (+ 367                    | ◄• [[] 3# # [] ] 4 3/5 m + 0 [ |
|                                |                        | 8.324.+00                | 2.0042400             | 1.386                     | 4. 400 - 01                    |
| 9.400++01                      | 1.379.+02              | 8.533.+00                | 4 830 - + 00          | [;000p∞0]<br> .400m≖0]    | 4.445                          |
| 9.500++01                      | 1.398.+02              | 8.744.+00                |                       |                           | 4. 520+01                      |
| 9.600 m + 01                   | 1.417.+02              | 8.957.+00                | 4 669 + 00            | <sup>3</sup> 1.445. = 01  | 4.58(**0)                      |
| 9.700++ul                      | 1.436-+02              | 9.174.+00                | 4.592-+00             | 465.=01                   | 4.001=+01                      |
| 9.000+01                       | 1.456.+02              | 9.393.+00                | 4.517m+nn             | 1.484.=n1                 | 4. 4220+01                     |
| 9,900±+01                      | 1.475.+n2              | 9.614±+nn                | 4.445±+nn             | 1.5n4.eni                 | 5                              |
|                                | 1.494.+02              | 9.838.+0n                | 4.374m+00             | 1.524• ni                 | 5. (7.0.0+0)                   |
| 1.100++62                      | 1.688-+02              | 1.222-+01                | 3.771.400             | 1.72imeni                 | 6.497±±1                       |
| 1.200#+02                      | 1.882.+02              | 1.487.+01                | 3.3n9≝♦nn             | 1.919=•n1                 | 7.967.01                       |
| 1. 3nnx+n2                     | 2. 176.+12             | 1.777.+01                | 2.945±+nn             | 2.117. PDI                | 9.576+1                        |
|                                |                        |                          | 20 00                 |                           | 01                             |

| DIAMETER                  | VELOCITY                              | RE                                    | DRAG COEF           | RELAX TIME                                    | ,90 DIST                   |
|---------------------------|---------------------------------------|---------------------------------------|---------------------|---|----------------------------|
| 1.400=+02                 | 2,270×+02                             | 2.093.+01                             | 2,053,+00           | 2.3.5.=01                                     | 1,132#+02                  |
| 1.500=+02                 | 2,463,+02                             | 2,433,+01                             | 2.414.+00           | 2,212=01                                      | 1.319#+02                  |
| 1.600±+02                 | 2,656.+02                             | 2,798,+01                             | 2,215=+00           | 2,708,=01                                     | 1.219=+02                  |
| 1 + / 00 + + 02           | 2,84/++02                             | 3.187.401                             | 2,048,+00           | 2,904,01                                      | 1./30#+02                  |
| <b>1,0</b> 00 <b>≠</b> 02 | 3.030.00                              |                                       | 1,702=00            | 3,098,01                                      | 1.9538+02                  |
| 1.700x+02                 | 3,22/**02                             |                                       | 1,/0≤n+00           | 3,4910701                                     | 2.187#+02                  |
|                           | 3,412,402                             |                                       |                     | 3,702000                                      | 2.432#+02                  |
| 2 200.402                 | 3 786 + 52                            | 5.484.+01                             | 1,202,400           | 3 860 -01                                     | 2.00/#*(2                  |
| 2.300++02                 | 3.969.+02                             | 6.011                                 | 426-***             |   | 3 27 -+ 02                 |
| 2.400.00                  | 4,151,402                             | 6.56n+ni                              | 1,360 mm nn         | 4.233   | 3.3100+02                  |
| 2.500++02                 | 4.331.+02                             | 7.129.+01                             | 1.302++00           | 4.4.7   | 3. 803#+02                 |
| 2.600+02                  | 4.510.+02                             | 7.720++01                             | 1.249.+00           | 4.599   | 4.1040+02                  |
| 2.700++02                 | 4.687.+12                             | 8.332.+ni                             | 1.200+00            | 4.7791  | 4.4130+02                  |
| 2.800++02                 | 4.862.+02                             | 8,964,+11                             | 1.157.+00           | 4.958 11                                      | 4./30*+02                  |
| 2,900++02                 | 5. n36#+ n2                           | 9,616=*01                             | 1.117±+nn           | 5.135. 11                                     | 5. 154++ 12                |
| 3.000++02                 | 5,208,+02                             | 1.029.+02                             | 1,080×+00           | 5,3110-01                                     | 5.386=+ 02                 |
| 3,100++02                 | 5,379=+02                             | 1,098,+02                             | 1,046=+00           | 5.485.01                                      | 5. /25=+02                 |
| 3.200x+02                 | 5,548 <sub>0</sub> +02                | 1.169.+02                             | 1.015++00           | 5,658, = 0                                    | 6. 171=+02                 |
| 3.300x+02                 | 5,710,+02                             | 1,242,+02                             | 9,864. BI           | 5,829,01                                      | 6.423=+02                  |
| 3,400=+02                 | 5,882+02                              | 1.317#+02                             | 9,597.801           | 5,998.01                                      | 6./820+02                  |
| 3,200++02                 | 6.04/m+02                             | 1,394=+02                             | 9,349=01            | 6, 166, 01                                    | 7.147=+02                  |
| 5,600++02                 | 6.210=+02                             | 1.472.+02                             | 9,11/01             | 6,332p=01                                     | 7.518=+02                  |
| 3,700=+02                 | 6,3/1±+02                             | 1,252,02                              | 8,701==01           | 6,49/p=01                                     | 7.094=+02                  |
| 3,800x+02                 | 0, 532 + 02                           | 1,034,02                              | 8,090 <u>p</u> =0   |   | 8.276=+02                  |
|                           | 0,070±+02                             |                                       | 8,202000            | .0.020#*()]<br>6.98%.=01                      | 0,003#+[]2                 |
|                           |                                       | 1.891.+02                             | 8.1625m01           | 7.142   | 9. U22=+ U2<br>9. 453++ 02 |
| 4.200++02                 | 7.158.+02                             | 1.980.+02                             | 8.004.=01           | 7. 3no - 1                                    | 9.455#+02                  |
| 4.300++02                 | 7.312.+02                             | 2.070++02                             | 7.855mmni           | 7.456. ni                                     | 1. 0260+03                 |
| 4.400 + 62                | 7.464m+n2                             | 2.162.*02                             | 7.714m=nt           | 7.011.01                                      | 1. 167**13                 |
| 4,500++02                 | 7.014.+02                             | 2,256.+02                             | 7,580,001           | 7,765,00                                      | 1.109=+03                  |
| 4,600++02                 | 7.763+02                              | 2,352+02                              | 7,453 01            | 7,9 7 <u>0</u> =0                             | 1.1510+03                  |
| 4.700=+02                 | 7.9110+02                             | 2.448.+02                             | 7,333 <b>.</b> • 01 | 8,068#"D                                      | 1.193=+03                  |
| 4,800*+02                 | 8,058,+02                             | 2,547=+02                             | 7.2190701           | 8,217.01                                      | 1.2360+03                  |
| 4.900=+02                 | 8,20 <sup>4</sup> ,+02                | 2,647=+02                             | 7.110# 01           | 8,366=0                                       | , ∠79∞+ <u>n</u> 3         |
| 2+000#+02                 | 8,348,+02                             | 2,748,+02                             | 7,000,00            | 8,213=01                                      | 1.230+03                   |
| 2.100#+02                 | 8.491.+02                             | 2,852,+02                             | 6,908,01            | 8,05901                                       | 1.367#+03                  |
| 2.200=+02                 | 8,0330+02                             | 2.750+02                              | 6,013=01            | 8.004   | 1.411#+03                  |
| 2•300¤+62                 | 0,//4+02                              | 0,0020*02                             | 0,/20#*01           | 0,74/2701                                     | 1,475#+ 03                 |
|                           | 0,7 0,0 + 02                          | U   0 Y # 7 []2<br>3 278 + n 0        | 0,03/##[]<br>4 555  | <b>7 + U7 () ⊭ 7 ()  </b><br>O - 2 <b>2</b> + |                            |
|                           | 7, [74×7]2<br>9, 189 × 63             | J. 388+n2                             | 6 476 0 ·           | 7,≤3,8701                                     | 1.2404403                  |
| 2.000±+02                 | 9.326.+n2                             | 3.5nn+n2                              | 6.4nl               | 9.5 inut ni                                   | 1.0370402                  |
| 5.8nn-+42                 | 9.461.+02                             | J.6 3_≠n2                             | 6.328×#11           | 9.648.eni                                     | 1+007#+03                  |
| 5.9n0×+02                 | 9.595.+02                             | 3.728=+n2                             | 6.259 mm            | 9.784 ni                                      | 1./29 m + n K              |
|                           | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                     |   |                            |

| DIAMETER   | VELOCITY   | RE                                   | DRAG COEF              | RELAX TIME             | ,90 DIST                |
|--|--|--------------------------------------|------------------------|------------------------|-------------------------|
| 6 6 6 6 4 4 4  | 0 708 + 04                                       | 3 843-+02                            | 6 192-501              | 9.920. 01              | 1. 1760+03              |
| $0.000 \pm 02$   | 9:/20:=+ U2                                      | 3 940-+02                            | 6 127                  | 1.005**00              | 1.823#+13               |
| $\begin{array}{c} 0 \\ \bullet \\$ | 9,00Us∓U2  | 4 070 + 02                           |                        | 1.019.+00              | 1.87+ 03                |
| 0.200×+02  | 9,9910=02  | 4 100                                | 6 000 mm 01            | 1.032.+00              | 1. 9170+03              |
| 0,300x+02  | 1.0120400  | 4 320+02                             | 5 949 11               | 1. 045.+00             | y65++03                 |
|  | 1 0 2 8 + 0 3                                    | 4.442.+02                            | 5 894 01               | 1. n58. + nn           | 2.1130+03               |
| 0,000+02   |  | 4 565                                | 5 841                  | 1.071.+00              | 2.161=+13               |
| 0,000#+02  | • U <sup>2</sup> U <sup>3</sup> + 0 <sup>3</sup> | 4.690.+02                            | 5.789                  | 1.084*00               | 2.109+03                |
|  |  | 4.8.6.+                              | 5.740                  | 1,097,+00              | 2. 57 + 03              |
|  | 1:07-3-00  | 4.943.+02                            | 5.692. ni              | I. IIn. * 00           | 2.206++03               |
| U. 200 + 02  |  | 5. 172.+12                           | 5.040                  | 1.122.+00              | 2.255*+03               |
| 7 100 + 02   |  | 5.2n2.+02                            | 5.0nl.•ni              | 1.135.+00              | 2.304=03                |
| 7 200 +02  | 1,125.+03  | 5.333.+02                            | 5,558 ni               | 1.147.+00              | 2.353#+03               |
| / 300++02  | 1.137.+03  | 5.465.+02                            | 5,516,01               | 1,159,+00              | 2.403**03               |
| 7.0000+02  | 1.149 + 03                                       | 5.598.+02                            | 5.475. 11              | 1,172=+00              | 2.452#+03               |
| / 500x+02  | 1.161.+03  | 5.732.+02                            | 5.4301                 | 1.184.+00              | 2.702*+03               |
| / 600++02  | 1,173,+03  | 5.868.+12                            | 5.398 . • NI           | 1.196.+00              | 2. 252 + 03             |
| 1.700+02   | 1.184.+03  | 6.005#+02                            | 5.36.1.0.01            | 1.208.+00              | 2.002#+03               |
| 7.800  | 1.196.+13  | 6.142.+12                            | 5.326=01               | 1.220.+00              | 2.052=+03               |
| /.900.+02  | 1.207.+03  | 6,281,+12                            | 5.291=01               | 1,231,+00              | 2./03=+03               |
| 8.000 <b>.</b> +82   | 1.219.+03  | 6.421.*02                            | 5.258.01               | 1,243,+00              | 2./53⊨+83               |
| 8.100x+62  | 1.230.+03  | 6,562.+02                            | 5.225=01               | 1.255.+00              | 2.004*+03               |
| $b_{200++02}$  | 1.242.+03  | 6,715.+02                            | 5.193= 01              | ,266_+00               | 2.054# <b>*03</b>       |
| 0.300±+02  | 1.253.+03  | 6,848,+02                            | 5.163=01               | •278 <b>∍</b> +∩0      | 2·Y05#+03               |
| 5.400x+62  | 1.264.+03  | 6,992.+02                            | 5.133=01               | 1.289 <b>±</b> 00      | 2.456*+03               |
| b.bnnx+02  | 1.275 + n3                                       | 7,138,+02                            | 5.104.01               | 1,3 <sub>00</sub> ,*00 | 3. u07»+03              |
| 6,600x+02  | 1,280 + 03                                       | 7,284.+02                            | 5,0 <sup>7</sup> 6∎€01 | 1,312=+00              | 3. <sub>11</sub> 59=+03 |
| 8.700x+02  | 1.297.+03  | 7,432.+02                            | 5, <u>0</u> 40,•01     | 1.323.+00              | 3.110#+03               |
| 0.0nn+02   | 1.3n8 + 03                                       | 7,58 <u>0</u> *02                    | 5,0220-01              | 1.334 .+ 00            | 3. 16 1 . + 03          |
| 8,900=+02  | 1.319 + 03                                       | 7,730++02                            | 4,996=01               | 1,345,+00              | 3.213=+03               |
| 9.000=+02  | 1.330.+03  | 7,880,+02                            | 4.971.01               | 1.356.+00              | 3.205#+03               |
| 7.100=+02  | 1.340.+03  | 8,032=+02                            | 4.940.01               | 1.30/#+00              | 3.310#*[]3              |
| 9.200=+02  | 1.351.+03  | 8,184=+02                            | 4.922=01               | [, 3/8, + 00           | 3.300=+U3<br>7.42em+03  |
| 9.300x+02  | 1.362a+03  | 8,338=+02                            | 4,0990-01              |                        | 3,420=+03               |
| 400x + 02  | 1,372=+03  | 8,493=+02                            | 4.0/0.00               | 1,399m+00              | 3.4/20+03               |
| 9,500×+02  | 1,382=+03  | 8,048,+02                            | 4.0740 01              |                        | 3 5765+03               |
| 9,600±+02  | 1.393+03   | 8,804,+02                            | 4.033=*01              |                        | 3.0280+03               |
| 9,700±+02  | 1,403±+03  | 8,962=+02                            | 4,01∠∞▼[]]             |                        | 3.0810+03               |
| 9,000x+02  | 1.413=+03  | A* 150*+05                           | 4,/7(2*())             | 10 TT   0 TU           | 3 /32min2               |
| 5,900x+02  | 1.423.+03  | A. 580*+05                           |                        | 1, 7/4×7UU             | 3. /86=+ n3             |
| 1.000=+13  | 1.434 + 03                                       | <b>7</b> , <b>4</b> 0, <b>7</b> , 02 | , 4, / 7 6 p []        | 11.7920700             | 3. +38=+ 13             |
| I∎0,1,0±+0,3.  | 1.444.+03  | Y. 001#*02                           | 4./30=-01              | 11 7/20 10             | 3. x0 : = ± n X         |
| 1.020+03   | 1.454 + 03                                       | Y, /65#+02                           | 4.//4                  | 1,492-+00              | 3. 443. + 0.4           |
| 1.050+15   | 1.464=+03  | A+ A50 + 05                          | 4.0308-01              | 1.503.+00              | U)                      |
| 1.040=+03  | 1,473=+03  | 1,009=+03                            | 4,0/00=01              | 1.5.0.+00              | 4 40m ± m 3             |
| 1,050±+03  | ,483m+03   | 1.0220+03                            | 4.00   # 8             | 00-4214                | 0 0.0                   |

| DIAMETER                        | VELOCITY                 | RE               | DRAG COEF                                | RELAX TIME                | ,90 DIST               |
|---------------------------------|--------------------------|------------------|--|---------------------------|------------------------|
| 1,000±+00                       | 3,026=02                 | 1,992            | 1.160 <b>.</b> +06                       | 3,086×=05                 | 2./75#=06              |
| l+100#+00                       | 5.050 = 02               | 2.048=05         | 8,800,+05                                | 3,728,05                  | 4. 158 - 06            |
| 1.200=+00                       | 4,347.02                 | 3,434,#05        | 6,803=+05                                | 4,43   p=05               | 5,/43#=06              |
| 1.300=+00                       | 2+094#*02                | 4,30   # 05      | 5,30/#+05                                | 5+195+=05                 | 7.904=06               |
|                                 |                          | 2+742+7U2        | 4,007#*05                                | 0,020,000                 | 1.002#=05              |
| 1+200#400                       | 0;//ip*[]2<br>7 609 - 02 | 0,000m+U2        | 3.7  #♥[]5<br>0 809 ±05                  | 0,7[]⊃#●[]⊃<br>7 851 = 25 | 1.399#* 05             |
| 1,000 <b>⊭</b> ≠00              | 8,686                    | 9.723.05         | 2,097,040                                | 8 858                     | 1.010##02              |
| 1.8nn++nn                       | 9.733                    | 1.154.404        | 2.043.405                                | 9,925, 05                 | 2,3058*05              |
| 1.900+00                        | 1.084.=01                | 1.356.014        | 1.740++05                                | 1.105                     | 3.993##05              |
| 2.000**00                       | 1.201.01                 | 1.581.m=n4       | 1.494 ± n5                               | 1.224. 14                 | 4.4090005              |
| 2.100=+00                       | 1.323                    | 1.83n.=n4        | 1.292=±n5                                | 1.349 = n4                | 5.15647.05             |
| 2.200*+00                       | 1,45201                  | 2.103.014        | 1.125.*05                                | 1.48n n4                  | 6.449==05              |
| 2,300+00                        | 1.58601                  | 2.402.04         | 9.852×+14                                | 1.617.=n4                 | 7./00#*05              |
| 2.400++00                       | 1.72601                  | 2.728.=04        | 8,678p+14                                | ,76 <sub>1#</sub> ≖14     | 9.125#= 15             |
| 2.500*+00                       | .873 <b>.</b> =0         | 3,083,04         | 7,684,+14                                | 1.910.04                  | 1.074=04               |
| 2.600*+00                       | 2.025=01                 | 3,467==04        | 6,837×+04                                | 2,065 <u>n</u> =04        | 1 · 256# • 04          |
| 2.700=+00                       | 2.183.01                 | 3,882=*04        | 6,109++04                                | 2,226, 04                 | 1.460=04               |
| 2,500*+00                       | 2+34/##01                | 4,328,04         | 5,48 <u>1</u> +04                        | 2.394 <u>.</u> 04         | 1.088.04               |
| 2+700*+00                       | 2,5   8, - 0             | 4,808,-04        | 4,93/0+04                                | 2, 567 04                 | 1.942=04               |
| S•000±+00                       | 2.09401                  | 2,321=04         | 4,402,+04                                | 2+/4/#=04                 | 2,223=04               |
| S +   00 + 00                   | 2.0/0.00                 |                  | 4,040,+04                                | 2, 733, - 04              | 2, 534=04              |
| V•Z00¥±00<br>3 300 ±00          | 3 ()58 - 0 /             | 7 079 = 04       | 3,000,00 04                              | 3 300 = 04                | 2.0/0=04               |
| 3 400 + 00                      | 3 458 - 81               | 7.741.=04        | 3,35/9+04                                | 3 526 - 04                | 3.25                   |
| 3.5nn#+0n                       | 3.663                    | 8.443. = 04      | 2.817.+04                                | 3,736 - 04                | 3,003##[]4<br>4.12##04 |
| 3.6nnx+0n                       | 3.875.+01                | 9.186.= 04       | 2.589 + n4                               | 3.952 04                  | 4.00.0004              |
| 3,700x+00                       | 4.093.01                 | 9,972=04         | 2.380.+14                                | 4.174. 14                 | 5.133.704              |
| 3,800x+00                       | 4.317.01                 | 1.080.03         | 2.203=+04                                | 4.402.04                  | 5./09==04              |
| 3,900x+00                       | 4,540,=01                | I. 168. 303      | 2.039.+04                                | 4,636m=04                 | 6.332= 14              |
| 4.000*+00                       | 4,782=01                 | 1.259. 03        | 1,8900+04                                | 4,876 <u>,</u> •04        | 7. j05##04             |
| 4 • 100 = + 00                  | 5.023.0-01               | ,356 <b>=</b> 03 | 1,/56 <b>»+</b> 04                       | 5.123.04                  | 7.131=04               |
| 4.200=+00                       | 5,271.01                 | 1.458. 03        | 1.034=+04                                | 5.375 - 04                | 8.7110004              |
| 4.300=+00                       | 5+524 m = 0              | 1.204. 03        | 1.523.+04                                | ე,იკკ <sub>თ</sub> ≖ე4    | 9.349##14              |
| 4.400=+00                       | 2 + 70 + 0 = 0           | 1.0/0.03         | 1.422.404                                | <b>5.098 m</b> 14         | 1.025# 03              |
| 4 6 0 5 4 0 0                   | 0 • [] 4 7 <b>m</b> ? [] |                  |  |                           | 1.121=03               |
| 4 7 10 + 00                     |                          |                  | ,242# <b>+</b> 04<br>, 168 + ∞4          |                           | 1.224=03               |
| 7•/UU⊭+UU<br>4.8n0 <u>+</u> +00 |                          | 2.175.#03        | . 00 <u>µ</u> +  4<br>⊧ 095 <u>µ</u> +04 |                           | 1.3330003              |
| 4.9 <u>00</u> +00               | 7.169.001                | 2.313.403        | 1.031 <u>0</u> +04                       | 7.511.=04                 |                        |
| ン・CON#+00                       | 7.464 <sub>mm</sub> ni   | 2.458±=03        | 9,7a5s+n3                                | 7.612men4                 | 1. / n6. m = n3        |
| >.100±+00                       | 7.765.01                 | 2.608.=03        | 9.148.+13                                | 7.919 04                  | 1.847#en3              |
| 5.200±+00                       | 8.n72.eni                | 2.764.=03        | 8.632 <b>.</b> +n3                       | 8,232, 14                 | 1.996##13              |
| 5,300x+10                       | 8,385,01                 | 2,926, = 03      | 8,154#+03                                | 8,55 - 04                 | 2.153                  |
| 2,400x+00                       | 8,764,=01                | 3,095,03         | 7.///.*13                                | 8.876 04                  | 2.320=03               |
| 5.500x+00                       | 9.028.01                 | 3.27 n = n3      | 7.3nn.+n3                                | 9.207 04                  | 2.496==03              |



| PIAMETER                              | VELOCITY               | RE                 | DRAG CUEF                                       | RELAX TIME             | ,98 DIST                |
|---------------------------------------|------------------------|--------------------|---|------------------------|-------------------------|
| 5.600x+00                             | 9,359=01               | 3.451=03           | 6.917 <b>=</b> +03                              | 9,544=04               | 2.082**03               |
| 2./00x+00                             | 9,695,=01              | 3,639 <b>n</b> =03 | 6,561=+03                                       | 9,087 <u>e</u> =04     | 2.878⊭⊕3                |
| 2.800#+00                             | 1:004=+00              | 3,834,∎⊄05         | 6,229=+03                                       | 1,024 <b>,=</b> 03     | 3. <sub>0</sub> 85¤= 03 |
| 5.900x+00                             | 1.039=+00              | 4,035,03           | 5.910=+13                                       | 1.059.03               | 3.303**03               |
| 0.00x + 00                            | 1+074++00              | 4,243,0=03         | 5.020=+03                                       | د) = «۲۷] • (          | 3. 532 - 03             |
| 0.100×+00                             | 1.110=+00              | 4,459,00           | 5,35/=+03                                       | • 32 <b>#</b> =03      | 3. //3. = 03            |
| 0,200#+00                             |                        | 4,00   # 03        | 5, 100=+03                                      | + 0¥#* 03              | 4. 020 ** 03            |
| C. SUU⊭+UU                            |                        | 5 48.207           | 4,0000+03                                       | 1.246                  | 4.27 8003               |
| 0,500**00                             | 1.260.+00              | 5.393.003          | 4 431 + 03                                      | 1.28503                | 4.06.000                |
| 0.00.+00                              | 1.299.+00              | 5.645.* n3         | 4. 233e± n3                                     | 1.325m#n3              | 5. 66= 03               |
| ••00-00<br>•700 <b>∗</b> +00          | 1.339.+00              | 5.905=03           | 4.047.0403                                      | 1.365=03               | 5.4860003               |
| 6.800×00                              | 1.379.+00              | 6.173.=03          | 3.872×+n3                                       | 1.4n6m=n3              | 5.420##03               |
| 6.900 <b>.</b> +00                    | 1.419+00               | 6,449 <b>,</b> =n3 | 3.707+03  | 1.448 <sub>0</sub> =03 | 6. 169 <b>=</b> n3      |
| 7.000×+00                             | 1.461.+00              | 6,733, n3          | 3.55   .+ 13                                    | 1,490=03               | 6. 334= n3              |
| 4.100=+00                             | 1.503.+00              | 7.026.03           | 3,404=+03                                       | 1,532×= p3             | 6.914==03               |
| 1.200++10                             | 1.545=+00              | 7,326. 03          | 3,264=+03                                       | 1,576. 03              | 7.311=03                |
| 7.300#+00                             | 1,588,±00              | 7,635.*03          | 3. 133 × 03                                     | 1,620=03               | 7.1240=03               |
| 7.400**00                             | 1,632,+00              | 7,953m=03          | 3,008**03                                       | <b>1,664</b> µ∎03      | 8.155=03                |
| /.>00*+00                             | ,676 <b>±+00</b>       | 8,279==03          | 2,890=+03                                       | 30 = م 9 1 7 1 1       | 8.604==03               |
| 7.6U0±+U0                             | 1.721.+00              | 8.614.=03          | 2,770#+03                                       | 1,755,003              | 9.j7 ==03               |
| 7.700=+00                             | 1.767=+00              | 8,957,03           | 2.671+03  | 1.802=03               | 9,557#* 03              |
| 7.600 <b>*</b> +00                    | 1,8 3 <sub>0</sub> +00 | 9.310×03           | 2.570++03                                       | 1.049.03               | 1,004=02                |
| 7•900×+00                             | 1,859,+00              | 9,672=03           | 2,474,+03                                       | 1,896p=03              | 1. u59==02              |
| 8.000x+00                             | 1.90/=+00              | 1.004=02           | 2,383,+13                                       | 1.944 <u>m</u> =03     | 1.113=02                |
| □••100#+00<br>₩ 000                   | 1.924=+00              | 1.042.02           | 2,290,0+03                                      | 1,993=03               | 1.120=05                |
| ⊂,∠00×+00                             |                        | 1.001.02           | 2.214#* 03                                      | Z+U42≠*U3              | 1.558 ** 05             |
| 0.000x+00<br>8.400×+00                |                        | 1.1210-02          |   |                        | 1.209##02               |
| 8,500±+00                             | 2 152.+00              |                    | 2.000 <u>0</u> 00000000000000000000000000000000 | 2, 194. • 0.3          | 1.372002                |
| 8.600+00                              | 2.202.+00              | 1.247. 102         | 1 920. • n3                                     | 2.24603                | 1.485##02               |
| 8.700.+00                             | 2,254,+00              | 1.291.02           | 1.855 <b>5</b> + n3                             | 2.298 13               | 1.556= 12               |
| 6.00x+00                              | 2,300,+00              | 1.336. = 02        | ,793∎ <b>•</b> ⊓3                               | 2,3510-03              | 1.028=02                |
| 0,900x+00                             | 2,358,+00              | 1,382.02           | 1./34=+03                                       | 2.405=03               | 1./03=02                |
| 9.000×+00                             | 2.411.+00              | 1.429.02           | 1.077 <b>.</b> +03                              | 2,459 03               | 1.181.02                |
| 4.100×+00                             | 2,465,+00              | 1.477.02           | 1.022=+03                                       | 2, 2 3. 03             | 1.061=02                |
| 9+200++00                             | 2+219=+00              | 1,526= 02          | 1.570=+03                                       | 2.569.03               | 1.944==02               |
| 9.300*+00                             | 2,574=+00              | 1.276.12           | 1.221.03  | 2.025=03               | 2. 030 = 02             |
| 9.400×+00                             | 2,627,00               | 1,02/=702          | 1,473=+03                                       | 2.08   = 03            | 5.1180.05               |
| 7.200=+00                             | 2,087,00               | 1,000+02           | 1,42/#+03                                       | 2.130, * 03            | 5.510+=05               |
| ✓ • <sup>0</sup> 0 0 × • 0 0          | 21/460+00              | 1.708 - 02         | , 3 <b>⊂ 3n ∓</b> (  3                          | 2 + / 70 p = [] 3      | 2.304##02               |
| ★★★↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓↓ | 2+/97**00              | 11/000702          | . <b>  , 3 4   ≥ 7 [3</b>                       | 2+074× 03              | 2.40122                 |
| .≠•9,00 <b>4</b> ₹00<br>19,900-+00    | 2+02/st[]<br>2 4 5 4 6 | 1.90400=000        | - [•.3[]#▼[]3<br>- 360-±n2                      | 2 · 7 ] 3 · 7 ] 3      | 2.2012702               |
| ***VU**VU                             | 2.974.+00              | 1.95802            | 1,7020-US                                       | 3.033.+03              | 2•0U>₩≂02<br>2•0U>₩≂02  |
| 1.100±+01                             | 3.595.+00              | 2.6.4.*.02         | 9.222=+02                                       | 3.06603                | 3. 966±= 02             |
|                                       |                        |                    | · · · · · · · · · · · · · · · · · · ·           |                        |                         |

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| DIAMETER               | VELOCITY                | RE                       | DRAG COEF                 | RELAX TIME                     | ,98 DIST       |
|------------------------|-------------------------|--------------------------|---------------------------|--------------------------------|----------------|
| 1.200±+01              | 4,273,+00               | 3, 577 <u>0 = 0</u> 2    | 7,121,+02                 | 4 <b>,</b> 358 <b>∞+</b> 03    | 5.012==02      |
| 1,300++01              | 5.009 <b>*</b> +00      | 4,287,*02                | 5,616,+02                 | 5,107,03                       | 7./24==02      |
| 1,400*+01              | 5,800,+00               | 5.34702                  | 4.511#+02                 | 5,915,03                       | 1.138=01       |
| 1.500x+01              | 6,647,+00               | 6,565,=02                | 3.680=+02                 | 6,778,=03                      | 1.367#=01      |
| 1.600=+01              | 7,548,+00               | 7.952.02                 | 3.044=+02                 | 7.697. 03                      | 1. /69##01     |
| 1.700.+01              | 8,502.+00               | 9,518,+02                | 2,549,+02                 | 8,670p=03                      | 2.253#=01      |
| 1,800=+01              | 9,509,+00               | 1,127=701                | 2,158.+02                 | 9.697.03                       | 2.830-01       |
| 1,900=+81              | 1.057. <b>*</b> 01      | 1,322==01                | 1,845,+02                 | 1.078.02                       | 3.511#01       |
| 2,000*+01              | •   67 # + 0            | <b>,</b> 537 <u>,</u> ≖0 | 1,591,+02                 | 1,190, 02                      | 4.308==01      |
| 2.100#+ul              | 1.283=+01               | 1,774,001                | .383 <u></u> ∍+02         | 1.308.02                       | 5.234=01       |
| 2:200**01              | 1.403 <b>.</b> +01      | 2.033.01                 | 1.212=+02                 | ,43  <b>,</b> =02              | 6.302=*01      |
| 2.300x+01              | •528 <u>+0</u>          | 2.3 4.0 = 0              | 1.068.+02                 | , <sup>5</sup> 58 <b>,</b> ≡02 | 7. 25==01      |
| 2.400#+01              | <b> </b> 657 <b>+</b> 0 | 2,618,01                 | 9,481,+01                 | 1,690,02                       | 8.418=01       |
| ∠•500×+01              | 1,790,+01               | 2,946=0                  | 8,462=+01                 | 1,825,02                       | 1.048.00       |
| 2,600×+01              | 1:927:+01               | 3,299,01                 | 7,594.+01                 | 1,965,02                       | 1.213=+00      |
| 2•700=+01              | 2+068+01                | 3,676=01                 | 6,849#+01                 | 2.108.02                       | 1.392#+00      |
| 2,800*+01              | 2.212.+01               | 4,078,=01                | 6.20/=+01                 | 2,255,02                       | 1.284=+00      |
| 2.700*+01              | 2,359=+01               | 4,205»=01                | 5.650**01                 | 2,406=02                       | 1.191=+00      |
| 3.000±+01              | 2.210.00                | 4,758,701                | 5, 162=+01                | 2:259=02                       | 2· u12=+00     |
| S. 100x+01             | 2.003=+0                | 2+43/x=0 <br>5 94: ==:   | 4./37.+0                  | 2,710,02                       | 2.248=+00      |
|                        | 2:02Ux+01               |                          | 4.302.10                  | 5,07 <b>3</b> - 20             | 2.200 ** 00    |
|                        |                         | 7                        | 4.0320+01                 | 3,U3/p≖02                      | 2./0/#+00      |
| 3.500±+01              | 3+130p+01               | 7 6 6 8 - 1 0 1          | 3,/4/07[]]                | 3,46,402                       | 3. 120**00     |
| 3 600 + 01             |                         |                          |                           | 3.575 - 02                     | 3.349#*00      |
| :3.7n0                 | 3, 430 g + 0 l          | 8.853.*01                | 3 24 (                    | 3, 706 = 02                    | 3.0040400      |
| ₩₽700#₹01<br>3.800≠€01 | 3.8n3.+01               | 9.515.=01                | - 3•071⊭≁01<br>-2 851⊭≠01 | 3.87802                        | 3.990₽€UU      |
| 5.900×+01              | 3.974.+01               | 1.020+00                 | 2.680.00                  | 4:052.*02                      | 4 / 00 + + 0 0 |
| 4.000++01              | 4.146.+01               | 1.092.+00                | 2.525.+01                 | 4.228                          | 59 in + 00     |
| 4.100x+01              | 4.321m+ni               | 1.166 <b>.</b> +00       | 2. 38 Sm + 11             | 4.406. + 02                    | 5.49i#+nn      |
| 4.200**01              | 4.497.+01               | 1.244.+00                | 2.254.+01                 | 4.586. = 02                    | 5. 907.00      |
| 4,300x+01              | 4,675,+01               | 1.324.+00                | 2.135.+11                 | 4.767. n2                      | 6.341×+nn      |
| 4,400±+01              | 4,855,+01               | 1.4n6.+nn                | 2.620 + ni                | 4,950.00                       | 6./92#+nn      |
| 4.508x+01              | 5. 130 + 11             | 1.492.+00                | 1.925-+ 11                | 5, 136 p n2                    | 7.261.0+00     |
| 4.000#+01              | 5,220+01                | 1.58  +00                | 1.031p+01                 | 5. 324 02                      | 7./48#+nn      |
| 4.708=+01              | 5,407=+01               | 1,0730+00                | 1.744=01                  | 5, 2   4 - 02                  | 8.252#+nn      |
| 4,000#+01              | 5,596+01                | 1,769,+00                | 1.663#+n1                 | 5,706.02                       | 8. /74=+nn     |
| 4,900x+01              | 5,788 <sub>0</sub> +01  | 1,867,+00                | ,587 <b>⊭</b> +0          | 5.902. 02                      | 9.3 4×+00      |
| 5.000×+01              | 5,982,+01               | 1,970,+00                | , 5 6 <b>x</b> +0         | 6,101=02                       | 9.0730+00      |
| >.100≠+61              | 6,180,+01               | 2.075×+00                | 1.449=+01                 | 6,3020=02                      | 1.045.+01      |
| 2.500*+01              | 6,381±+01               | 2.185.+00                | 1,380m+01                 | 6,207 <b>∞</b> ≖02             | 1.104=01       |
| Þ,3 <u>00≠+0</u> ∣     | 6,586_+01               | 2,298,+00                | 1.326.+01                 | 6.716.*02                      | 1.166=+01      |
| 2.400×+01              | $6,794_{p}+01$          | 2,416=+00                | ,269±+0                   | 6,928,02                       | 1.229=+01      |
| >.>00∗+01              | 7.00°×+01               | 2,237=+00                | 1,210m+01                 | 7,144,=02                      | 1,293=+01      |
| >,000x+01              | 7.220,+01               | 2,662.+00                | 1.160.+01                 | 7.363=02                       | 1,360=+01      |
| 5.78n+et               | 7.430.+01               | 2./92.+00                | 1.118.001                 | 7.585.402                      | 1.420.401      |

| $ \begin{array}{c} b, b(0) + (0) & 7, b(57) + (0) & 2, 9(24 + (0) & 1, 0(7) + (0) & 8, 0(3) + (0) & 7, b(7) + (0) & 3, 0(6) + (0) & 1, 0(3) + (0) & 8, 0(3) + (0) & 9, 0(3) + (0) & 9, 0(3) + (0) & 9, 0(3) + (0) & 9, 0(3) + (0) & 1, 0($  | DIAMETER               | AEFQCIIA                               | RE                     | DRAG CUEF                   | RELAX TIME                  | .98 DIST                |
|---|------------------------|--|------------------------|-----------------------------|-----------------------------|-------------------------|
| $\begin{array}{c} 9, 900 + 01 & 7, 078 + 01 & 3, 061 + 00 & 1, 022 + 01 & 8, 033 + 02 & 1, 971 + 01 \\ 6, 000 + 01 & 8, 078 + 01 & 3, 200 + 00 & 9, 926 + 00 & 8, 259 + 02 & 1, 645 + 01 \\ 6, 100 + 01 & 8, 532 + 01 & 3, 441 + 00 & 9, 240 + 00 & 8, 482 + 02 & 1, 921 + 01 \\ 6, 300 + 01 & 8, 741 + 01 & 3, 626 + 00 & 8, 947 + 00 & 8, 701 + 02 & 1, 968 + 01 \\ 6, 400 + 01 & 8, 939 + 01 & 3, 767 + 00 & 8, 947 + 00 & 8, 701 + 02 & 1, 968 + 01 \\ 6, 400 + 01 & 8, 939 + 01 & 3, 767 + 00 & 8, 947 + 00 & 8, 701 + 02 & 1, 968 + 01 \\ 6, 400 + 01 & 8, 939 + 01 & 3, 767 + 00 & 8, 947 + 00 & 8, 914 + 02 & 1, 968 + 01 \\ 6, 400 + 01 & 9, 253 + 01 & 4, 174 + 00 & 8, 475 + 00 & 9, 446 + 02 & 2, 128 + 01 \\ 6, 600 + 01 & 9, 253 + 01 & 4, 174 + 00 & 8, 122 + 00 & 9, 446 + 02 & 2, 138 + 01 \\ 6, 600 + 01 & 9, 659 + 01 & 4, 174 + 00 & 8, 122 + 00 & 9, 650 + 02 & 2, 303 + 01 \\ 7, 400 + 01 & 9, 659 + 01 & 4, 479 + 00 & 7, 794 + 00 & 1, 026 + 01 & 2, 866 + 01 \\ 7, 400 + 01 & 1, 026 + 02 & 4, 958 + 00 & 7, 394 + 00 & 1, 026 + 01 & 2, 866 + 01 \\ 7, 400 + 01 & 1, 026 + 02 & 4, 958 + 00 & 7, 144 + 00 & 1, 046 + 01 & 2, 806 + 01 \\ 7, 400 + 01 & 1, 066 + 02 & 5, 123 + 00 & 6, 973 + 00 & 1, 107 + 01 & 2, 774 + 01 \\ 7, 400 + 01 & 1, 106 + 02 & 5, 636 + 00 & 6, 552 + 00 & 1, 128 + 01 & 2, 774 + 01 \\ 7, 600 + 01 & 1, 166 + 02 & 5, 636 + 00 & 6, 552 + 00 & 1, 128 + 01 & 2, 975 + 01 \\ 7, 600 + 01 & 1, 126 + 02 & 5, 636 + 00 & 6, 552 + 00 & 1, 128 + 01 & 2, 975 + 01 \\ 7, 900 + 01 & 1, 126 + 02 & 5, 636 + 00 & 6, 572 + 00 & 1, 128 + 01 & 3, 99 + 01 \\ 7, 900 + 01 & 1, 126 + 02 & 5, 636 + 00 & 5, 755 + 00 & 1, 247 + 01 & 3, 198 + 01 \\ 7, 900 + 01 & 1, 273 + 02 & 6, 369 + 00 & 5, 755 + 00 & 1, 248 + 01 & 3, 29 + 01 \\ 7, 900 + 01 & 1, 269 + 02 & 7, 352 + 00 & 5, 755 + 00 & 1, 254 + 01 & 3, 29 + 01 \\ 7, 900 + 01 & 1, 269 + 02 & 7, 352 + 00 & 5, 755 + 00 & 1, 355 + 01 & 3, 59 + 01 \\ 7, 900 + 01 & 1, 30 + 02 & 7, 352 + 00 & 5, 755 + 00 & 1, 355 + 01 & 3, 59 + 01 \\ 7, 900 + 01 & 1, 30 + 02 & 7, 352 + 00 & 5, 75 + 00 & 1, 355 + 01 & 3, 59 + 01 \\ 7, 900 + 01 & 1, 30 + 02 & 7, 35$  | 5.808±01               | 7.657.±01                              | 2.924.+00              | 1. 0 <b>7.5.+</b> n.1       | 7.808s=02                   | 1.499ø+ni               |
|   | 5.900+01               | 7.878m+ni                              | 3.061.+00              | 1.032 <b>0+</b> 01          | 8.03302                     | 1. 27 1. + 01           |
|   | 6.000#+01              | 8 • n 9 8 • + n i                      | 3,200,+00              | 9.926.+пп                   | 8.259. • n2                 | 1.045**11               |
| $\begin{array}{c} 6,200 \pm 01 & 8,532 \pm 01 & 3,483 \pm 00 & 9,240 \pm 00 & 8,701 \pm 02 & 1,799 \pm 01 \\ 6,300 \pm 01 & 8,741 \pm 01 & 3,626 \pm 00 & 8,947 \pm 00 & 8,714 \pm 02 & 1,878 \pm 01 \\ 6,400 \pm 01 & 8,939 \pm 01 & 3,767 \pm 00 & 8,611 \pm 00 & 9,116 \pm 02 & 1,869 \pm 01 \\ 6,500 \pm 01 & 9,122 \pm 01 & 3,94 \pm 00 & 8,346 \pm 00 & 9,446 \pm 02 & 2,128 \pm 01 \\ 6,600 \pm 01 & 9,263 \pm 01 & 4,026 \pm 00 & 8,346 \pm 00 & 9,446 \pm 02 & 2,218 \pm 01 \\ 6,600 \pm 01 & 9,263 \pm 01 & 4,724 \pm 00 & 8,346 \pm 00 & 9,468 \pm 02 & 2,218 \pm 01 \\ 6,700 \pm 01 & 9,659 \pm 01 & 4,525 \pm 00 & 7,998 \pm 00 & 1,005 \pm 01 & 2,394 \pm 01 \\ 7,000 \pm 01 & 9,659 \pm 01 & 4,479 \pm 00 & 7,704 \pm 00 & 1,005 \pm 01 & 2,394 \pm 01 \\ 7,000 \pm 01 & 9,658 \pm 01 & 4,479 \pm 00 & 7,299 \pm 00 & 1,005 \pm 01 & 2,394 \pm 01 \\ 7,000 \pm 01 & 1,026 \pm 02 & 4,795 \pm 00 & 7,399 \pm 00 & 1,064 \pm 01 & 2,389 \pm 01 \\ 7,200 \pm 01 & 1,066 \pm 02 & 5,123 \pm 00 & 6,973 \pm 00 & 1,067 \pm 01 & 2,774 \pm 01 \\ 7,500 \pm 01 & 1,066 \pm 02 & 5,291 \pm 00 & 6,572 \pm 100 & 1,087 \pm 01 & 2,774 \pm 01 \\ 7,500 \pm 01 & 1,066 \pm 02 & 5,291 \pm 00 & 6,552 \pm 100 & 1,128 \pm 01 & 3,978 \pm 01 \\ 7,500 \pm 01 & 1,166 \pm 02 & 5,462 \pm 00 & 6,552 \pm 100 & 1,128 \pm 01 & 3,978 \pm 01 \\ 7,700 \pm 01 & 1,166 \pm 02 & 5,933 \pm 00 & 6,373 \pm 00 & 1,172 \pm 01 & 3,299 \pm 01 \\ 7,600 \pm 01 & 1,166 \pm 02 & 5,933 \pm 00 & 6,373 \pm 00 & 1,128 \pm 01 & 3,978 \pm 01 \\ 7,700 \pm 01 & 1,166 \pm 02 & 5,933 \pm 00 & 6,575 \pm 00 & 1,231 \pm 01 & 3,299 \pm 01 \\ 7,900 \pm 01 & 1,167 \pm 02 & 5,933 \pm 00 & 5,715 \pm 00 & 1,231 \pm 01 & 3,299 \pm 01 \\ 7,900 \pm 01 & 1,224 \pm 02 & 6,366 \pm 00 & 5,955 \pm 00 & 1,231 \pm 01 & 3,299 \pm 01 \\ 7,900 \pm 01 & 1,224 \pm 02 & 6,366 \pm 00 & 5,955 \pm 00 & 1,231 \pm 01 & 3,299 \pm 01 \\ 7,900 \pm 01 & 1,284 \pm 02 & 6,739 \pm 00 & 5,715 \pm 00 & 1,355 \pm 01 & 3,735 \pm 01 \\ 8,200 \pm 01 & 1,289 \pm 02 & 7,332 \pm 00 & 5,755 \pm 00 & 1,355 \pm 01 & 3,735 \pm 01 \\ 8,200 \pm 01 & 1,284 \pm 02 & 6,739 \pm 00 & 5,716 \pm 00 & 1,355 \pm 01 & 3,735 \pm 01 \\ 8,400 \pm 01 & 1,289 \pm 02 & 7,332 \pm 00 & 5,75 \pm 00 & 1,355 \pm 01 & 3,755 \pm 01 \\ 8,400 \pm 01 & 1,284 \pm 02 & 6,739 \pm 00 & 5,75 \pm 00 & 1,355 \pm 01 & 3,755 \pm 01 \\ 8,400 \pm 01 & 1,284 \pm 02 & 7,329 \pm 00 & 5,75 \pm 00 & 1,355 \pm 01 & 3,755 \pm 01 \\ 8,400 \pm 01 &$  | 6.100x+01              | 8.317.+11                              | 3.341.+00              | 9.568.+00                   | 8.482.02                    | 1./21#+11               |
|   | 6.200++01              | 8.532.+ni                              | 3.483 <b>.</b> +nn     | 9.240                       | 8.701.02                    | 1.799#+n1               |
|   | 6.300+01               | 8.741.+11                              | 3.626 <b>.</b> +nn     | 8.947.+00                   | 8,914, n2                   | 1.878#+n1               |
| $\begin{array}{c} 6,500 \pm 01 & 9,122 \pm 01 & 3,904 \pm 00 & 8,475 \pm 00 & 9,303 \pm 02 & 2,43 \pm 01 \\ 6,600 \pm 01 & 9,263 \pm 01 & 4,0264 \pm 00 & 8,346 \pm 00 & 9,446 \pm 02 & 2,215 \pm 01 \\ 6,800 \pm 01 & 9,659 \pm 01 & 4,325 \pm 00 & 7,905 \pm 00 & 9,656 \pm 02 & 2,303 \pm 01 \\ 6,900 \pm 01 & 9,659 \pm 01 & 4,325 \pm 00 & 7,905 \pm 00 & 9,656 \pm 02 & 2,303 \pm 01 \\ 6,900 \pm 01 & 9,659 \pm 01 & 4,325 \pm 00 & 7,704 \pm 00 & 1,025 \pm 01 & 2,394 \pm 01 \\ 7,000 \pm 01 & 1,005 \pm 02 & 4,795 \pm 00 & 7,595 \pm 00 & 1,026 \pm 01 & 2,394 \pm 01 \\ 7,100 \pm 01 & 1,025 \pm 02 & 4,795 \pm 00 & 7,323 \pm 00 & 1,046 \pm 01 & 2,580 \pm 01 \\ 7,200 \pm 01 & 1,065 \pm 02 & 5,291 \pm 00 & 6,573 \pm 00 & 1,065 \pm 01 & 2,774 \pm 01 \\ 7,300 \pm 01 & 1,065 \pm 02 & 5,291 \pm 00 & 6,593 \pm 00 & 1,107 \pm 01 & 2,676 \pm 01 \\ 7,400 \pm 01 & 1,065 \pm 02 & 5,291 \pm 00 & 6,593 \pm 00 & 1,107 \pm 01 & 2,674 \pm 01 \\ 7,500 \pm 01 & 1,125 \pm 02 & 5,636 \pm 00 & 6,521 \pm 00 & 1,107 \pm 01 & 2,674 \pm 01 \\ 7,500 \pm 01 & 1,126 \pm 02 & 5,636 \pm 00 & 6,521 \pm 00 & 1,1128 \pm 01 & 2,775 \pm 01 \\ 7,600 \pm 01 & 1,126 \pm 02 & 5,636 \pm 00 & 6,355 \pm 00 & 1,218 \pm 01 & 3,178 \pm 01 \\ 7,900 \pm 01 & 1,167 \pm 02 & 5,933 \pm 00 & 6,355 \pm 00 & 1,218 \pm 01 & 3,299 \pm 01 \\ 7,900 \pm 01 & 1,167 \pm 02 & 5,934 \pm 00 & 5,755 \pm 00 & 1,231 \pm 01 & 3,299 \pm 01 \\ 8,200 \pm 01 & 1,167 \pm 02 & 6,360 \pm 00 & 5,711 \pm 00 & 1,273 \pm 01 & 3,299 \pm 01 \\ 8,200 \pm 01 & 1,269 \pm 02 & 6,546 \pm 00 & 5,711 \pm 00 & 1,273 \pm 01 & 3,299 \pm 01 \\ 8,200 \pm 01 & 1,269 \pm 02 & 7,329 \pm 00 & 5,376 \pm 00 & 1,325 \pm 01 & 3,969 \pm 01 \\ 8,400 \pm 81 & 1,228 \pm 02 & 6,548 \pm 00 & 5,376 \pm 00 & 1,355 \pm 01 & 3,356 \pm 01 \\ 8,000 \pm 01 & 1,30 \pm 02 & 7,329 \pm 00 & 5,376 \pm 00 & 1,355 \pm 01 & 3,356 \pm 01 \\ 8,000 \pm 01 & 1,30 \pm 02 & 7,329 \pm 00 & 5,376 \pm 00 & 1,355 \pm 01 & 3,356 \pm 01 \\ 8,000 \pm 01 & 1,30 \pm 02 & 7,322 \pm 00 & 5,275 \pm 00 & 1,356 \pm 01 & 4,299 \pm 01 \\ 8,000 \pm 01 & 1,330 \pm 02 & 7,532 \pm 00 & 5,275 \pm 00 & 1,356 \pm 01 & 4,269 \pm 01 \\ 8,000 \pm 01 & 1,330 \pm 02 & 7,532 \pm 00 & 5,275 \pm 00 & 1,356 \pm 01 & 4,269 \pm 01 \\ 8,000 \pm 01 & 1,330 \pm 02 & 7,532 \pm 00 & 5,275 \pm 00 & 1,356 \pm 01 & 4,269 \pm 01 \\ 8,000 \pm 01 & 1,330 \pm 02 & 7,936 \pm 00 & 4,696 \pm 00 & 1,4199 \pm 01 & 4,283 \pm 01 \\ 9,000 \pm 01 &$  | 6,400+01               | 8.939.+ni                              | 3.767.+nn              | 8.691.+00                   | 9.116.12                    | 1.96n#+n1               |
| $\begin{array}{c} 0, 0 \\ 0, 0 \\ 0, 0 \\ 0, 0 \\ 0, 0 \\ 0, 0 \\ 0, 0 \\ 0, 0 \\ 0 \\$   | 6,5n0x+01              | 9.122.+ni                              | 3,9n4 <b>,</b> +nn     | 8.475.+nn                   | 9,303-02                    | 2. 143++11              |
| $ \begin{array}{c} c, 7 & 0 & z + 0 & 1 & 9, 461 & z + 0 & 1 & 4, 174 & z + 0 & 8, 122 & z + 0 & 9, 648 & z + 02 & 2, 215 & z + 0 & 1 \\ c, 8 & 0 & 0 + 0 & 1 & 9, 659 & z + 0 & 1 & 4, 325 & z + 0 & 7, 796 & z + 00 & 1, 005 & z + 02 & 2, 393 & z + 01 \\ 7, 0 & 0 & z + 0 & 1 & 0 & 0 & 588 & z + 0 & 1 & 4, 479 & z + 0 & 7, 794 & z + 00 & 1, 005 & z + 01 & 2, 394 & z + 01 \\ 7, 0 & 0 & z + 0 & 1 & 0 & 0 & 0 & z & 4, 635 & z + 0 & 7, 794 & z + 00 & 1, 026 & z + 01 & 2, 394 & z + 01 \\ 7, 200 & z + 0 & 1 & 0 & 0 & 0 & z & 4, 958 & z + 00 & 7, 324 & z + 00 & 1, 046 & z + 01 & 2, 288 & z + 01 \\ 7, 200 & z + 0 & 1 & 1, 046 & z + 02 & 4, 958 & z + 00 & 7, 144 & z + 00 & 1, 046 & z + 01 & 2, 74 & z + 01 \\ 7, 400 & z + 0 & 1 & 1, 066 & z + 02 & 5, 291 & z + 00 & 6, 893 & z + 00 & 1, 107 & z + 01 & 2, 275 & z + 01 \\ 7, 500 & z + 0 & 1 & 1, 106 & z + 02 & 5, 636 & z + 00 & 6, 652 & z + 00 & 1, 128 & z + 01 & 2, 775 & z + 01 \\ 7, 600 & z + 0 & 1 & 1, 126 & z + 02 & 5, 636 & z + 00 & 6, 252 & z + 00 & 1, 149 & z + 01 & 3, 183 & z + 01 \\ 7, 900 & z + 0 & 1 & 1, 146 & z + 02 & 5, 993 & z + 00 & 6, 217 & z + 00 & 1, 149 & z + 01 & 3, 29 & y + 01 \\ 7, 900 & z + 0 & 1 & 1, 167 & z + 02 & 6, 175 & z + 00 & 6, 263 & z + 00 & 1, 128 & z + 01 & 3, 29 & y + 01 \\ 7, 900 & z + 0 & 1 & 1, 167 & z + 02 & 6, 738 & z + 00 & 6, 273 & z + 00 & 1, 224 & z + 01 & 3, 29 & y + 01 \\ 7, 900 & z + 0 & 1 & 1, 228 & z + 02 & 6, 548 & z + 00 & 5, 255 & z + 00 & 1, 224 & z + 01 & 3, 252 & z + 01 \\ 8, 200 & z + 0 & 1 & 1, 248 & z + 02 & 7, 130 & z + 00 & 5, 755 & z + 00 & 1, 355 & z + 01 \\ 8, 200 & z + 0 & 1 & 1, 289 & z + 02 & 7, 130 & z + 00 & 5, 755 & z + 00 & 1, 355 & z + 01 \\ 8, 200 & z + 0 & 1 & 1, 289 & z + 02 & 7, 130 & z + 00 & 5, 755 & z + 00 & 1, 355 & z + 01 \\ 8, 00 & z + 0 & 1 & 1, 351 & z + 02 & 7, 737 & z + 00 & 5, 775 & z + 00 & 1, 355 & z + 01 \\ 8, 00 & z + 0 & 1 & 1, 351 & z + 02 & 7, 737 & z + 00 & 5, 775 & z + 00 & 1, 350 & z + 01 \\ 8, 00 & z + 0 & 1 & 1, 371 & z + 02 & 7, 737 & z + 00 & 5, 775 & z + 00 & 1, 350 & z + 01 \\ 9, 00 & z + 0 & 1 & 1, 350 &$   | 6,600#+01              | 9,263,+01                              | 4,026=*00              | 8.340.+00                   | 9,446,-02                   | 2. 28 + 01              |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 0,700++01              | 9,461,+01                              | 4, 174, * 00           | 8,122+10                    | 9,648, 02                   | 2.215=+01               |
| $\begin{array}{c} 6,900 \pm 01 & 9,858 \pm 01 & 4.479 \pm 00 & 7.704 \pm 00 & 1.005 \pm 01 & 2.394 \pm 01 \\ 7.000 \pm 01 & 1.006 \pm 02 & 4.795 \pm 00 & 7.509 \pm 00 & 1.026 \pm 01 & 2.486 \pm 01 \\ 7.200 \pm 01 & 1.026 \pm 02 & 4.795 \pm 00 & 7.323 \pm 00 & 1.046 \pm 01 & 2.580 \pm 01 \\ 7.200 \pm 01 & 1.026 \pm 02 & 4.958 \pm 00 & 7.144 \pm 00 & 1.066 \pm 01 & 2.580 \pm 01 \\ 7.200 \pm 01 & 1.066 \pm 02 & 5.123 \pm 00 & 6.973 \pm 00 & 1.087 \pm 01 & 2.774 \pm 01 \\ 7.400 \pm 01 & 1.086 \pm 02 & 5.291 \pm 00 & 6.697 \pm 00 & 1.087 \pm 01 & 2.975 \pm 01 \\ 7.500 \pm 01 & 1.066 \pm 02 & 5.462 \pm 00 & 6.652 \pm 00 & 1.128 \pm 01 & 2.975 \pm 01 \\ 7.500 \pm 01 & 1.126 \pm 02 & 5.636 \pm 00 & 6.501 \pm 00 & 1.128 \pm 01 & 2.975 \pm 01 \\ 7.600 \pm 01 & 1.167 \pm 02 & 5.933 \pm 00 & 6.355 \pm 10 & 1.149 \pm 01 & 3.183 \pm 01 \\ 7.600 \pm 01 & 1.167 \pm 02 & 5.933 \pm 00 & 6.217 \pm 00 & 1.199 \pm 01 & 3.299 \pm 01 \\ 7.900 \pm 01 & 1.167 \pm 02 & 6.175 \pm 00 & 6.854 \pm 00 & 1.221 \pm 01 & 3.399 \pm 01 \\ 7.900 \pm 01 & 1.87 \pm 02 & 6.175 \pm 00 & 5.955 \pm 00 & 1.231 \pm 01 & 3.299 \pm 01 \\ 6.100 \pm 01 & 1.228 \pm 02 & 6.548 \pm 00 & 5.955 \pm 00 & 1.273 \pm 01 & 3.99 \pm 01 \\ 6.100 \pm 01 & 1.228 \pm 02 & 6.548 \pm 00 & 5.955 \pm 00 & 1.273 \pm 01 & 3.535 \pm 01 \\ 6.300 \pm 01 & 1.269 \pm 02 & 7.329 \pm 00 & 5.378 \pm 00 & 1.355 \pm 01 & 3.969 \pm 01 \\ 6.300 \pm 01 & 1.269 \pm 02 & 7.329 \pm 00 & 5.378 \pm 00 & 1.355 \pm 01 & 3.969 \pm 01 \\ 6.500 \pm 01 & 1.310 \pm 02 & 7.329 \pm 00 & 5.378 \pm 00 & 1.355 \pm 01 & 3.969 \pm 01 \\ 6.500 \pm 01 & 1.310 \pm 02 & 7.329 \pm 00 & 5.378 \pm 00 & 1.355 \pm 01 & 4.988 \pm 01 \\ 6.000 \pm 01 & 1.330 \pm 02 & 7.532 \pm 00 & 5.275 \pm 00 & 1.355 \pm 01 & 4.457 \pm 01 \\ 6.000 \pm 01 & 1.351 \pm 02 & 7.737 \pm 00 & 5.176 \pm 00 & 1.482 \pm 01 & 4.457 \pm 01 \\ 9.000 \pm 01 & 1.332 \pm 02 & 8.565 \pm 00 & 4.699 \pm 00 & 1.449 \pm 01 & 4.457 \pm 01 \\ 9.000 \pm 01 & 1.425 \pm 02 & 8.565 \pm 00 & 4.699 \pm 00 & 1.461 \pm 01 & 4.457 \pm 01 \\ 9.000 \pm 01 & 1.475 \pm 02 & 9.455 \pm 00 & 4.699 \pm 00 & 1.461 \pm 01 & 4.457 \pm 01 \\ 9.000 \pm 01 & 1.475 \pm 02 & 9.456 \pm 00 & 4.699 \pm 00 & 1.461 \pm 01 & 4.973 \pm 01 \\ 9.000 \pm 01 & 1.557 \pm 02 & 9.252 \pm 00 & 4.565 \pm 00 & 1.524 \pm 0 & 5.575 \pm 01 \\ 9.000 \pm 01 & 1.557 \pm 02 & 9.252 \pm 00 & 4.565 \pm 00 & 1.524 \pm 0 & 5.575 \pm 01 \\ 9.000 \pm 01 & 1.$  | 6,800#+01              | 9,659,+01                              | 4,325.+00              | 7,900×+00                   | 9.850×=02                   | 2.303#+01               |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 6,900=+01              | 9,858,+01                              | 4,479,+00              | 7.704=+00                   | 1.005.00                    | 2.394=+01               |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 7.000±+01              | 1.000=+02                              | 4,636.+00              | 7,509+00                    | 1.026.=01                   | 2.486=+01               |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 7.100±+01              | 1,026.+02                              | 4,795+00               | 7, 323, + 00                | •046 <b>∍</b> =0            | 2, 58 0= + 01           |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 7,200++01              | 1.046,+02                              | 4,958_+00              | 7,144,+00                   | ,066 <u>,=</u> 0            | 2.076+01                |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $  | 7.300++01              | 1,066,+02                              | 5,123×+00              | 6.973 <b>.</b> +00          | •087 <b>∺</b> ≖0            | 2./740+01               |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 7,400=+01              | ,086 <u>m</u> +02                      | 5,291,+00              | 6,809#+00                   | , 07 <b>∍</b> ≖0            | 2.874#+01               |
| $\begin{array}{c} 7.600 + 01 \\ 7.700 + 01 \\ 1.146 + 02 \\ 5.636 + 00 \\ 6.366 + 00 \\ 6.366 + 00 \\ 1.169 - 01 \\ 3.183 + 01 \\ 3.183 + 01 \\ 7.800 + 01 \\ 1.167 + 02 \\ 5.993 + 00 \\ 6.217 + 00 \\ 1.190 - 01 \\ 3.290 + 01 \\ 1.190 - 01 \\ 3.290 + 01 \\ 1.190 - 01 \\ 3.290 + 01 \\ 3.290 + 01 \\ 1.190 - 01 \\ 3.290 + 01 \\ 1.190 - 01 \\ 3.290 + 01 \\ 1.190 - 01 \\ 3.290 + 01 \\ 1.190 - 01 \\ 3.290 + 01 \\ 1.190 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.290 + 01 \\ 1.21 - 01 \\ 3.90 + 01 \\ 1.225 - 01 \\ 3.90 + 01 \\ 1.225 - 01 \\ 3.90 + 01 \\ 1.252 - 01 \\ 3.90 + 01 \\ 1.252 - 01 \\ 3.90 + 01 \\ 1.259 - 01 \\ 3.90 + 01 \\ 1.269 + 02 \\ 1.30 + 02 \\ 7.329 + 00 \\ 5.90 - 10 \\ 1.356 - 01 \\ 4.209 + 01 \\ 1.356 - 01 \\ 4.209 + 01 \\ 1.356 - 02 \\ 4.392 - 00 \\ 1.356 - 01 \\ 4.352 - 01 \\ 4.352 - 01 \\ 4.352 - 01 \\ 4.352 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.356 - 01 \\ 4.352 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.378 - 01 \\ 5.458 -$  | 7,500=+01              | <b> </b> •10 <sup>6</sup> <b>∍</b> +02 | 5,462=+00              | 6.652#+00                   | , 28 <b>∍</b> *0            | 2.475=+01               |
| $\begin{array}{c} 7,700 \pm 01 & 1,146 \pm 02 & 5,813 \pm 00 & 6,356 \pm 00 & 1,169 \pm 01 & 3,183 \pm 01 \\ 7,900 \pm 01 & 1,167 \pm 02 & 5,993 \pm 00 & 6,217 \pm 00 & 1,190 \pm 01 & 3,290 \pm 01 \\ 7,900 \pm 01 & 1,127 \pm 02 & 6,175 \pm 00 & 6,0175 \pm 00 & 1,211 \pm 01 & 3,399 \pm 01 \\ 8,000 \pm 01 & 1,207 \pm 02 & 6,360 \pm 00 & 5,955 \pm 00 & 1,231 \pm 01 & 3,299 \pm 01 \\ 8,200 \pm 01 & 1,228 \pm 02 & 6,548 \pm 00 & 5,711 \pm 00 & 1,252 \pm 01 & 3,627 \pm 01 \\ 8,200 \pm 01 & 1,228 \pm 02 & 6,933 \pm 00 & 5,955 \pm 00 & 1,224 \pm 01 & 3,755 \pm 01 \\ 8,300 \pm 01 & 1,269 \pm 02 & 6,933 \pm 00 & 5,711 \pm 00 & 1,273 \pm 01 & 3,755 \pm 01 \\ 8,300 \pm 01 & 1,269 \pm 02 & 7,130 \pm 00 & 5,485 \pm 00 & 1,315 \pm 01 & 3,969 \pm 01 \\ 8,400 \pm 01 & 1,289 \pm 02 & 7,130 \pm 00 & 5,485 \pm 00 & 1,315 \pm 01 & 3,969 \pm 01 \\ 8,400 \pm 01 & 1,310 \pm 02 & 7,329 \pm 00 & 5,378 \pm 00 & 1,355 \pm 01 & 4,988 \pm 01 \\ 8,600 \pm 01 & 1,351 \pm 02 & 7,377 \pm 00 & 5,176 \pm 00 & 1,355 \pm 01 & 4,209 \pm 01 \\ 8,600 \pm 01 & 1,351 \pm 02 & 7,737 \pm 00 & 5,176 \pm 00 & 1,377 \pm 01 & 4,332 \pm 01 \\ 8,600 \pm 01 & 1,371 \pm 02 & 7,945 \pm 00 & 5,79 \pm 00 & 1,398 \pm 01 & 4,457 \pm 01 \\ 8,900 \pm 01 & 1,392 \pm 02 & 8,156 \pm 00 & 4,896 \pm 00 & 1,419 \pm 01 & 4,983 \pm 01 \\ 9,000 \pm 01 & 1,392 \pm 02 & 8,369 \pm 00 & 4,896 \pm 00 & 1,419 \pm 01 & 4,983 \pm 01 \\ 9,000 \pm 01 & 1,392 \pm 02 & 8,369 \pm 00 & 4,396 \pm 00 & 1,461 \pm 01 & 4,71 \pm 01 \\ 9,100 \pm 01 & 1,474 \pm 02 & 9,027 \pm 00 & 4,396 \pm 00 & 1,461 \pm 01 & 4,71 \pm 01 \\ 9,200 \pm 01 & 1,474 \pm 02 & 9,027 \pm 00 & 4,369 \pm 00 & 1,461 \pm 01 & 4,71 \pm 01 \\ 9,200 \pm 01 & 1,474 \pm 02 & 9,252 \pm 00 & 4,369 \pm 00 & 1,461 \pm 01 & 4,71 \pm 01 \\ 9,200 \pm 01 & 1,475 \pm 02 & 9,480 \pm 00 & 4,369 \pm 00 & 1,545 \pm 01 & 5,378 \pm 01 \\ 9,400 \pm 01 & 1,575 \pm 02 & 9,480 \pm 00 & 4,448 \pm 00 & 1,545 \pm 01 & 5,241 \pm 01 \\ 9,500 \pm 01 & 1,575 \pm 02 & 9,711 \pm 00 & 4,414 \pm 10 & 1,567 \pm 01 & 5,241 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,588 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,943 \pm 01 \\ 9,900 \pm 01 & 1,578$  | 7.600=+01              | 1.120.+02                              | 5,636=+00              | 6. <sup>5</sup> 01∞*00      | 1,149.01                    | 3. <sub>0</sub> 78¤±01  |
| $\begin{array}{c} 7.9 \ 0 \ 0 \ x + 0 \ 1 & 1.167 \ x + 02 & 5.993 \ x + 00 & 6.217 \ x + 00 & 1.199 \ 0 \ x + 01 & 1.187 \ x + 02 & 6.175 \ x + 00 & 6.983 \ x + 00 & 1.211 \ x + 01 & 3.299 \ x + 01 \\ 8.000 \ x + 01 & 1.207 \ x + 02 & 6.360 \ x + 00 & 5.955 \ x + 00 & 1.231 \ x + 01 & 3.99 \ x + 01 \\ 8.100 \ x + 01 & 1.228 \ x + 02 & 6.548 \ x + 00 & 5.431 \ x + 00 & 1.252 \ x + 01 & 3.929 \ x + 01 \\ 8.200 \ x + 01 & 1.228 \ x + 02 & 6.548 \ x + 00 & 5.431 \ x + 00 & 1.252 \ x + 01 & 3.755 \ x + 01 \\ 8.300 \ x + 01 & 1.248 \ x + 02 & 6.739 \ x + 00 & 5.711 \ x + 00 & 1.273 \ x + 01 & 3.755 \ x + 01 \\ 8.300 \ x + 01 & 1.289 \ x + 02 & 6.933 \ x + 00 & 5.966 \ x + 00 & 1.294 \ x + 01 & 3.755 \ x + 01 \\ 8.400 \ x + 01 & 1.289 \ x + 02 & 7.130 \ x + 00 & 5.378 \ x + 00 & 1.315 \ x + 01 & 3.969 \ x + 01 \\ 8.500 \ x + 01 & 1.310 \ x + 02 & 7.329 \ x + 00 & 5.378 \ x + 00 & 1.355 \ x + 01 & 4.988 \ x + 01 \\ 8.500 \ x + 01 & 1.351 \ x + 02 & 7.329 \ x + 00 & 5.375 \ x + 00 & 1.355 \ x + 01 & 4.322 \ x + 01 \\ 8.500 \ x + 01 & 1.351 \ x + 02 & 7.945 \ x + 00 & 5.779 \ x + 00 & 1.377 \ x + 01 & 4.322 \ x + 01 \\ 9.000 \ x + 01 & 1.371 \ x + 02 & 8.369 \ x + 00 & 4.896 \ x + 00 & 1.440 \ x + 01 & 4.983 \ x + 01 \\ 9.000 \ x + 01 & 1.412 \ x + 02 & 8.369 \ x + 00 & 4.896 \ x + 00 & 1.440 \ x + 01 & 4.711 \ x + 01 \\ 9.200 \ x + 01 & 1.412 \ x + 02 & 8.866 \ x + 00 & 4.896 \ x + 00 & 1.440 \ x + 01 & 4.711 \ x + 01 \\ 9.200 \ x + 01 & 1.412 \ x + 02 & 8.866 \ x + 00 & 4.896 \ x + 00 & 1.440 \ x + 01 & 4.711 \ x + 01 \\ 9.200 \ x + 01 & 1.475 \ x + 02 & 9.252 \ x + 00 & 4.896 \ x + 00 & 1.440 \ x + 01 & 4.711 \ x + 01 \\ 9.400 \ x + 01 & 1.475 \ x + 02 & 9.252 \ x + 00 & 4.896 \ x + 00 & 1.420 \ x + 140 \ x + 735 \ x + 01 \\ 9.400 \ x + 01 & 1.475 \ x + 02 & 9.252 \ x + 00 & 4.896 \ x + 00 & 1.567 \ x + 01 & 5.78 \ x + 01 \\ 9.400 \ x + 01 & 1.598 \ x + 02 & 9.252 \ x + 00 & 4.848 \ x + 00 & 1.567 \ x + 01 & 5.78 \ x + 01 \\ 9.400 \ x + 01 & 1.598 \ x + 02 & 9.711 \ x + 00 & 4.342 \ x + 00 & 1.567 \ x + 01 & 5.78 \ x + 01 \\ 9.400 \ x + 01 & 1.57$   | /.700×+nl              | 1,146,+02                              | 5,813=+00              | 6,350 <b>p</b> + <u>0</u> 0 | + 69 <b>=</b> 0             | 3. 83**01               |
| $\begin{array}{c} 7,900 \pm 01 & 1,187 \pm 02 & 6,175 \pm 00 & 6,083 \pm 00 & 1,211 \pm 01 & 3,399 \pm 01 \\ 8,000 \pm 01 & 1,207 \pm 02 & 6,360 \pm 00 & 5,955 \pm 00 & 1,231 \pm 01 & 3,509 \pm 01 \\ 8,200 \pm 01 & 1,228 \pm 02 & 6,548 \pm 00 & 5,731 \pm 00 & 1,252 \pm 01 & 3,621 \pm 01 \\ 8,200 \pm 01 & 1,248 \pm 02 & 6,739 \pm 00 & 5,711 \pm 00 & 1,273 \pm 01 & 3,755 \pm 01 \\ 8,300 \pm 01 & 1,269 \pm 02 & 6,933 \pm 00 & 5,965 \pm 00 & 1,294 \pm 01 & 3,851 \pm 01 \\ 8,300 \pm 01 & 1,269 \pm 02 & 7,130 \pm 00 & 5,485 \pm 00 & 1,315 \pm 01 & 3,969 \pm 01 \\ 8,300 \pm 01 & 1,289 \pm 02 & 7,329 \pm 00 & 5,378 \pm 00 & 1,355 \pm 01 & 4,288 \pm 01 \\ 8,500 \pm 01 & 1,310 \pm 02 & 7,329 \pm 00 & 5,378 \pm 00 & 1,356 \pm 01 & 4,209 \pm 01 \\ 8,500 \pm 01 & 1,351 \pm 02 & 7,532 \pm 00 & 5,275 \pm 00 & 1,356 \pm 01 & 4,209 \pm 01 \\ 8,500 \pm 01 & 1,351 \pm 02 & 7,737 \pm 00 & 5,176 \pm 00 & 1,377 \pm 01 & 4,332 \pm 01 \\ 8,500 \pm 01 & 1,371 \pm 02 & 7,945 \pm 00 & 5,079 \pm 00 & 1,398 \pm 01 & 4,457 \pm 01 \\ 8,900 \pm 01 & 1,392 \pm 02 & 8,156 \pm 00 & 4,866 \pm 00 & 1,419 \pm 01 & 4,833 \pm 01 \\ 9,000 \pm 01 & 1,412 \pm 02 & 8,369 \pm 00 & 4,690 \pm 00 & 1,440 \pm 01 & 4,71 \pm 01 \\ 9,200 \pm 01 & 1,453 \pm 02 & 8,566 \pm 00 & 4,509 \pm 00 & 1,461 \pm 01 & 4,73 \pm 01 \\ 9,200 \pm 01 & 1,475 \pm 02 & 9,027 \pm 00 & 4,725 \pm 00 & 1,524 \pm 01 & 4,97 \pm 01 \\ 9,400 \pm 01 & 1,575 \pm 02 & 9,480 \pm 00 & 4,485 \pm 00 & 1,524 \pm 01 & 5,378 \pm 01 \\ 9,400 \pm 01 & 1,575 \pm 02 & 9,711 \pm 00 & 4,414 \pm 00 & 1,545 \pm 01 & 5,378 \pm 01 \\ 9,500 \pm 01 & 1,578 \pm 02 & 9,711 \pm 00 & 4,414 \pm 00 & 1,545 \pm 01 & 5,577 \pm 01 \\ 9,500 \pm 01 & 1,578 \pm 02 & 9,711 \pm 00 & 4,342 \pm 00 & 1,545 \pm 01 & 5,577 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,630 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,545 \pm 01 & 5,978 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,630 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,630 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,630 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,042 \pm 01 & 4,272 \pm 00 & 1,630 \pm 01 & 5,99 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,042 \pm 01 & 4,272 \pm 00 & 1,69 \pm 01 & 5,99 \pm 01 \\ 9,900 \pm 01 & 1,578 \pm $  | 7,800±+01              | 1:167:+02                              | 5,993.400              | 6.217×+00                   | 1,190=01                    | 3.290**01               |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 7,900×+01              | 1.187.+02                              | 6,175,+00              | 6, <u>083</u> ,+ <u>00</u>  | 1.211.01                    | 3, 399₽≠01              |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 8.000×+01              | 1+20/+02                               | <b>6,360±+</b> 00      | 5,955=+00                   | [+23[ <b>#</b> =0]          | 3.209#*01               |
| $\begin{array}{c} 8,200 \pm 101 & 1,248 \pm 02 & 6,739 \pm 00 & 5,711 \pm 00 & 1,273 \pm 01 & 3,735 \pm 01 \\ 8,300 \pm 101 & 1,269 \pm 02 & 6,933 \pm 00 & 5,596 \pm 00 & 1,294 \pm 01 & 3,851 \pm 01 \\ 5,400 \pm 101 & 1,289 \pm 02 & 7,130 \pm 00 & 5,485 \pm 00 & 1,315 \pm 01 & 3,969 \pm 01 \\ 5,500 \pm 101 & 1,310 \pm 02 & 7,329 \pm 00 & 5,378 \pm 00 & 1,355 \pm 01 & 4,988 \pm 01 \\ 5,600 \pm 101 & 1,330 \pm 02 & 7,532 \pm 00 & 5,275 \pm 00 & 1,356 \pm 01 & 4,209 \pm 01 \\ 5,700 \pm 101 & 1,351 \pm 02 & 7,737 \pm 00 & 5,176 \pm 00 & 1,377 \pm 01 & 4,332 \pm 01 \\ 5,600 \pm 01 & 1,371 \pm 02 & 7,945 \pm 00 & 5,079 \pm 00 & 1,398 \pm 01 & 4,457 \pm 01 \\ 5,900 \pm 01 & 1,392 \pm 02 & 8,156 \pm 00 & 4,986 \pm 00 & 1,419 \pm 01 & 4,583 \pm 01 \\ 9,000 \pm 01 & 1,392 \pm 02 & 8,369 \pm 00 & 4,896 \pm 00 & 1,440 \pm 01 & 4,714 \pm 01 \\ 9,100 \pm 01 & 1,433 \pm 02 & 8,369 \pm 00 & 4,699 \pm 00 & 1,461 \pm 01 & 4,841 \pm 01 \\ 9,200 \pm 01 & 1,474 \pm 02 & 9,027 \pm 00 & 4,25 \pm 00 & 1,503 \pm 01 & 5,166 \pm 01 \\ 9,400 \pm 01 & 1,474 \pm 02 & 9,027 \pm 00 & 4,644 \pm 00 & 1,503 \pm 01 & 5,166 \pm 01 \\ 9,400 \pm 01 & 1,575 \pm 02 & 9,480 \pm 00 & 4,485 \pm 00 & 1,545 \pm 01 & 5,578 \pm 01 \\ 9,600 \pm 01 & 1,557 \pm 02 & 9,711 \pm 00 & 4,414 \pm 00 & 1,567 \pm 01 & 5,578 \pm 01 \\ 9,600 \pm 01 & 1,557 \pm 02 & 9,944 \pm 00 & 4,342 \pm 00 & 1,545 \pm 01 & 5,577 \pm 01 \\ 9,600 \pm 01 & 1,578 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,999 \pm 01 \\ 9,600 \pm 01 & 1,557 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,999 \pm 01 \\ 9,600 \pm 01 & 1,598 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,999 \pm 01 \\ 9,600 \pm 01 & 1,598 \pm 02 & 1,018 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,999 \pm 01 \\ 9,600 \pm 01 & 1,598 \pm 02 & 1,042 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,999 \pm 01 \\ 9,600 \pm 01 & 1,598 \pm 02 & 1,042 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,999 \pm 01 \\ 9,600 \pm 01 & 1,598 \pm 02 & 1,042 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,999 \pm 01 \\ 9,600 \pm 01 & 1,598 \pm 02 & 1,042 \pm 01 & 4,272 \pm 00 & 1,699 \pm 01 & 5,943 \pm 01 \\ 1,000 \pm 02 & 1,066 \pm 01 & 4,139 \pm 00 & 1,651 \pm 01 & 6,188 \pm 01 \\ 1,000 \pm 02 & 1,066 \pm 01 & 4,139 \pm 00 & 1,651 \pm 01 & 6,188 \pm 01 \\ 1,000 \pm 02 & 1,066 \pm 01 & 4,139 \pm 00 & 1,651 \pm 01 & 6,188 \pm 01 \\ 1,000 \pm 02 & 1,066 \pm 01 & 4,139 \pm 00 & 1,651 $  | 8 • 100 = + 01         | 1.228 .+ 02                            | 0,248=*00              | 5,8310+00                   | 1.252# 01                   | 3.021 * 01              |
| 6, 300x + 01 $1, 269x + 02$ $6, 933x + 00$ $5, 596x + 00$ $1, 294x - 01$ $3, 851x + 01$ $6, 400x + 01$ $1, 289x + 02$ $7, 130x + 00$ $5, 485x + 00$ $1, 315x - 01$ $3, 969x + 01$ $6, 500x + 01$ $1, 310x + 02$ $7, 329x + 00$ $5, 378x + 00$ $1, 335x - 01$ $4, 988x + 01$ $6, 600x + 01$ $1, 330x + 02$ $7, 532x + 00$ $5, 275x + 00$ $1, 356x - 01$ $4, 209x + 01$ $6, 700x + 01$ $1, 351x + 02$ $7, 737x + 00$ $5, 176x + 00$ $1, 377x - 01$ $4, 332x + 01$ $8, 600x + 01$ $1, 371x + 02$ $7, 945x + 00$ $5, 079x + 00$ $1, 398x - 01$ $4, 457x + 01$ $8, 90x + 01$ $1, 392x + 02$ $8, 156x + 00$ $4, 986x + 00$ $1, 419x = 01$ $4, 383x + 01$ $9, 00x + 01$ $1, 412x + 02$ $8, 369x + 00$ $4, 696x + 00$ $1, 461x = 01$ $4, 711x + 01$ $9, 100x + 01$ $1, 433x + 02$ $8, 805x + 00$ $4, 696x + 00$ $1, 461x = 01$ $4, 73x + 01$ $9, 200x + 01$ $1, 474x + 02$ $9, 027x + 00$ $4, 644x + 00$ $1, 503x = 01$ $5, 241x + 01$ $9, 400x + 01$ $1, 515x + 02$ $9, 480x + 00$ $4, 545x + 00$ $5, 575x + 01$ $5, 241x + 01$ $9, 500x + 01$ $1, 515x + 02$ $9, 944x + 00$ $4, 342x + 00$ $1, 567x = 01$ $5, 577x + 01$ $9, 500x + 01$ $1, 515x + 02$ $9, 944x + 00$ $4, 342x + 00$ $1, 598x = 01$ $5, 577x + 01$ $9, 500x + 01$ $1, 578x + 02$ $9, 944x + 00$ $4, 342x + 00$ $1, 639x = 01$ $5, 94$   | 8+200++01              | 1+248+02                               | 6,/39±+00              | 5,/11+00                    | 1.273.000                   | 3./35#*0                |
| $\begin{array}{c} 6,400*+01 \\ 1,289*+02 \\ 1,30*+00 \\ 5,378*+00 \\ 1,355*+01 \\ 1,335*+01 \\ 1,330*+02 \\ 7,329*+00 \\ 5,378*+00 \\ 1,356*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,355*+01 \\ 1,375*+01 \\ 1,392*+02 \\ 8,156*+00 \\ 4,986*+00 \\ 1,419*+01 \\ 1,498*+01 \\ 1,498*+01 \\ 1,498*+01 \\ 1,412*+02 \\ 8,369*+00 \\ 4,696*+00 \\ 1,419*+01 \\ 1,498*+01 \\ 4,283*+01 \\ 4,283*+01 \\ 4,283*+01 \\ 4,283*+01 \\ 4,283*+01 \\ 4,283*+01 \\ 4,295*+02 \\ 8,866*+00 \\ 4,696*+00 \\ 1,40*+01 \\ 1,405*+01 \\ 4,205*+00 \\ 1,482*+01 \\ 4,25*+01 \\ 1,524**01 \\ 5,200*+01 \\ 1,545*+02 \\ 9,252*+00 \\ 4,342*+01 \\ 1,567*+01 \\ 5,505*+01 \\ 1,567*+01 \\ 5,57*+02 \\ 9,944*+00 \\ 4,342*+01 \\ 1,588*+01 \\ 5,59*+01 \\ 1,578*+02 \\ 1,018*+01 \\ 1,578*+02 \\ 1,018*+01 \\ 1,578*+02 \\ 1,018*+01 \\ 4,272*+00 \\ 1,69**01 \\ 1,588*+01 \\ 5,99**01 \\ 1,69**01 \\ 1,598*+01 \\ 1,598*+02 \\ 1,018*+01 \\ 4,272*+00 \\ 1,630*-01 \\ 5,943*+01 \\ 1,69**01 \\ 1$   | 8.300x+01              | 1+269+02                               | 6,933±*00              | 5,596,+00                   | 1.294.01                    | 3.0510+01               |
| $\begin{array}{c} 0.500 \\$   | 0,400x+01              | 1+289++02                              | /.130.*00              | 5.485.+00                   | 1,3 5=*0                    | 3.969=+01               |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$  | 0,200x+01              | 1,310+02                               | 7,329,+00              | 5,378=+00                   | 1, 335 m = 01               | 4• u <sup>8</sup> 8••01 |
| $\begin{array}{c} 0,700 \pm 101 \\ 0,770 \pm 102 \\ 0,711 \pm 100 \\ 0,770 \pm 101 \\ 0,770 \pm 1$ |                        | 1.330+02                               | 7,232=*00              | 5,2/5=+00                   | 0 ° a ° c •                 | 4.209=+01               |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$   | 0,/00±+01              | •35 ±+02                               | / / / / » • 00         | 5,170=+00                   |                             | 4.332++01               |
| $\begin{array}{c} 9, 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $   | 0,000x+01              | 1.3/10+02                              |                        |                             |                             | 4.457#+01               |
| 9,100±01       1,433±02       8,586±00       4,695±00       1,461±01       4,841±01         9,200±01       1,433±02       8,586±00       4,609±00       1,461±01       4,841±01         9,200±01       1,453±02       8,805±00       4,725±00       1,482±01       4,973±01         9,300±01       1,474±02       9,027±00       4,644±00       1,503±01       5,106±01         9,400±01       1,495±02       9,252±00       4,565±00       1,524±01       5,241±01         9,500±01       1,555±02       9,480±00       4,485±00       1,545±01       5,378±01         9,600±01       1,536±02       9,711±00       4,414±00       1,567±01       5,517±01         9,700±01       1,557±02       9,944±00       4,342±00       1,588±01       5,057±01         9,500±01       1,578±02       1,018±01       4,272±00       1,699±01       5,99±01         9,500±01       1,598±02       1,018±01       4,275±00       1,630±01       5,99±01         9,500±01       1,598±02       1,042±01       4,205±00       1,630±01       5,943±01         9,500±01       1,598±02       1,066±01       4,139±00       1,651±01       5,943±01 <td></td> <td></td> <td>0,150,÷00<br/>8.369,≑00</td> <td>4,700,400</td> <td>1.440.=01</td> <td>4, 203,04 []</td>  |                        |  | 0,150,÷00<br>8.369,≑00 | 4,700,400                   | 1.440.=01                   | 4, 203,04 []            |
| $9,200 \pm 01$ $1,433 \pm 02$ $8,805 \pm 00$ $4,725 \pm 00$ $1,482 \pm 01$ $4,973 \pm 01$ $9,200 \pm 01$ $1,474 \pm 02$ $9,027 \pm 00$ $4,725 \pm 00$ $1,482 \pm 01$ $4,973 \pm 01$ $9,300 \pm 01$ $1,474 \pm 02$ $9,027 \pm 00$ $4,c44 \pm 00$ $1503 \pm 01$ $5,106 \pm 01$ $9,400 \pm 01$ $1,495 \pm 02$ $9,252 \pm 00$ $4,565 \pm 00$ $1,524 \pm 01$ $5,241 \pm 01$ $9,500 \pm 01$ $1,515 \pm 02$ $9,480 \pm 00$ $4,485 \pm 00$ $1,545 \pm 01$ $5,278 \pm 01$ $9,600 \pm 01$ $1,536 \pm 02$ $9,711 \pm 00$ $4,414 \pm 00$ $1,567 \pm 01$ $5,578 \pm 01$ $9,700 \pm 01$ $1,557 \pm 02$ $9,944 \pm 00$ $4,342 \pm 00$ $1,588 \pm 01$ $5,057 \pm 01$ $9,600 \pm 01$ $1,578 \pm 02$ $1,018 \pm 01$ $4,272 \pm 00$ $1,609 \pm 01$ $5,99 \pm 01$ $9,00 \pm 01$ $1,598 \pm 02$ $1,042 \pm 01$ $4,205 \pm 00$ $1,609 \pm 01$ $5,99 \pm 01$ $9,00 \pm 01$ $1,598 \pm 02$ $1,042 \pm 01$ $4,205 \pm 00$ $1,630 \pm 01$ $5,943 \pm 01$  | 7•UUU≭≁UI<br>9 100 +ui | 1 435 + 00                             | 8 586.+00              | 4,0900+00                   |                             | 4.711#*01               |
| 9.300#+01       1.474**02       9.027**00       4.044**00       1.503**01       5.106**01         9.400#+01       1.495**02       9.252**00       4.565**00       1.524**01       5.241**01         9.500**01       1.515**02       9.480**00       4.488**00       1.545**01       5.241**01         9.600**01       1.515**02       9.480**00       4.488**00       1.545**01       5.378**01         9.600**01       1.555**02       9.480**00       4.488**00       1.567**01       5.517**01         9.600**01       1.557**02       9.71**00       4.44**00       1.567**01       5.517**01         9.700**01       1.557**02       9.944**00       4.342**00       1.588**01       5.057**01         9.600**01       1.578**02       1.018**01       4.272**00       1.609**01       5.99**01         9.600**01       1.598**02       1.042**01       4.205**00       1.630**01       5.943**01         9.90**02       1.042**01       4.205**00       1.651**01       5.943**01       5.943**01   | 9.200++01              | 1.453.+02                              | 8.805.+00              | 4.00/××00<br>4.725.+00      |                             | 4. 473                  |
| 9,400 $\mu$ +01       1,495 $\mu$ +02       9,252 $\mu$ +00       4,565 $\mu$ +00       1,524 $\mu$ =01       5,241 $\mu$ +01         9,400 $\mu$ +01       1,515 $\mu$ +02       9,480 $\mu$ +00       4,488 $\mu$ +00       1,545 $\mu$ =01       5,241 $\mu$ +01         9,500 $\mu$ +01       1,515 $\mu$ +02       9,480 $\mu$ +00       4,488 $\mu$ +00       1,545 $\mu$ =01       5,378 $\mu$ +01         9,600 $\mu$ +01       1,536 $\mu$ +02       9,711 $\mu$ +00       4,414 $\mu$ +00       1,567 $\mu$ =01       5,517 $\mu$ +01         9,700 $\mu$ +01       1,557 $\mu$ +02       9,944 $\mu$ +00       4,342 $\mu$ +00       1,588 $\mu$ =01       5,657 $\mu$ +01         9,600 $\mu$ +01       1,578 $\mu$ +02       1,018 $\mu$ +01       4,272 $\mu$ +00       1,699 $\mu$ =01       5,799 $\mu$ +01         9,600 $\mu$ +01       1,598 $\mu$ +02       1,018 $\mu$ +01       4,272 $\mu$ +00       1,630 $\mu$ =01       5,943 $\mu$ +01         9,900 $\mu$ +01       1,598 $\mu$ +02       1,042 $\mu$ +01       4,205 $\mu$ +00       1,630 $\mu$ =01       5,943 $\mu$ +01         1,000 $\mu$ +02       1,066 $\mu$ +01       4,139 $\mu$ +00       1,651 $\mu$ =01       6, $\mu$ 88 $\mu$ +01   | 9.300+01               | 474 + 02                               | 9.027.+00              | 4 0 4 4 + 6 0               | 1.503.01                    | 5.106**01               |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$   | 9.400#+81              | 1,495,+02                              | 9.252.+00              | 4.565.*00                   | 1.524.01                    | 5.24 w+ni               |
| $9,600 \pm 01$ $1,536 \pm 02$ $9,711 \pm 00$ $4,414 \pm 00$ $1,567 \pm 01$ $5,517 \pm 01$ $9,700 \pm 01$ $1,557 \pm 02$ $9,944 \pm 00$ $4,342 \pm 00$ $1,588 \pm 01$ $5,577 \pm 01$ $9,500 \pm 01$ $1,578 \pm 02$ $9,944 \pm 00$ $4,342 \pm 00$ $1,588 \pm 01$ $5,657 \pm 01$ $9,500 \pm 01$ $1,578 \pm 02$ $1,018 \pm 01$ $4,272 \pm 00$ $1,609 \pm 01$ $5,990 \pm 01$ $9,900 \pm 01$ $1,598 \pm 02$ $1,018 \pm 01$ $4,272 \pm 00$ $1,609 \pm 01$ $5,990 \pm 01$ $9,900 \pm 01$ $1,598 \pm 02$ $1,042 \pm 01$ $4,205 \pm 00$ $1,630 \pm 01$ $5,943 \pm 01$ $1,000 \pm 02$ $1,042 \pm 01$ $4,139 \pm 00$ $1,651 \pm 01$ $6,188 \pm 01$  | 5.500-+01              | 1.515.+12                              | 9.480.+00              | 4,480 <sub>6</sub> +nn      | 1.545.*01                   | 5. 378=+01              |
| 9,700x+01 $1,557x+02$ $9,944x+00$ $4,342x+00$ $1,588x=01$ $5.057x+01$ $9,500x+01$ $1,578x+02$ $1,018x+01$ $4.272x+00$ $1.609x=01$ $5.799x+01$ $9,00x+01$ $1.598x+02$ $1.018x+01$ $4.272x+00$ $1.609x=01$ $5.799x+01$ $9,00x+01$ $1.598x+02$ $1.042x+01$ $4.205x+00$ $1.630x=01$ $5.943x+01$ $1.000x+02$ $1.619x+02$ $1.066x+01$ $4.139x+00$ $1.651x=01$ $6.188x+01$   | <b>γ.6ng.</b> +01      | 1.536.+02                              | 9.711.**00             | 4.414=+00                   | 1.567. 701                  | 5.517#+01               |
| 9, $6 \cup 0 \pm + 0 + 1 + 578 \pm 0 = 1 + 018 \pm 0 + 0 + 4 + 272 \pm 0 = 1 + 609 \pm 0 + 5 + 799 \pm 0 + 1 + 900 \pm + 0 + 1 + 1 + 598 \pm 0 + 0 + 1 + 0 + 4 + 205 \pm 0 + 0 + 1 + 630 \pm 0 + 5 + 943 \pm 0 + 1 + 000 \pm + 0 = 1 + 6619 \pm 0 + 0 + 0 + 4 + 139 \pm 0 = 1 + 651 \pm 0 + 6 + 188 \pm 0 + 0 + 1 + 128 \pm 0 + 128 \pm $   | 9.700+HI               | 1.557.+n2                              | 9.944.+00              | 4.342.+00                   | 1.588 ni                    | 5, o57+ni               |
| 9.900x + 01 [.598x + 02 ].042x + 01 4.205x + 00 [.630x - 0] 5.943x + 01<br>1.000x + 02 [.619x + 02 ].066x + 01 4.139x + 00 [.651x - 0] 6.188x + 01  | 9.600.+01              | 1.578.+12                              | 1.018±+01              | 4.272±+00                   | 1.609.01                    | 5./99»+ni               |
| $1 \cdot 0 = 0 + 12 = 1 \cdot 6 + 12 = 1 \cdot 0 = 0 + 12 =$  | 7,900±+01              | 1.598.+12                              | 1.042.101              | 4.2n⊅∞+nn                   | [ <b>•</b> 63∩ <b>∍</b> =∩1 | 5.943+11                |
|   | 1.000++112             | 1.619.+ 12                             | 1.066=*01              | 4.139±+nn                   | 1.651m=01                   | 6. 188#+n1              |
| $1 \cdot 100 + 12 = 1 \cdot 827 + 12 = 1 \cdot 323 + 11 = 3 \cdot 570 + 10 = 1 \cdot 863 - 11 = 7 \cdot 035 + 11$   | 1.100#+02              | 1.827 + n2                             | 1. 3230+11             | 3.576×+00                   | 863. 1                      | 7.035**01               |
| 1.200x+62 2.035x+02 1.008x+01 3.145x+00 2.076x*01 9.346*+01   | 1.200++02              | 2. 135.+12                             | 1,618,0+11             | 3. 43#+nn                   | 2.076.01                    | 9.346***                |
| 1.300++02 2.244+02 1.921+01 2.002+00 2.288+01 1.122+02  | 1.300++02              | 2.244.+02                              | 1.921=+01              | 2.002=+00                   | 2,288,01                    | 1.122=+02               |

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| DIAMETER            | VELOCITY              | RE                     | DRAG COEF               | RELAX TIME               | ,90 DIST               |
|---------------------|-----------------------|------------------------|-------------------------|--------------------------|------------------------|
| 1.400++02           | 2,451+02              | 2,260,+01              | 2,528,+00               | 2.200.001                | 1.324#+02              |
| 1.500=+02           | 2,658,+02             | 2,626=*01              | 2,303×00                | 2,/11=01                 | 1, 24   #+02           |
| 1.600±+02           | 2,864,+02             | 3,018,+01              | 2.116=+00               | 2,921,000                | 1./7/#+02              |
| 1.700++02           | 3,069+02              | 3,436,+01              | 1.958                   | 3 + 1 3 Q + D 1          | 2.016=+02              |
| 1.000=+02           | 3,275,+02             | 3,079p+0               | 1.824.+00               | 3,337,00                 | 2.274=+02              |
| 1.900=+02           | 3,474,+02             | 4,347,+01              | 1./08=+00               | 3,243,=01                | 2.244=+02              |
| 4.000=+02           | 3.072.0+02            | 4,039,+01              | 1.00/=+00               | 3,/4/#*0                 | 2+826**02              |
| 2 200 :+ 2          | $3 \cdot 0 / 3 + 0 2$ | 2,320#781<br>5 807 4a1 | 1,217,00                | 3,720#*01                | 3.119#+02              |
| 2.300++02           | 4 366 + 02            | 5.46 m + 01            | 1.441.0700              |                          | 3.4240+02              |
| 2.400.00            | 4 459 + 02            | 7.047.+01              | 1+0/1×00                | 4,000                    | 3.740#102              |
| 2.500++02           | 4.651.+02             | 7.657.+01              | 1.010#*00               | 4 743.001                |                        |
| 2,600+02            | 4.841.+02             | 8.288.+01              | 204.+00                 | 4 937                    | 4 4 4 6 4 4 9 2        |
| 2.700++02           | 5.029.+02             | 8,942,+01              | 1,42078700<br>1 1584400 | 5,129,*01                | 5 1000+02              |
| 2.800+02            | 5.216.+12             | 9.617.+01              |                         | 5.319.mm()               | 5.4630+02              |
| 2.900++02           | 5.4nl+02              | 1.031.0+02             | 1.079n+00               | 5.508.eni                | 5.435**02              |
| 3.000±+02           | 5.584.+12             | 1.1n3_+n2              | 1.044 <b>.</b> +00      | 5.694.*01                | - 6.214+12             |
| 3,100++02           | 5.765.+02             | 1.177.*02              | 1.012=+00               | 5.879. ni                | 6.602#+02              |
| 3,200++02           | 5,945,+02             | 1.253.+02              | 9.824                   | 6, 062 NI                | 6. 997 + 112           |
| 3,300++02           | 6,123,+02             | 1, 330.+02             | 9,551.001               | 6,244.=01                | 7. 399 + 12            |
| 5.400=+02           | 6,299 <u>+</u> +02    | 1.410=+02              | 9,297.01                | 6.424#=01                | 7.009+02               |
| 3.500++02           | 6,474,+02             | 1,492,*02              | 9,0610=01               | 6,602,=01                | 8.225=+02              |
| 3,600x+02           | 6,64/0+02             | 1,576,+02              | 8,8410=01               | 6,/78,-01                | 8,048#+02              |
| $S_* / 00 x + 02$   | $6 \cdot 0   0 + 0 2$ | 1.061.+02              | 8,030=01                | 6,953,01                 | 9, <sub>0</sub> 77¤+02 |
| ა <u>ა</u> ხცე⊭+ც2  | 6,988,+02             | 1,/49=+02              | 8,443=01                | 7,126,01                 | 9.212=+02              |
| S, Y () () # + () ∠ | 7. 150, + 02          | 1.038#+02              | 8.2000=01               | /, ∠98, = ()  <br>7, 440 | 9, 9530+02             |
| 4.000=+02           | 7, 323=+02            | 1.929.*02              | 8.093=*01               | /+ #68±* 01              | 1. 140+ 03             |
| 4 100 + 64          | 7,480,02              | 2+022=+02              | 7,934=01                | /•₽30±#0 <br>7 8±7 = 01  | 1.102**03              |
| 4 500 +02           |                       | 21100-12               | 7,7000-01               | 7 960 - 01               | 1. 13 19 + 13          |
| 4 400-+92           |                       | 2 3 1 1 - + 02         | 7.50701                 | 8 133.=01                | 1. 17/0+ US            |
| 4.500++02           | 8.134.+02             | $2.410 \pm 02$         | 7 379                   | 8,295,*01                | 1.224#₹03              |
| 4.600+02            | 8.292.+02             | 2.512+12               | 7.259 mm                | 8.456. nl                | 1.319#* 03             |
| $4.700 \pm 02$      | 8.449.+02             | 2.015+02               | 7.144 m = G1            | 8.616.01                 | 1.367*+n3              |
| 4,800++02           | 8.004.+02             | 2.7 19.+02             | 7. n35 ni               | 8,77401                  | 1.416#* 13             |
| 4.900++12           | 8,758,+n2             | 2,826.+ 02             | 6,932 <b>.</b> ni       | 8,931, ni                | 1.465#+ n3             |
| 5.000=+02           | 8,91,10+02            | 2,934,+02              | 6.833 m = 01            | 9,08701                  | 1. 2 4 4 + 13          |
| 2,100x+02           | 9,062,+02             | 3,043++02              | 6,739=01                | 9,24   01                | 1.264=+13              |
| 5.200+02            | 9,212+02              | 3,154 <b>.+</b> 02     | 6,049.001               | 9,394=01                 | 1.014=+03              |
| 5,300x+02           | 9.360.+02             | 3,267.+02              | 6,564 <b>.</b> =DI      | 9,545 <b>,*</b> 01       | 1.064#+03              |
| 2.400++12           | 9,508,+02             | 5.3810+02              | 6.48201                 | 9,696=01                 | 1.1150+03              |
| 5,500x+02           | 9.654.+02             | 3,496m+02              | 6.403=01                | 9,845×=01                | 1./66#+03              |
| 5+000=+02           | 9,799 + 02            | 3,613+02               | 6,328=01                | 9,993 <b>∺</b> ≖0∣       | 1.018#+03              |
| 2./00=+02           | 9,943,+02             | 5,732=+02              | 6,250=01                | 1.014 + 00               | 1.870#+03              |
| 2,000x+02           | 1.007.+03             | 3,052=+02              | 6, 8/01                 | 1,028=+00                | 1.755=+03              |
| 2.400+02            | 1.0234+03             | 3.973.*12              | 6.121mm01               | 1.045.+00                | 1 4744483              |

| DIAMETER                    | VELOCITA                              | RE                             | DRAG CUEF                    | RELAX TIME                 | ,98 DIST                |
|-----------------------------|---------------------------------------|--------------------------------|------------------------------|----------------------------|-------------------------|
| 6+000=+02                   | 1.037.+03                             | 4,096#+02                      | 6,05701                      | +057 <b>#</b> +00          | 2. <sub>0</sub> 27#+03  |
| $6 \cdot 100 \times + 02$   | l+051m+03                             | 4,220=*02                      | 5,996.01                     | 1+07·1#+00                 | 2. j <sup>8</sup> 0#+03 |
| 6,200×+02                   | 1,064.+03                             | 4,346=+02                      | -5 <b>,</b> 937 <u>#</u> ≞01 | • <u>0</u> 86 <b>»+</b> 00 | 2. 33=+03               |
| 0.300++02                   | 1.078.+03                             | 4.473=+02                      | 5,880=01                     | 1.100=+00                  | 2. 87=+03               |
| 0,400x+02                   | 1+044+03                              | 4,001=+02                      | 5,820,00                     | 1,1  <b>5</b> ,+00         | 2.24   = 03             |
| 0,200=+02                   | 1.1020+03                             | 4,/31,+02                      | 5,//Se=01                    | 1.127.00                   | 2.295=+03               |
| 0,000 + 02                  |                                       | 4,002,+02                      | 5,/24=01                     | 1.141#*00                  | 2.349##03               |
| 0.000+02                    | 1. 145. + 03                          | 5. (28-+-2                     | 5,070000                     | [+]29#+U[]<br>↓ (68+oo     | 2.404=*03               |
| 6 900=+u2                   | 11188+03                              | 5.263.+02                      |                              | • 00 <b>∞</b> •00          | 2.45040 [3              |
| 7.000++02                   |                                       | 5,399,+n2                      | 5 537                        |                            | 2. 568 + 63             |
| 7. 100r+n2                  | 1.184.+03                             | 5.536.+02                      | 5 494                        | 1.208++00                  | 2, 624 = 63             |
| 7.200+02                    | 1.197.+13                             | 5.675.+n2                      | 5.453                        | 1,221,+00                  | 2.679*****              |
| 7.300+02                    | 1.210.+03                             | 5.015.+02                      | 5,413,01                     | 1.234.+00                  | 2. /35== 13             |
| 7.400+02                    | 1.222.+13                             | 5,956,+02                      | 5.374=ni                     | 1.246 <u>+</u> nn          | 2.79                    |
| 7.500++02                   | 1.235.+03                             | 6,098,+02                      | 5.337.eni                    | 1,259,+00                  | 2.847=+13               |
| 7.600=+02                   | 1,247,+03                             | 6,242,+02                      | 5,3n1#*ni                    | 1,272,+00                  | 2. yn3=+n3              |
| 7.700x+02                   | 1.260.+03                             | 6,387.+02                      | 5,266p-01                    | 1,285,+00                  | 2,460*+03               |
| 7.600x+02                   | I,272,∎±03                            | 6,532.+02                      | 5,232=01                     | 1,297,+00                  | 3.016++03               |
| 7 <b>.900±+</b> 02          | 1.284.+03                             | 6,680,+02                      | 5,199=01                     | 1,309=+00                  | 3.073=+03               |
| 8.000×+02                   | 1.296.+03                             | 6,828=+02                      | 5,167.01                     | 1.322.+00                  | 3.130=+03               |
| 8.100#+02                   | 1,308,+03                             | 6,977++02                      | 5,130,001                    | •334×+00                   | 3.187*+03               |
| °•200×+02                   | 1,320,05                              | 7,128,02                       | 5,100=01                     | 1.346.+00                  | 3.2440+03               |
| 0,300#+02                   | • 33∠ m ≠ [] 3                        | 7 470 + 02                     | 5+07/2=01                    | 1,378m+00                  | 3.301**03               |
|                             | 1 347 #+ [] 3                         |                                | 5.040.0                      |                            | 3.379##83               |
|                             |                                       | 7 741 +02                      |                              | 1,3020+00                  | 3 4 10 4 13             |
| 8 7 n p + 02                | 1,307 <u>s</u> ≠03                    | 7.897.+02                      | 4,7779-01                    |                            | 3.4/4#*03               |
| 8,8n0++92                   | 1,390,+03                             | 8.054.+02                      | 4,960,000                    |                            | 3. 589. + 63            |
| 8.9nnx+02                   | 1.4n1.+n3                             | 8.212.+02                      | 4.918.01                     | 1.429.+00                  | 3.047#+n3               |
| 9.000+12                    | 1.413.+13                             | 8,371.+02                      | 4.894 <sub>m</sub> =ni       | 1•441•+00                  | 3./15**13               |
| 9.100++02                   | 424 + 03                              | 8,532,+02                      | 4.871                        | 1.452.+00                  | 3. 163=+03              |
| 9.200×+02                   | 1.435.+03                             | 8,693,+02                      | 4.848                        | 1,463=+00                  | 3.022=+03               |
| 9,300=+02                   | 1,440,+03                             | 8,855 <b>,</b> +02             | 4.020.01                     | 1,475=+00                  | 3.080=+03               |
| 9,400=+02                   | 1+45/s+03                             | 9+019++02                      | :4 <b>.</b> °0,4 <b></b> .0  | 1:486=+00                  | 3. 738-+ 03             |
| 9+200++02                   | 1.468.+03                             | 9-1830+02                      | 4,7836-01                    | 1:497:+00                  | 3, 97== 03              |
| <b>∀</b> •000 <b>±</b> +02  | 1,479,05                              | 9.349.02                       | 4./63.0                      | 1,208=+00                  | 4. 0560+03              |
| 9 • / 0 0 × + 0 2           | 490 <b>x+03</b>                       | 9+215+*02                      | 4./4.30=01                   | 1.219.0+00                 | 4.114=+03               |
| <b>∀</b> •○00 <b>x</b> +02  |                                       | 8.85. +02                      | 4./23.01                     | 1,200±00                   | 4. 1/3#+03              |
| / • 7 UU# 7 () 4<br>1. nno+ | 1 + 2   1 m T () 3<br>1 - 5 2 2 + 5 2 | 2002 +07<br>1.002 +07          | ∴ 4 • /:0™₽™ 0 ↓<br>Λ δ86    | 1+27 #T00<br>1.550 ±00     | 4,202#*[]3              |
| itutita<br>Lio Lo≂≁ ć*      | 1 - J < Co T () J                     | I + UU∠= + U3<br>I. n.Q. + n.7 | 4,000±00                     | 11720500                   | 7.27                    |
| i+uiu±+us<br>i+u20-+n3      | 1.543 +03                             | 1+017#***03<br>1-036=±03       | 4,000#*[]]                   | 1.577-+00                  | 4.4090407               |
| - 1. n3n+ n3                | 1.553                                 | 1.053_+n3                      | 4.633×**                     | 1.584.+00                  | 4.468±472               |
| ·1.040±+03                  | 1.563.+n3                             | 1. n71=+03                     | 4,0-10 <b>b</b> = ⊓ 1        | 1.594.+00                  | 4. 527#+13              |
| 1.050++10                   | 1,574 <u>m</u> +03                    | 1.088.+03                      | 4,¢ <u>n</u> û»=ni           | 1,0 <u>05</u> +00          | 4.286++13               |

| <b>DIAMETER</b>              | VELOCITY                      | RE                         | DRAG COEF                  | RELAX TIME                   | ,98 DIST          |
|------------------------------|-------------------------------|----------------------------|----------------------------|------------------------------|-------------------|
| 1,000=+00                    | 3,328,02                      | 2,192==05                  | <b>,</b> ]6(] <b>,</b> +]6 | 3,394 <u>,=0</u> 5           | 3.353##06         |
| 1.100×+00                    | 4.021.02                      | 2;913=05                   | 8,000+05                   | 4,101,=05                    | 4, y 04=06        |
| 1.200*+00                    | 4,780,-02                     | 3,777₽=05                  | 6,185=+05                  | 4,874 <u>,</u> +05           | 6,739##06         |
| I.3U0±+00                    | 5.604.02                      | 4,797, 05                  | 4,880.+05                  | 5,715==05                    | 9,,,50,⊭≖16       |
| 1.400=+00                    | 6,493 m 02                    | 5,986 <u>m</u> =05         | 3,917=+05                  | 6,622,05                     | 1.284##05         |
| 1.500++00                    | .7,448 <sub>0</sub> +02       | 7,357.05                   | 3,192=+05                  | 7,596, <b>=</b> 05           | 1.090==05         |
| 1,600=+00                    | 8,469,-02                     | 8,922,05                   | 2,636,+05                  | 8,636p+05                    | 2.1870-05         |
| 1.700×+00                    | 9,555 <sub>0</sub> =02        | 1.070##04                  | 2,2010+05                  | 9,744.05                     | 2,785==05         |
| 1.800*+00                    | +07 <b> </b> ₩=Q              | 1,269.=04                  | ,857 <b>+</b> 05           | 1,092,04                     | 3.499=05          |
| 1.400*+00                    | 1:192:01                      | 1.492.04                   | <b>.</b> 582 <b>.</b> +05  | 1.216p=04                    | 4.3410-05         |
| 2.000**00                    | +321±=0                       | 1.739m=04                  | ,358 <b>∍</b> ≠05          | ,347 <u></u> =04             | 5.3270005         |
| 2.100*+00                    | ,455 <u>m</u> =0              | 2.012=04                   | , 74 <b>#</b> +05          | 484•04                       | 6.472=05          |
| 2,200*+00                    | 1.597.01                      | 2.313.04                   | 1,022#+05                  | 1,628,=04                    | 7./92==05         |
| 2.300×+00                    | <sub>1</sub> ,745 <u>⊭</u> #0 | 2.642=04                   | 8,956+04                   | 1,779=04                     | 9.304==05         |
| ∠•400×+00                    | <b>,899∍≖0 </b>               | 3,0010=04                  | 7,890 <b>m</b> +04         | ,937 <b>∞</b> =04            | 1.103=04          |
| 5.200x+00                    | 2+060=01                      | 3,39   = 04                | 6,986=+04                  | 2,101=04                     | 1,298##04         |
| 2.000++00                    | 2,228,01                      | 3,814 <b>=</b> 704         | 6.212#+04                  | 2,272=04                     | 1.517=04          |
| 2./00=+00                    | 2,402=*01                     | 4,270=04                   | 5.554.404                  | 2.449.0-04                   | 1.1640004         |
| 2.800=+00                    | 2.282.01                      | 4,/0 =04                   | 4.953.+04                  | 2,033, - 04                  | 2.040=04          |
| ∠•¥00 <b>⊭</b> +00           | 2,/07,8701                    | <b>2,288</b> ∎∎04          | 4,480,0+04                 | 2,024,04                     | 2.346=94          |
| 3.000=+00                    | 2.900=01                      | 2,03 <u>9</u> 704          | 4,070,04                   | 3+022#*04                    | 2.000**04         |
| 3.100=+00                    | 3, 103, 01                    | 7 1                        | 3.0/0                      | 3+ 220p = 114                | 3.00              |
| 3.200x+00                    | 3,3/U±=[]]<br>3,592 × 51      | 7 7 97 4                   | 3.340∍◆()4                 |                              | 3,4/50=04         |
| 3.300r+00                    | 3+203#m[]                     | 7+707#*04<br>8 515 - 54    | 3.072=*04                  |                              | 3.92900 04        |
| 3,400x+00                    | 3,083m≠61                     |                            | 2,7960 + 04                |                              | 4.420#*04         |
|                              | 4, [[3]]a + []<br>4, 063 - 01 | 2, <u>60</u> /#:"U"        |                            |                              | 5 5 5 6 5 6 7 6 4 |
|                              |                               | 1.097.903                  | 2.169.4.04                 | 4.591.04                     | 6. 2020= 04       |
| 0,700x+00                    | 4 748 - DI                    | 1.188.*03                  | 2. 1020 - UH               | 4.842.*04                    | 6. 898 = 74       |
| 3 900.+00                    |                               | 1.284                      | 2.000000<br>1.0544+04      | 5.100-7.04                   | 7.55197.04        |
| 4.000++00                    | 2+001#=01<br>5.260.=01        | 1,204∎*00<br>1,385⊭≠03     | 1, 719 + n4                | 5. 364 × n4                  | 8.464             |
| 4.100**00                    | 5.526.01                      | 1.492.**n3                 | 1,596++14                  | 5.635. 04                    | 9.3410=04         |
| 4.200++60                    | 5.796.                        | I. 6 n3∎ n3                | 1.480 <b>±</b> +14         | 5.912. 14                    | 1                 |
| 4.500++00                    | 6.077.01                      | 1.721.==03                 | 1.385m+n4                  | 6.197                        | 1.ເວັກ≊♥ກິວິ      |
| .4 <b>.4</b> 00 <b>≭</b> +60 | 6.362. 11                     | 1.043. 13                  | 1. 29 3m + 14              | 6,488p=04                    | 1.238 13          |
| 4.500x+00                    | 6.654 - ni                    | 97.2. 13                   | 1.207=+04                  | 6,785 = 04                   | 1. 3540 - 13      |
| 4,600*+00                    | 6,952, - 11                   | 2.106. 703                 | 1.132.+ 14                 | 7, <u>n</u> 89, e <u>n</u> 4 | 1.478 + n3        |
| 4.7 nn++ nn                  | 7,257,eni                     | 2,246. n3                  | 1. 162.+ 14                | 7,4 <sub>00,0</sub> ,04      | 1.011.013         |
| 4;000×00                     | 7,560 m n l                   | 2. 392= 03                 | 9,960 ± n3                 | 7,7,18,04                    | 1./52≈=n3         |
| 4.900++00                    | 7,886,.01                     | 2,544.= 03                 | 9.373 m+ n3                | 8, 042p = 04                 | 1.902-03          |
| >•000 <b>∗</b> +60           | 8.2110-01                     | 2.703-03                   | 8.024 + 03                 | 8,373, - 04                  | 2. 162 03         |
| >+100 <b>∗</b> +00           | 8.54201                       | 2,868.*03                  | 8,317+03                   | 8,7 <sub>100</sub> +04       | 2.2310-03         |
| 5.200*+00                    | 8,879 - DI                    | <b>3,</b> 040 <b>∞</b> ≖03 | 7,048,+03                  | 9,054p+04                    | 2.4110-03         |
| 5,300++00                    | 9,2250001                     | 3,219µ≈03                  | 7.414.+03                  | 9,4 <sub>0</sub> 5,•04       | 2.0020003         |
| <b>5.400±+00</b>             | 9,574=01                      | 3,40403                    | 7.0110+03                  | 9,763p+04                    | 2.0030003         |
| 2.500+400                    | 9.93101                       | 3.596                      | 6.037.+03                  | 1.013.03                     | 3 160 . 03        |

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| PIAMETER                    | VELOCITY              | RE               | DRAG COEF                  | RELAX TIME                 | ,98 DIST       |
|-----------------------------|-----------------------|------------------|----------------------------|----------------------------|----------------|
| Þ.600≖+00                   | 00+ 25، 1             | 3, 196= 03       | 6,289 <b>.+</b> 03         | 1,050m=03                  | 3. 24  == 03   |
| Þ.700≠+00                   | 1.060.+00             | 4,00303          | 5,965±+.03                 | <b>,</b> 088 <b>,</b> ∞03  | 3.478≖∎03      |
| 5,800x+00                   | $1 \cdot 10^{4} = 00$ | 4.217.03         | 5,063=+03                  | 1,120,=03                  | 3,/28=03       |
| 5.900×+00                   | 1.142.+00             | 4,438. 03        | 5, 3810+03                 | I, 165 <b>∞</b> = û3       | 3. 99   0 = 03 |
| 0.000x+00                   | 1.181.+00             | 4,667. 03        | 5.117.+03                  | 1,205=03                   | 4.268== 03     |
| 6.100++00                   | 1.221.+00             | 4.9n4=n3         | 4.071.0+13                 | 1.245. 03                  | 4. 559× n 3    |
| 0.200x+00                   | 1.261.+00             | 5.149 n3         | 4.640.+13                  | 1,286 . · 03               | 4.064==03      |
| 0.30nx+00                   | 1.302.+00             | 5.402. 03        | 4.423=+13                  | 1. 528 13                  | 5. 185 - 13    |
| 6.400× 00                   | 1. 344.+00            | 5.663. n3        | 4.22n. + n3                | 1.37 n= n3                 | 5. 32100 13    |
| 6.5nox+co                   | 1.386.+00             | 5.932. 03        | 4.029×+03                  | i•4i3∞≖n3                  | 5. 874== 13    |
| 6.6nn++0n                   | 1.429.+00             | 6.209.03         | 3.049.+03                  | 1.457. • n3                | 6. 243p=n3.    |
| 6.700++00                   | 1.472.+00             | 6.495. 03        | 3.680.403                  | 1.201.03                   | 6.029#*03      |
|                             |                       | 6.79 n. = n3     | 3,521.403                  | 1.546. 03                  | 7              |
| 6 900±+00                   | 11 - 1 - 2 - 00       | 7.094.03         | 3 37 1 4 03                | 1.592.03                   | 7.454          |
|                             |                       | 7.406.03         | 7 2.39 + 63                | 1.039.03                   | 7.494          |
| /•UUU≖•UU                   |                       | 7,707.003        | 7 .05.40%                  | 1.686-03                   | 8. 54          |
| / • 100× • 00               | 1,050,00              | / / / / / # ~ US |                            |                            | 8 474 - 07     |
| 7.200**00                   |                       |                  | 2, 700 40.                 | 1 790 - 03                 | 0.004=00       |
| / • • • 0 0 × + 0 0         | 1.747.00              | 0,0400,000       | 2.040.00                   |                            | 9,000=00       |
| /•400 <b>=</b> +00          | 1,795,+00             | 0,/4/#"[]3       | 2.732.03                   |                            | 9,054=03       |
| /,⊃(()=+()()                | 1.044=+00             | 9,100,13         | 2.02/10-03                 |                            | 1.040=02       |
| /•°U0×+00                   | 1.893.+00             | 9,4/4m" ()3      | 2,220 + 03                 |                            | 1.090 02       |
| /•/00×+U0                   | 1,943,+00             | 9.052=03         | 2.427**03                  | 1,702×000                  | 1.122 02       |
| /•¤00=+00                   | 1.994.+00             | 1.024.02         | 2.33/=+03                  | 2.033=03                   | 1.510=05       |
| <b>7.</b> 900≠+00           | 2,042×+00             | 1.064. 02        | 2.250=*03                  | 2,0850=03                  | 1.2/9## 02     |
| Þ.000≠+00                   | 2.097 + 00            | 1.105.02         | 2,16/-+03                  | 2,138, - 03                | 1.345=*02      |
| 8.100 <b>*</b> +00          | 2.150.+00             | 1.146.*02        | 2, <u>0</u> 80 <b>±</b> 13 | 2.192.03                   | 1.413=02       |
| 6,200*+00                   | 2.203-+00             | 1,189.02         | 2, <u>01</u> 3**D3         | 2,246, 03                  | 1.484=02       |
| 8.300×+00                   | 2,25/0+00             | 1,2330-02        | 1.942=+03                  | 2. S <sub>Q</sub>   ≈ ° QS | 1.220 ** 02    |
| 8,400×+00                   | 2.511.+00             | 1,278,02         | , <sup>573</sup> ∎+03      | 2.357. 03                  | 1.034=*02      |
| p">n0*+00                   | 2,366,+00             | 1. 324= 02       | •°0° <b>∍</b> +03          | 2.413.03                   | 1.1130=02      |
| 8.000x+00                   | 2,422+00              | 1.372× 02        | .746.+03                   | 2:47 0= 03                 | 1.1950=02      |
| 6./00 <b>≠</b> +00          | 2.479=+00             | 1.420="02        | i, 687,∎+ 03               | 2, 528, = 03               | 1.080-05       |
| o,o()≖+()                   | 2,536,+00             | 1,469,02         | •03  <b>¤</b> *83          | 2. 286 . 03                | 1.767=02       |
| ¤,∀00≠+00                   | 2,593,+00             | 1. 20. 20.       | 1.577.+03                  | 2.645. 03                  | 2. u58×* 02    |
| 9.000×+00                   | 2,652+00              | 1,57 02          | 1,525,+03                  | 2. 104. * 03               | 2.152=02       |
| ¥•100±+00                   | 2.711.+00             | 1.624.02         | 1.475×03                   | 2.764=03                   | 2.249=02       |
| 9.200=+00                   | 2,770+00              | 1.678.02         | 1.428.+03                  | 2,0 <u>25,</u> •03         | 2.3490-02      |
| 4.500x+00                   | 2.831.+00             | 1.733= 02        | 1.383.+03                  | 2,087,03                   | 2.453==02      |
| Y.400=+00                   | 2,892.+00             | 1.790-*02        | +339×+D3                   | 2,949,=03                  | 2. 260 ** 02   |
| 9.500x+00                   | 2,953.+00             | 1.847. 02        | 1.298.+03                  | 3.012=03                   | 2.070=02       |
| 9,600x+00                   | 3.015.+00             | 1,906,-02        | 1.250 .+ 03                | 3,075, 03                  | 2.184=02       |
| 4.700±+00                   | 3. 07.8 + 00          | 1,966. 02        | 1.220-+03                  | 3. 139. 03                 | 2.701=02       |
| 9 <b>,8</b> 0 <b>n</b> ⊭+00 | 3.142.+00             | 2.027.02         | 1.183.+n3                  | 3,214.03                   | 3. 123= 02     |
| 9,900±+00                   | 3.206 + nn            | 2,090. 102       | 1. 148 .+ n3               | 3.269. 03                  | 3. 147= 02     |
| 1.000x+01                   | 3,27 l + nn           | 2.154. 12        | 1.114=+n3                  | 3, 335 13                  | 3.276== 02     |
| · ]• ['0.0±+8.1             | 3.953.+00             | 2.863 = n2       | 8.389.+02                  | 4.031.0003                 | 4.192== 02     |
|                             |                       |                  |                            | - (- U-                    |                |

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| DIAMETER           | VELOCITY                          | RE .                            | DRAG COEF          | RELAX TIME   | ,90 DIST                                |
|--------------------|-----------------------------------|---------------------------------|--------------------|--------------|---|
| 1,200±+01          | 4,698,+00                         | 3,713,+02                       | 6.479.+112         | 4.79103      | 6./81×=02                               |
| 1.300±+01          | 5,506,+00                         | 4,713=02                        | 5.111.02           | 5,615,0=03   | 9.33==02                                |
| 1.400*+01          | 6,375 <u>0</u> +00                | 5,877,02                        | 4.106.+02          | 6,501=03     | 1.254=01                                |
| 1.500*+01          | 7,305,+00                         | 7,2150-02                       | 3,351=+02          | 7.449.=03    | 1.052                                   |
| 1,600=+01          | 8,294.+00                         | 8,738=702                       | 2.773.+02          | 8,458, 03    | 2.137=01                                |
| 1.700×+01          | 9,341,+00                         | ,046∍≂0                         | 2,323.+02          | 9,525,03     | 2.122.001                               |
| 1.800=+01          | 1.044.+01                         | 1,238.01                        | 1,968.+02          | 1.06502      | 3.4190=01                               |
| 1.700x+01          | •   • 0 <b>»</b> + 0              | 1,452×=01                       | 1,683,+02          | 1.18302      | 4.242==01                               |
| 2.000+01           | 1.282×01                          | 1,088="0                        | 1,452=+02          | 1.307.02     | 5.206**01                               |
|                    | [+400»*0]                         |                                 | 1.2030+02          | 1,436,02     | 6,325=01                                |
|                    |                                   | 2,200±01                        | 1.10/**02          | 1,270=02     | 7.015                                   |
|                    | • 0 / 0 <u>+</u> 0                | 2,238=01                        | 9,//[=+0           | 1+/09=02     | 9•⊎92 <b>≖</b> ≢0∣                      |
| 2.500++01          |                                   |                                 | 8.07/=+01          | 1,052,02     | 1.077=+00                               |
|                    | 10,2010+01                        | 3 6 4 - 01                      | /,/5 #+0           | 2,000=*02    | 1.2570+00                               |
|                    | 2. 264. + 01                      | 0,014 <b>6</b> ≉01<br>4.025.≢01 |                    | 2. 1720 - 12 | 1.450*+00                               |
| 2.800.+01          | 2,421,+01                         | 4.463.001                       | 0.20787[]          | 2, 309, 02   | 1.022=+00                               |
| 2.900=+01          | 2.581.+01                         | 4.928.701                       | 5.194.4.           | 2,400,402    | 1.805**00                               |
| 3.000+01           | 2.744.+01                         | 5.421. ni                       | 4.752m+ni          | 2,799        | 2, 120**00                              |
| 3,100++01          | 2,911,+01                         | 5.942. 1                        | 4.365.+11          | 2.968 02     | 2,00000000                              |
| 3.200x+01          | 3. 18 8. + 01                     | 6,49 n = n L                    | 4.024=+0i          | 3.141.02     | 2.455**.00                              |
| 3,300#+01          | 3,252,+01                         | 7.066mm01                       | 3.723.+01          | 3.316 12     | 3. 267 = 10                             |
| 3,400++01          | 3.424.+01                         | 7,666.=01                       | 3.461.+01          | 3,492,02     | 3.397+10                                |
| 3,500x+01          | 3.0010+01                         | 8,298, 101                      | 3.222.+01          | 3,672,02     | 3.945#+00                               |
| 3,600x+01          | 3,779.+01                         | 8,959.01                        | 3,000+01           | 3,854,=02    | 4.315=+00                               |
| 3./00=+01          | 3,960+01                          | 9,647.0                         | 2,817=+01          | 4.03802      | 4.099+00                                |
| 3,000x+01          | 4, 142=+01                        | I,U36∞+00                       | 2.043.+01          | 4,224.*02    | 5.104=+00                               |
| 3,900=+01          | 4.32/=+01                         | I.I.I.#*00                      | 2.48/.+01          | 4,4120=02    | 5, 28=+00                               |
|                    | 4, 2   3, + 0                     | 1.189.+00                       | 2,344.+01          | 4,0020002    | 5. 72 + 00                              |
|                    | 4 + 7 <u>0</u> 1 # + 0 }          | 1,207#700                       | 2.214001           | 4,/94,#02    | 6.436#+00                               |
| 4.300++01          | 4 + 07 + 4 + 0 + 5 + 084 + 0 + 01 |                                 | 2,092×+01          | 4,988,02     | 6. 9   9 = 0                            |
| 4.400++01          | 5.279.+01                         | 1, 329. + 00                    | 1. 785. + 0 I      | 5,104× 02    | 7.4230+00                               |
| 4.5n0x+01          | 5.476.+01                         | 1.623.+00                       |                    | 5,584        | 7,940=•U0                               |
| 4.600=+01          | 5.676.+01                         | 1.719.+00                       | 1.704 m + 01       | 5.788        | 0.40,58,400                             |
| 4.7 nox + 11       | 5.878 <sub>0</sub> +ni            | 1.819.+00                       | 1.625+61           | 5.995. 02    | 9. 636=+00                              |
| 4,800x+01          | 6. 184.+01                        | 1.923.+00                       | 1.548 <b>.</b> +n1 | 6.205.02     | 1                                       |
| 4.900++01          | 6.294 + 01                        | 2.031.+00                       | 1.476.+11          | 6.418 02     | 1 · · · 2 · · · · · · · · · · · · · · · |
| 5,000*+01          | 6.507.+01                         | 2,142=+00                       | 1.410+01           | 6.63502      | 1. 15 1                                 |
| 2.100=+01          | 6,723,+01                         | 2,258.+00                       | j. 347∎+ nj        | 6.856 n n2   | 1.2180401                               |
| 5,200x+01          | 6,944,+01                         | 2,378,+00                       | 1.287.+01          | 7.081.0012   | 1.286=+01                               |
| 5.300x+01          | 7, 168 - 01                       | 2,502+00                        | .231m+01           | 7,510-12     | 1. 357#+01                              |
| 5,400x+01          | 7,396,+01                         | 2,630,+00                       | ,  78±+0           | 7.542 02     | 1.43n±+ni                               |
| 5.500*+01          | 7.627.+01                         | 2.762.+00                       | 1,129,0+01         | 7,778.02     | 1. 7 A # + A I                          |
| 5,600x+01          | 7,061=+01                         | 2,099=+00                       | 1.082.+01          | 8,016,02     | 1. 28                                   |
| ⊅,7 <u>00</u> ≰+01 | 8,096,+01                         | 3,039,+00                       | 1.030.+01          | 8,256,*02    | 1.060-+01                               |

| DIAMETER                        | VELOCITY   | RE                     | DRAG COEF                 | RELAX TIME                | ,98 DIST            |
|---------------------------------|--|------------------------|---------------------------|---------------------------|---------------------|
|                                 | 0 <b>77</b>  |                        | 0.075                     | 9 <b>4</b> 05 0           |                     |
|                                 | 0,001s+01  |                        | 9,9/5,00                  |                           | + / 4   ®♥ []  <br> |
|                                 |  | 5,52/b∓U[<br>5,474 +00 | 9.001.00                  |                           |                     |
| ○+ UUU#+UI                      |  | 3 632 +05              | 9,20U≥+00<br>0 056:+00    |                           | 1                   |
|                                 | 9 10 4 4 1 1 4 4 1 1 4 4 4 1 1 4 4 4 1 1 4 4 4 1 1 4 4 1 1 4 1 1 4 1 1 | 3 747 + 00             | 8,990 = 70                |                           | 1,99/##[]           |
| - ↔ < 0.0±+01<br>- 6 - 30.0±+01 | 9,220=+01  | 3.909.+00              | 0,071#*UU                 | 20 10 - 40<br>9. 6 - 0 02 | 2. 100 - 01         |
|                                 | 9 576 4 0 L  | 4 035 + DO             | 8 531.+77                 | 9 765 - 02                | 2. 170-+01          |
| 6.500++01                       | 9,786.+01  | 4.189.+00              | 0,001##00<br>8 101##00    | 9,980,02                  | 2. 167              |
| 0.0nv+cl                        | 9,998,+01  | 4.345.+00              | 7.681.stoo                |                           | 2.465#*01           |
| 6.7no++01                       | 10.02  | 4.5.4.*.00             | 7 679 4 60                |                           | 2. 764+01           |
|                                 | 1.042.+02  | 4.667.+00              | 7.472+00                  | *U∾1#°0 <br> •063m≖n      | 2.066#*81           |
| 0 + -00 + 01                    | 1,064,+02  | 4.032.+00              | 7.281.+00                 | 1.085                     | 2. 17               |
| 7.000++01                       | 1,085,+02  | 2.000.+00              | 7 099 + 00                | 1. 1.0.0 0.1              | 2. 876+11           |
| 7.100.+01                       | 1.106+02   | 5.172.+no              | 6.924»+nn                 | 1.128                     | 2. 9840+01          |
| 7.2nn+++1                       | 1,128,+02  | 5.346 + nn             | 6.757 + nn                | 1.150.01                  | 394.+ n 1           |
| 7.3nn+n1                        | 1.149.+02  | 5,524,+00              | 6.597 <b>.</b> +00        | 1.172m=01                 | 3.206#+01           |
| 7.4nos+at                       | 1.171.+02  | 5.7n5.+nn              | 6.444 <b>±</b> +nn        | 1.194                     | 3.32n#+n1           |
| 7.5nnx+n1                       | 1.192.+02  | 2•888 <b>∞</b> •∩⊓     | 6.297 <b>.</b> +nn        | 1. < 16 mm n 1            | 3.437++11           |
| 7.608.+01                       | 1.214.+02  | 6 n75 + nn             | 6.150±+nn                 | 1.238 . • n1              | 3.555**11           |
| 7.700++01                       | 1.230 + 12   | 6.265.+00              | 6.020±+00                 | 1.26 n. = n l             | 3.075×+11           |
| 7,800++01                       | 1,257 + 02   | 6.457.+00              | 5.890=+00                 | 1.282. ni                 | 3.198++11           |
| 7,900x+11                       | 1.279.+02  | 6,653,+00              | 5,764±+nn                 | 1. 5n4=n1                 | 3. 922#+ni          |
| 6.000x+01                       | 1.301.+02  | 6,852.+00              | 5.044.+00                 | 1,326p=01                 | 4. 149 * 11         |
| 6.100x+01                       | 1.322++02  | 7,054,+00              | 5,528.+00                 | 1.349 m = D1              | 4.177=+01           |
| 8.200=+01                       | 1.344.+02  | 7,259,+00              | 5.410.+00                 | 1,371=01                  | 4.307#+01           |
| 8,300x+01                       | 1,366=+02  | 7,466.400              | 5.300=+00                 | 1.393p=01                 | 4.440+01            |
| 8,408≠0I                        | 1,388 <sub>2</sub> +02   | 7,677 <b>,</b> +00     | 5,204=+00                 | 1,415m=D1                 | 4. 574 + 01         |
| 8.500=+01                       | 1.410.+02  | 7,891#*00              | 5.104.+00                 | 1,438,01                  | 4./  #+0            |
| b,000#+01                       | 1,432 + 02   | 8,108,+00              | 5.007=+00                 | •460 <b>=</b> 0           | 4.549=+01           |
| °•/00×+01                       | 1.454±+02  | 0,328 <b>.</b> +00     | 4,913=+00                 | [+ 482x=0]                | 4. 7 0 0 + 0 1      |
| 0,000x+01                       | 1,4/0,+02  | 0,25,00                | 4,023,+00                 | ,202×70                   | 5.132**01           |
| ○• <b>&gt;</b> 00 <b>±</b> +01  | 1,490,+02  | 0,///#*00              | 4,730,+00                 |                           |                     |
| Y + U U U # + U I               |  |                        | 4.00 10 00                |                           | 5.72.54+01          |
| 2+100#*01<br>9.200+*01          | 1,0460+02  | 9.473.+00              | 4,270×100                 | 1.595                     | 5,722 m + n         |
| 71200#*01<br>9.300w*01          | 1.586.+02  | 9.7.1                  | 4.4.4.+00                 | 1, 617 m 0 1              | 5. 774 + 01         |
| 5.400 ± 01                      | 1.6n8.+02  | 9,952,+00              | 4 340 + 100               | 1.640.01                  | 6                   |
| 9,500++01                       | 1.630.402  |                        | 4.268.+00                 | 1.062-101                 | 6.185#+DI           |
| <b>Y</b> ,600 <b>x</b> +01      | 1.652.+02  | 1 044 m + 01           | .4. 195 <b>∍</b> +∩∩      | 1.085m*n1                 | 6.3430+n1           |
| 9.7nn±+n1                       | 1.074.+02  | 1 • 069 • + 01         | 4.131m+nn                 | 1.707m • D1               | 6.503#+01           |
| 9,800±+01                       | 1.090,+02  | 1.095 <b>.</b> *n1     | 4,065.00                  | 1,73n# n.1                | 6.065++n1           |
| 9.900+11                        | 1.718.+02  | 1.150*+01              | <b>4.</b> ∩ <b>1⊳+</b> ∩∩ | 1,752m=n1                 | 6.529#+n1           |
| 1.000=+02                       | 1,741=+02  | 1.146=+01              | 3,940×+00                 | 1.7.75 m + 0              | 6, 994×+n1          |
| 1.100=+02                       | 1,962,+02  | 1,421=+01              | 3,409,+00                 | 2.001.001                 | 8./56++01           |
| 1,200++02                       | 2.184.+02  | 1,7260+01              | 3.002++00                 | 2.228.01                  | 1.070-+02           |
| 1.300.+02                       | 2.406.+02  | 2.060.+01              | 2 080++00                 | 2.454-eni                 | 1. 2820+02          |

| DIAMETER            | VELOCITY                        | RE                | DRAG COEF                 | RELAX. TIME               | -+98 DIST     |
|---------------------|---------------------------------|-------------------|---------------------------|---------------------------|---------------|
| 1.400=+02           | 2,627,+02                       | 2,422+01          | 2,421,+00                 | 2,679,000                 | 1.212##02     |
| 1.500x+02           | 2,847,+02                       | 2,812,+01         | 2,208,+00                 | 2,904×=01                 | 1./57#+02     |
| 1.600*+02           | 3,066,+02                       | 3,230,*01         | 2,031=+00                 | 3,127,01                  | 2.019**02     |
| 1,700++02           | 3,284,+02                       | 3,676 <u>+</u> 01 | 1,882,+00                 | 3,348p=01                 | 2.295++02     |
| 1.800x+02           | 3,499,+02                       | 4.48.+01          | 1.754 <b>»</b> +00        | 3, 569, -01               | 2.586**02     |
| 1.900*+02           | 3.714.+02                       | 4,646=+01         | ,644 <b>#</b> +00         | 3,787 <u>,</u> -01        | 2,891++02     |
| 2.000=+02           | 3,920,+02                       | 5,170=+01         | 1,549=+00                 | 4,004p=01                 | 3.209**02     |
| 5.100*+05           | 4,136,+02                       | 5,720,+01         | 1.465.+00                 | 4,2,8,*0)                 | 3.240**02     |
| 2,200++02           | 4,345,+02                       | 6,295,+01         | <b>.</b> 391# <b>+</b> 00 | 4.43  01                  | 3,083++02     |
| 2.300=+02           | 4,552+02                        | 6,894,+01         | 1,325=+00                 | 4,642=01                  | 4.238**02     |
| 2.400x+02           | 4,75/#+02                       | 7,517,+01         | 1,260,+00                 | 4,8510=01                 | 4.005++02     |
| 2.200*+05           | 4.960.+02                       | 8,165,*01         | 1.213=+00                 | 5,058,01                  | 4,982**02     |
| 2:600*+02           | 5,161,+02                       | 8,835_+01         | , 65 <b>,+</b> 00         | 5,2630=01                 | 5,369#+02     |
| 2.700=+02           | 5,360=+02                       | 9,529=*01         | 1.122=+00                 | 5,466=01                  | 5.767+02      |
| 2.800+02            | 5,557_+02                       | 1,025,+02         | ,082⊨ <b>+</b> 00         | 5,667 <u>m</u> =01        | 6. 174=+02    |
| 2,900=+02           | 5,752,+02                       | 1.098.+02         | 1.040.+00                 | 5,866p=01                 | 6.391#+02     |
| 3.000=+02           | 5,940,+02                       | 1.174#+02         | 1.013#+00                 | 6,063# <b>0</b>           | 7.017**02     |
| 3.100*+02           | 6,13/0+02                       | 1,253=+02         | 9,024.01                  | 6,258 <b>,*</b> 01        | 7.451++02     |
| 3.200=+02           | 6,32/=+02                       | 1.333.+02         | 9.5420-01                 | 6.452.01                  | 7.893**02     |
| 3.300*+02           | 6.514.+02                       | 1,410,+02         | 9,281,01                  | 0,04 <i>3p</i> = <u>0</u> | 8.344#+02     |
| 3.400x+02           | 6,/00++02                       | 1.200=*02         | 9,037,0701                | 0,033p=0                  | 8.802##02     |
| 3,200++02           | 6,884,e+02                      | 1,28/#+02         | 8,8140=01                 | /+02 =*0                  | 9.201+05      |
| 3.000=+02           | /+06/#+02                       | •0/5m+[]2         | 8.004*                    | /+40/#*01                 | 9,740=+02     |
| 2.100+455           | 7.240.+02                       | 1. /00. 702       | 8,40/#701                 |                           | 1.025*+02     |
|                     | 7 42/ = + 02                    | 1,0000+12         | 8,227.0.01                | 7,754 - 01                | 1. 17 18 13   |
|                     |                                 |                   | 0,U2 ⊕₹[]<br>0,00 - 0,    |                           | 1, 120 × 03   |
|                     | / , / / ≥ p + U <<br>7 053 + 00 |                   |                           |                           | • /[m≠[]3     |
| 4 200 + 02          | 1,70V#+UZ                       | 2,247.+n2         |                           | 8.286. = 01               | 1. 27 [0+03   |
|                     | 8 206 402                       | 2,340 + 02        | 7,775#*01                 | 8.460                     | 1 + 27 1 + 00 |
|                     |                                 | 2 453.+02         | 7,328.=01                 | 8.633.=01                 | 1, 32344 03   |
| 4.500++02           | 8.633.+02                       | 2.558.+02         | 7.200.01                  | 8.8n4.=n1                 | 1.428**03     |
| 4.600+02            | 8.800                           | 2.665.+02         | 7.091×=01                 | 8.973 01                  | 1.481#+n3     |
| 4.700++02           | 8.964.+02                       | 2.774.+02         | 6.981.00                  | 9.141.01                  | 1. 234#+ 03   |
| 4.000+02            | 9,127,+n2                       | 2.885.+02         | 6.077.0                   | 9.308.01                  | 1. 288 + 03   |
| 4.900++02           | 9.289.+02                       | 2.997.+02         | 6.778.•ni                 | <b>9.473.</b> •01         | 1.043**03     |
| 5.000+02            | 9.449 + 02                      | 3.111+02          | 6.683                     | 9.636                     | 1.0980+03     |
| $2 \cdot 1000 + 02$ | 9.6 104 + 12                    | 3.227.+02         | 6. 59 <b>3</b> • n i      | 9.798                     | 1. 153 = n3   |
| 5.20n+ d2           | 9.766.+02                       | 3.344.+n2         | 6.5n8∞∙ni                 | 9,959. #01                | 1.009#+03     |
| 5.3no++02           | 9,922_+n2                       | 3.463.+ 12        | 6.425.                    | 1+012++nn                 | 1.865.403     |
| 5.400++02           | 1.008.+03                       | 3,583=+02         | 6.347m•ni                 | 1.0.28.+00                | 1.9220+03     |
| 5.5nn++n2           | 1. 123 + 13                     | 3.7.15=+.12       | 6,272 ni                  | 1. <u>043</u> .+nn        | 1.979±+n3     |
| 5.6nn+n2            | 1.n38_+n3                       | 3.829.+02         | 6.200=#01                 | 1.059.+00                 | 2             |
| 5.7nn±+02           | 1.053,+03                       | 3.954.+02         | 6.131×11                  | 1.0.74.+0.0               | 2. 193 + 13   |
| 5.6ma+62            | 1.168-+13                       | 4.181.412         | 6,065 <b>=</b> 01         | •089 <b>∍</b> +nn         | 2.151**03     |
| 5 9 0 0 - 94        | 1 083.+03                       | 4.208.+02         |                           | 1.105.+00                 | 2.0100403     |

| DIAMETER                        | AFFACILA                        | RE           | DRAG CUEF                            | RELAX TIME              | ,98 DIST                       |
|---------------------------------|---------------------------------|--------------|--------------------------------------|-------------------------|--------------------------------|
| 6 000 + 02                      |                                 | A (70 ) - 0  |                                      |                         |                                |
|                                 | 1 UYO B + US                    | 4,338,+02    | 5,940×01                             | 1.120.+00               | 2.268 <b>*</b> +03             |
| 0 • 100 × 102                   |                                 | 4.469=+02    | 5,8820-01                            | 1+135=+00               | 2.3270+03                      |
| ♥• < UUx + UZ Ø• < UUx + UZ     | 1.12/0+03                       | 4.001.02     | 5.020.00                             | 1.149.+00               | 2.386=+03                      |
|                                 | 4   ±   3                       | 4,/32#402    | 5.//10-01                            | $1 \cdot 164_{10} + 00$ | 2,446=+03                      |
|                                 | 1,150,+03                       | 4,0/0=+02    | 5,/19#*01                            | 1, 179 <u></u> +00      | 2,205*+03                      |
|                                 | +   / Um + () 3                 | 2,00/++02    | 5,067,001                            | 1.193,+00               | 2. 265++03                     |
| 0,000x+02                       | 1 104 + 03                      | 2, 145, + 02 | 5,020.01                             | 1.20 <sup>7</sup> **00  | 2, 025++ 03                    |
|                                 | 1, 190, + 03                    | 5,285=+02    | 5,573=01                             | 1+222++00               | 2,686#+93                      |
|                                 | 1+2120+03                       | 2,425=402    | 5,520,01                             | [,236 <b>,</b> +00      | 2.146=+03                      |
| V • 700x + 02                   | 1.222=+03                       | 2,268,+02    | 5,484,01                             | ,25 <u>0</u> ,*00       | 2.007=+03                      |
| 7 000++02                       | 1.237+ 03                       | 2:/11=*02    | 5.442.01                             | 1,264,+00               | 2. ¤68⊭+ŋ3                     |
| / • 108x + 82                   | $1 \cdot 25 \cdot 3_{10} + 0.5$ | 2,050,+02    | 5,4020-01                            | ,277 <sub>0</sub> +00   | 2.¥30¤+03                      |
| 1+ <u>200</u> ++ <u>0</u> 2     | 1,200,+03                       | o,002+*02    | 5,362.01                             | 1.291.00                | 2. 49   = 03                   |
| 7. 000 + 02                     | 1.279 + 03                      | 0,149,+02    | 5,3240001                            | 1,305×00                | 3. u53≞+ o3                    |
| / • "UDx+0<                     | 1,294,05                        | 0,298,+02    | 5,287 <u>∞</u> •0∣                   | ,3 8 <sub>₽</sub> +00   | 3.115=+03                      |
| 7,200+02                        | 1.300.+03                       | 0,448,+02    | 5,25[ <b>#</b> #0]                   | ,33  <u>+</u> 00        | 3.1770+03                      |
| 7.000+02                        | 1.3170+03                       | 0,299,+02    | 5,217,01                             | 1,345 <u>+</u> 00       | 3,239=+03                      |
| 7.100±+02                       | 1.332.+03                       | 0,/51,#02    | 5,183,01                             | 1,358.+00               | 3.302*+03                      |
| 7.000 + 02                      | 1 • 344 ± 03                    | 0,905=+02    | 5,  5  = 0                           | 1,3710+00               | 3.364=+03                      |
| /.700±+02                       | 1.35/4+03                       | /,060=+02    | 5,119=01                             | 1. 384 p+ 00            | 3.427=+03                      |
| 0.000+02                        | 1.3/0.+03                       | /,216=+02    | 5,089×=0                             | 1.397,+00               | 3.490=+03                      |
| P+100x+02                       | 1.3820+03                       | 1,373=+02    | 5.059==01                            | 1+410=+00               | 3. 553. + 03                   |
|                                 | 1.3950+03                       | /.23/#*02    | 5.030.0901                           | 1,422=+00               | 3.016**03                      |
|                                 | 1.40/.+03                       | 7,091=+02    | 5,002=*01                            | 1,435 <u>m</u> +00      | 3,079∞+03                      |
|                                 | 1+420++03                       | 1,052=+02    | 4,975=01                             | <b> ,448⊳+00</b>        | 3.143++03                      |
|                                 | 1.4320+03                       | 8,014=+02    | 4.949.01                             | 1,460=+00               | 3,8 <u>06</u> #+03             |
| 8 700 + 92                      | • 4 4 4 x + [ 3                 | 0,1//=+02    | 4. 423 01                            | 1,472,+00               | 3.¤7 <b>g</b> ≖+ŋ3             |
|                                 |                                 | 0,34   =+ 02 | 4.090.00                             | 1,485,+00               | 3. 4340+03                     |
|                                 |                                 | 0,200,+02    | 4.874.01                             | 1,497,+00               | 3.998 - 13                     |
|                                 |                                 | 0,0/3=+02    | 4,0010+01                            | 1.209 + 00              | 4. <sub>0</sub> 62 <b>+</b> 13 |
| 7 • UUUx • U4<br>9 - 100 - + 02 | 1 492 s + 03                    | 0,040+02     | 4,020, = 01                          | 1,221,+00               | 4.126=+03                      |
| 9.200++02                       | 1.515.+03                       | 9.178.+02    | 4,802, 784                           | 1, 233p+00              | 4.190=+03                      |
| 9.3nn+++2                       | 1.527.+03                       | 9: 49. +02   | 4,707,87                             |                         | 4.254=+03                      |
| 9.400+02                        |                                 | 9.531.+02    |                                      | [+ 27/p+00              | 4.3 9 * 03                     |
| 9.500+02                        | 1.55.0.+03                      | 9.694.+02    | 4.792                                | 1,580,+00               | 4,383=+03                      |
| <b>7.</b> 6nn <b>+</b> n2       | 1.561.+03                       | 9.867.+02    |                                      | 1.592.400               | 4.448                          |
| 9.7no+12                        | 572+03                          |              | 4.683                                | 1. 603 +00              | 4, 7 2 4 0 3                   |
| 5.000x+02                       | 1.583.+03                       |              |                                      | 1,00,00+00              | 4.5//#+03                      |
| <b>7.900-+</b> 02               | 1.595.+03                       | 1.040-+03    | 4,0000000                            |                         | 4,0420+03                      |
| 1.000+03                        | 1.616.+13                       | 1.057.+03    |                                      |                         | 4,/0/#+03                      |
| 1.010+13                        | 1.617.+03                       | 1.075.404    | 7+96701UI<br>2 6124001               |                         | →,//20+03                      |
| 1.020+05                        | 1,628≠n3                        | 1, 103-+03   | 4 505                                | 1.660 +00               | 4.837#* []3                    |
| 1.030±+00                       | 1.639.+13                       | 1,111,4+0,X  | 4.579                                |                         | 4.902**03                      |
| 1.040+03                        | 1.649.+03                       | 1.129.+03    | 7+77787UI                            |                         |                                |
| 1.050+03                        | 1.660-+n3                       | 1.148.+07    | 4 547                                |                         | 2·U32**03                      |
|                                 |                                 |              | <b>→</b> • / <b>→</b> / ₩ <b>=</b> U | 1,0,2,0,4,00            | ⊃•u∀/#+03                      |

| UIAMETER                           | VELOCITY               | RE                   | DRAG COEF              | RELAX TIME               | .98 DIST        |
|------------------------------------|------------------------|----------------------|------------------------|--------------------------|-----------------|
| ·000=*00                           | 3,631,=02              | 2,391=05             | 9.718=+05              | 3,703=05                 | 3. 947 06       |
| I•100≠+00                          | 4,38/1=02              | 3, 78, *05           | 7.333.0+05             | 4.4/4.00                 | 5,/74##06       |
| 1.200=+00                          | 5.214=02               | 4.120=05             | 5,667,+05              | 5,317,=05                | 8.170.0000      |
| 1.300=+00                          | 0,110,02               | 2.2330 = 02          | 4.4/30+05              | 0,2341 = 05              | 1.124==05       |
| 1.400×+00                          | /:0070=02              | 0,23(1,0)2           | 3,591×+05              |                          | 1.211=02        |
| 1.200*+00                          | 8   20 m = 02          | 0,020±*02            | 2, 920 + 05            | Ø,∠80⊭¶()2<br>0,421 - 05 | 1.9900000       |
| 1.700++00                          | 9+237##UZ              | 1.167.040            | 2,710,000              | 9,721p709                | 2.779##05       |
| . (• / UU≢ * UU<br>800 m ≠ 00      |                        | 1.384                | 2,0100,00              |                          | 4 4 9 9 9 9 5   |
| 1.900.+00                          | 1.301##01              | 1.627.714            | 1.450.05               | 1.326.*04                | 5.ilwe05        |
| 2.000+00                           |                        | 1.897 04             | 1.245++05              | 469.00                   | 6.272#*05       |
| 2.100**00                          | 1.588                  | 2.195.04             | 1. n76=+n5             | 1.019.= 14               | 7.62            |
| 2.200++00                          | 1.742                  | 2.523. 14            | 9.372.+14              | 1.776. • 04              | 9.174== 15      |
| 2.300+10                           | 1,903,01               | 2,882.=04            | 8.210=+04              | 1,941p=04                | 1. 195          |
| 2.400=+00                          | 2.072.01               | 5,274=04             | 7,232=+04              | 2.1130-04                | 1.298=04        |
| 2.500++00                          | 2.247.01               | 3,699,04             | 6.404=+04              | 2.292.04                 | 1.528==04       |
| 2.000=+00                          | 2,430.=01              | 4.160.=04            | 5,6970+04              | 2.478.04                 | 1.187=04        |
| 2,700**00                          | 2+620=01               | 4,658,*04            | 5.091.+04              | 2.672.04                 | 2. 077== 04     |
| 2.800x+00                          | 2.817=01               | 5,194.04             | 4,268=+04              | 2.873 04                 | 2.401=04        |
| 2.900#+80                          | 3.021.0-01             | 2,/69,=04            | 4.114=+04              | 3+08  <b>∞</b> =04       | 2.162=04        |
| 3.000#+UD                          | 3.232=01               | 0,389 <u>m</u> =()4  | 3./10=04               | 3.290                    | 3.102#=04       |
| 3.100#+00                          | 3,451,01               |                      | 3, 372#+04             | 3,719,004                | 3.004=04        |
|                                    |                        | 8 494 = 04           | 3,00/0+04<br>5,795_+04 | 3,749,00 04              | 4. U2 [#= 04    |
| 3.300x-00                          |                        | 0 200 = 04           | 2.750 + 04             |                          | 5 1 L L P = 04  |
| ●• <b>▼UU#</b> ▼UU<br>ふ。知un#●00    | 4,390,*01              |                      | 2 3474+04              | 4. 483                   | 5. 35 nap n4    |
| 5.000+00                           | 4.650                  | 1.102.03             | 2,150,+04              | 4.742.+04                | 6. 546= 14      |
| 3.7nn±+nn                          | 4.911m=01              | 1. 197 <u>m</u> = n3 | 1.988.+14              | 5. 009×04                | 7.3020004       |
| 3.800±+00                          | 5.180                  | 1.296. 03            | 1. c 36 + 14           | 5,282 04                 | 8.122.04        |
| 3.900+00                           | 5,455,001              | 1,4010=03            | 1.699.+14              | 5,563,-04                | 9.118**14       |
| 4.000=+00                          | 5.738. 01              | 1.511.=03            | 575 + 04               | 5,8510=04                | 9.966**04       |
| 4.100**00                          | 0.02°01                | 1,627,03             | 1.465m+04              | $6,  47_{\mu} = 04$      | 1.100**03       |
| 4.200×+00                          | 6,322==01              | 1,749.03             | <b>,</b> 362∎+∏4       | 6,450,04                 | 1.211=03        |
| 4.500×+00                          | 6+627##0I              | I.877∎®03            | ,269×+04               | 6./60.04                 | 1.30.03         |
| 4+400=+00                          | 6+940# <b>7</b> 01     | 2.0110-03            | 1+ 152++.04            | 7.0//=04                 | 1.458## []3     |
| 4,200**00                          | / • 25° • • 0          | 2,151#*03            | 1,100+04               |                          | 1.394=03        |
| 4 7 a a + 0 0                      | /+2010#0101<br>フロックーの1 | 2.29/#=03            | 0 731 + 07             | /+/.34±=04<br>8 o73 = o4 | 1.7410003       |
| <b>7.</b> 4 () () <b># +</b> () () |                        | 2,420,403            | 9,7310+03              | 8 4 9                    | 1+07/## [3<br>0 |
| 4.900**00                          | 8.6#3#=01              | 2.776                | 8 592.473              | 8,773,*04                | 2.00303         |
| '+'UU≢∓UU<br>⊅.000≠+00             | 8.95701                | 2,949.*n.3           | 8.089.+03              | 9.134.*04                | 2,428           |
| -∗000#*09<br>>.lnñ⊎*nn             | 9.310±+n1              | <b>3.129</b> n3      | 7.624 + n3             | 9,5n2x=n4                | 2.627#mnX       |
| 5.200×100                          | 9.686                  | 3.316==03            | 7.194 <b>x</b> +n3     | 9.877. • n4              | 2.039##03       |
| 5.3nn±+nn                          | 1.000±=01              | 3,511 <b>m</b> =n3   | 6.796±+n3              | n3 = م126 - n3           | 3. 63. n S      |
| 2,400x+00                          | 1.044.+00              | 3,713=03             | 6.427.+03              | 1.065.03                 | 3.3000003       |
| 2.500×+00                          | 1.085-+00              | 5,923±*03            | 6.084.+03              | 1.105=03                 | 3. 25   # # 8 3 |

| DIAMETER               | VELOCITY                 | RE             | DRAG CUEF                         | RELAX TIME                | ,90 DIST                    |
|------------------------|--------------------------|----------------|-----------------------------------|---------------------------|-----------------------------|
| 5,000x+00              | ,  23 <b>∞+</b> 00       | 33 = م   4   4 | 5,765=+03                         | ,  45 <b>m =</b> 03       | 3.016**03                   |
| 5,700x+00              | 1.163.+00                | 4,36603        | 5.468.+03                         | 1. 186 03                 | 4, 195=03                   |
| 5.800x+00              | 1.204=+00                | 4,600=03       | 5.192.+03                         | 1.228. 03                 | 4.389#=03                   |
| 5.900±+00              | 1,246,+00                | 4,841=03       | 4,933+03                          | 1.271.03                  | 4.099=03                    |
| 6.000×+00              | 1,289,+00                | 5,091==03      | 4,691±+03                         | $ , 3 4_{p} = 03$         | 5. u25== 03                 |
| ¢•100≖+00              | +332±+00                 | 5,350=03       | 4,4650+03                         | 1.358p=03                 | 5,367== 03                  |
| 0,200#+00              | 1,376,+00                | 5,617, 03      | 4,254=+03                         | 1.403.03                  | 5./27=03                    |
| 0.300#+00              | 1.420=+00                | 5,893=03       | 4.055=+03                         | 1,449=03                  | 6,105**03                   |
| 0,400=+00              | 1,460,+00                | 6,177=03       | 3.869=+03                         | 1,495=03                  | 6. 20   #= 03               |
| 0,200#+00              | 1+2 4# 00                | 6 777 - 7      | 3.094                             | 1,2420 03                 | 0.916#*03                   |
|                        |                          | 7              | 3. 527 * 03                       | 1 578 - 57                | 7.320**03                   |
| 0,700**00<br>6 808 +00 | 1,000,00                 |                | 3 <b>,</b> 0/7≌≖80<br>7,008 + -7  |                           | . /,o <u>∩</u> 4==∩3.<br>88 |
| 6,900 <b>**</b> 00     | 1.7.3.+00                | 7.738.203      | 3.2200003                         | 1,737.=03                 | 8. 76                       |
| 7.000++00              | 1.753.+00                | 8.079.003      | 0,070,400<br>0,070,403            | 1.787.•03                 | 9. 95. 03                   |
|                        | 1.8n3_+00                | 8.42903        | 2.837.*03                         | 1.839. • n3               | 9.836##03                   |
| 7.200++00              | 1.854.+00                | 8.790. 03      | 2.721.003                         | 1.891.=03                 | 1. 40.000                   |
| 7.3nn±+nn              | 1.906.+00                | 9.16n.=n3      | 2.012.013                         | 1.943.+13                 | 1. 199##02                  |
| 7.400x+00              | 1.958.+00                | 9.54103        | 2.5n8=+n3                         | 1.997. • n3               | 1.16n#=12                   |
| 7.500=+00              | 2.011.+00                | 9,932==03      | 2.409+03                          | 2.051.0013                | 1.224##02                   |
| 7,600#+00              | 2,065,+00                | 1,033=02       | 2.310=+03                         | 2,106=03                  | 1.290=02                    |
| 7,700**00              | 2.120.+00                | 1.075==02      | 2,227,+03                         | 2.161.=03                 | 1.360==02                   |
| 7,800=+00              | 2,175±+00                | I.II7#≢02      | 2,143=+03                         | 2.218.03                  | .43  <b>#</b> #02           |
| 7 <b>.</b> 908±+00     | 2,231,+00                | 1.160.02       | 2.063=+03                         | 2,275 <b>,</b> ∗03        | 1.206**02                   |
| g,000*+00              | 2,287,+00                | 1,2050-02      | 1,487 <b>m</b> +∏3                | 2,333m=03                 | 1.584##02                   |
| ¤•100≠+00              | 2.3450+00                | 1:25   = 02    | 1,915=+03                         | 2,391=03                  | 1.064==02                   |
| °•200≠+00              | 2,403,+00                | 1,297=02       | 1.040m+03                         | 2,450=03                  | 1./48##02                   |
| Þ.300±+00              | 2.461.+00                | 1,345.02       | 1.780=+03                         | 2, 2   0, = 0.5           | 1.034=02                    |
| 0,400±+00              | 2,221+00                 | 1:094=02       | ,/  <sup>0</sup> »+[]3            | $2 \cdot 2 /  _{B} = 0.5$ | 1.924==02                   |
|                        | 2,201,0+00               | 1,440,02       | 1.020=+03                         | 2, 0.32 = 0.3             | 2.01/0=02                   |
| 9.700 <b>*</b> +00     | 2.703.+00                | 1.549.=02      | ,001≠¶3<br>  547=+03              | 2, 757 = 03               |                             |
| 5.8nn+nn               | 2,766_+nn                | 1.603.702      | 495.***                           | 2.820.*03                 | 2. 1640.02                  |
| 8.980±+00              | 2.829.+00                | 1.058. n2      | 1.446 <sub>m</sub> +n3            | 2.884                     | 2.423++02                   |
| 9.000×+00              | 2.892.+11                | 1.71.4. 02     | 1.398.+13                         | 2.949. 03                 | 2. 34 . 12                  |
| ¥.108#+00              | 2.957.+00                | 1,772, 12      | 1.353 <b>≞</b> +n3                | 3,015,0=03                | 2.048#= 12                  |
| 4,200×+00              | 3. 022.+00               | 1,830=02       | 1,310m+03                         | 3,08   = 03               | 2.166=02                    |
| 9.300=+00              | 3.087.+00                | 1,09 02        | 1,268.+03                         | 3, 148, - 03              | 2,888**02                   |
| ¥•400±+00              | 3.154.+00                | 1.952=702      | 1.220.+03                         | 3,216=03                  | 3.014==02                   |
| 7.200*+00              | 3,221,#*00               | 2,015=*02      | 1.190=+03                         | 3,285p=03                 | 3.144=02                    |
| 7+000#+00              | 3+289+00                 | 2.079.02       | 1.1.54=13                         | 3, 554. = 13              | 3.278==02                   |
| 7./00#+00              | 3,35/=+00                | 2+144=02       | 1.1.90+03                         | 3,424,=03                 | 3.416==02                   |
| Y,000#+00              | 5,420,+.00               | 2+211=02       | 1.082.4.03                        | 3,494,=03                 | 3. 259= * 02                |
| × · × 00 = + 00        | 5,490±+00<br>2 547 + c - | 2.2/90702      | .   • <u>0</u> ⊅ ∿ ≈ + <u>0</u> 3 | 3,209 m = 03              | 3./06==02                   |
| I+000×+01              | 3.20/#*00                | 210470702      | -1.0220-03                        | 3, U3/p7 B3               | 3+ 577**02                  |
| ↓↓↓↓↓↓#★↓!↓            | ન ન ગા ા છ ₹ 0 0         | J 1222 UZ      | 1.0200405                         | ₩+ 370 <b>9</b> ₹()\$     | <b>2.042#</b> #02           |



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| DIAMETER               | VELOCITY               | RE                          | DRAG COEF                 | RELAX TIME                  | .90 DIST               |
|------------------------|------------------------|-----------------------------|---------------------------|-----------------------------|------------------------|
| 1.200++01              | 5,123,+00              | 4,048,02                    | 5,945=+02                 | 5,225,*03                   | 7,9840002              |
| 1,300±+01              | 6, 113, + 11           | 5,139.02                    | 4,691,+12                 | 6,122,-03                   | 1.199==01              |
| 1.400=+01              | 6,950,+00              | 6,4n7. • 02                 | 3.770++02                 | 7.087.03                    | 1.477##01              |
| 1.500++01              | 7.962.+00              | 7.864. 12                   | 3.077.+**                 | 8.119.=13                   | 1. 945##01             |
| 1.008=+01              | 9.138.+11              | 9.522.02                    | 2.548.+02                 | 9.217.=03                   | 2.216##01              |
| 1.700.+01              | 1.018*+01              | 1.139.01                    | 2.135.+02                 | 1.038.02                    | 3.2050001              |
| 1.800++01              | 1.138.+11              | 1.348                       | 1 809-+02                 | 1.160.402                   | 4                      |
| 1.900x+01              | 1.264.+01              | 1.581.01                    | 1.548.+02                 | 1.289. 12                   | 4.995.01               |
| 2.000++01              | 1.395.+11              | 1.838.*01                   | 1.337.+12                 | 1.423p=02                   | 6.129##ni              |
| 2.100.+01              | 1.532.+01              | 2.119.***                   | 1.163.+12                 | 1.563. 12                   | 7.447                  |
| 2.200++01              | 1.675.+n1              | 2.426.11                    | 1.020.+02                 | 1.708.02                    | 8. y65                 |
| 2.300.+01              | 1.823.+01              | 2.760                       | 9'. 010=+01               | 1.859. * 02                 | 1.171#+00              |
| 2.400+01               | 1.975.+01              | 3.121                       | 8.007 <b>.</b> +01        | 2.014.02                    | 1.262####              |
| 2.200.00               | 2,132,+ni              | 3.509.01                    | 7,158,+11                 | 2.174.12                    | 1.467#+00              |
| 2.6nn++01              | 2.293.+01              | 3.926. 01                   | 6.434 + ft 1              | 2.338. = 12                 | 1.088#+00              |
| 2.700++01              | 2.458.+ni              | 4.37 i. • n i               | 5.813.+11                 | 2.507. 02                   | 1.928=+00              |
| 2.800+01               | 2,628,+01              | 4,845 <u>p</u> = <u>p</u> j | 5,277++11                 | 2.68 00 - 02                | 2.186****              |
| 2,900+01               | 2.800.+01              | 5,347. TI                   | 4.813.+11                 | 2,856. 12                   | 2.463.+ 00             |
| 5.000-+01              | 2.976,+01              | 5,879, • 0j                 | 4,407=+01                 | 3.035.02                    | 2, /59 + 10            |
| 3.100x+01              | 3,155,+01              | 6,441.001                   | 4.052.+01                 | 3,218,+02                   | 3. 174 + 00            |
| 3.200=+01              | 3.337.+01              | 7,032=01                    | 3,740+01                  | 3,403=02                    | 3.410**00              |
| 3.300±+01              | 3.522+01               | 7,6520 01                   | 3.463.+01                 | 3,59   = 02                 | 3,/66++00              |
| 5.400 + 111            | 3,7 <sub>0</sub> 7,+01 | 8,299.01                    | 3,222+01                  | 3,780,*02                   | 4.142=+00              |
| 3.500+11               | 3,896,+01              | 8,979,•01                   | 3.002=+01                 | 3,973=02                    | 4, 54 0 * 00           |
| 3,600x+61              | 4,087,+01              | 9,689=01                    | 2.000+01                  | 4,168,102                   | 4. 958 = 00            |
| 5,700x+01              | 4.281+01               | 1,043,+00                   | 2,029,0+01                | 4,366,-02                   | 5,398=+00              |
| 3,800±+01              | 4,477,+01              | I,120++00                   | 2,469#tDI                 | 4,565,-02                   | 5,859=+00              |
| 5.700*+bl              | 4,674,+01              | 1,200=+00                   | 2. 324=+01                | 4,767 <u>p</u> =02          | 6,342=+00              |
| 4,000±+01              | 4,874,+01              | 1,284=+00                   | 2,192+01                  | 4,970∞•02                   | 6.547=+00              |
| 4.100**01              | 5,07ó,+01              | 1,370 <b>+</b> 00           | 2.072.+01                 | 5,176 <u>,</u> 12           | 7,374×+00              |
| 4.200=+01              | 5,281 <u>m</u> +01     | 1.460.+00                   | 1,961.*01                 | 5,385=02                    | 7.9230+00              |
| 4.500#+01              | 5,488,+01              | 1,554 <b>+</b> 00           | ,8 <b>59</b> # <b>+</b> 0 | 5,596p=02                   | 8,494#+00              |
| 4.400=+01              | 5,697 <u>+</u> 01      | 1,6510*00                   | 1.765.+01                 | 5,810,02                    | 9. <sub>0</sub> 88#+00 |
| 4.205#+01              | 5.910+01               | 1,751#*00                   | 1,077×+01                 | 6, <u>0</u> 27 <b>,</b> "02 | 9./04**00              |
| 4.600=+01              | 6,120,+01              | 1,856,+00                   | 1,396=+01                 | 6,247=02                    | • y34#+0               |
| 4 • / 0 0 <b># +</b> 8 | 6,340 m+01             | 1,964.+00                   | 1.550++01                 | 6,4/  <b>0</b> 702          | I+100 <b>*</b> *01     |
| 4.000x+01              | 6,569,+01              | 2,076=+00                   | 1.448 <b>.</b> +.01       | 6,699#*02                   | .  69=+0               |
| 4.900=+01              | 6,796,+01              | 2.193=+00                   | 1, 38 1 <b>*</b> 0 1      | 6,9310-02                   | 1.24 0++ 01            |
| 2•009≖+01              | 7.020.+01              | 2,314=+00                   | 1.310-+01                 | 7.167.02                    | 1.313#4.01             |
| <b>2.100±</b> ≠01      | 7,263 <u>0</u> +01     | 2,439,+00                   | 1.259 == 01               | 7: 407× 02                  | 1.3880+01              |
| Þ•200±+61              | 7,505+01               | 2,269.*00                   | 1.205=+01                 | 7,051=02                    | ,466=+0                |
| 2.3U0±+111             | 7,746,+01              | 2./03.+00                   | 1,150m+01                 | 7,899=02                    | 1.246 + 01             |
| 2.400+01               | 7,995=+01              | 2,842=+00                   | 1.101 <b>.</b> +01        | 8,151a B2                   | 1,628#+01              |
| 2•200x+0               | 8,241,+01              | 2,785=+00                   | 1.054#+01                 | 8,404                       | 1.712=+01              |
| >,6U0x+UI              | 8,491#+01              | 3,131,#*00                  | 1.011×+01                 | 8.059.02                    | ./99#+0                |
| 5.700++01              | 8.739.+01              | 3.28n.+nn                   | 9./18 <b>.</b> +nn        | 8.912.02                    | 1.888#+01              |

| DIAMETER                                | VELOCITY                | RE  | DRAG COEF          | RELAX TIME                 | 198 DIST           |
|---|-------------------------|---|--------------------|----------------------------|--------------------|
| 5.000=+01                               | 8,984,+01               | 3,431=+00   | 9,356m+00          | 9,162,02                   | 1. 480++01         |
| 2.900x+01                               | 9:224:+01               | 3,283,#00   | 9.032=+.00         | Υ•Ψ()⊅⊭Ψ()2<br>Ο 434 - 00  | 2. 0/4#+01         |
|   | Y,4⊃U∞+() <br>0,661,501 |   | 8,/47#+00          | 9,030p*UZ                  | 2.1/0#*01          |
|   | 9+001∎ <b>+</b> 01      |   | 8.210.470          | 9,052#=02                  | 2.200=01           |
|   | ¥•0 7#+0                |   | 8,3738400          |                            | 2+309#*[]          |
|   |                         | 4 397.00  | 7 9 6 6 - + 0 0    | I•U≤¬∞=UI<br>I.047=0I      | 2 1781 + 1         |
| 0,700x401                               |                         | 4 49  | 7.595.400          |                            | 2.5/00+01          |
|   | 1.072+02                | 4.657.+00   | 7.483.4.7          | 1.070#*01                  | 2. 1950+01         |
| 6.700++01                               | 1 094                   | 4.827.+00   | 7 987 + 50         |                            | 2, un 8 m m l      |
| 0,800++01                               |                         | 5.001w#00   | 7,207,000          | 1.139                      | 3 2244.01          |
| 6.900+01                                | 1 139+02                | 5.177.+*00  |                    | 1.162                      | 3. (30=+0)         |
| ν, ευσ+υΙ<br>Ζ. ουσ+υΙ                  | 1.162.+02               | 5.357.+00   | 6 748 + 00         | 11102801                   | 3.258#+01          |
| 7.100.+01                               | 1,185,+02               | 5,54n,+00   | 6.583++00          |                            | 3.380#+01          |
| 7.200×+01                               | 1.208.+02               | 5.726.+00   | 6.420++nn          | 1.232. • ni                | 3.904+01           |
| 7.300+01                                | 1.231.+02               | 5.916.+00   | A. 276++nn         | 1.25501                    | 3.0300+01          |
| 7.408x+01                               | 1.254.+02               | 6. In8.+Nn  | 6.131±+nn          | 1,278,mni                  | 3.758=+ni          |
| 7.580×+61                               | 1.277.+02               | 6.3n4.+nn   | 5.993.+nn          | 1.302-+01                  | 3.889+11           |
| 7.680x+01                               | 1.300.+02               | 6.5n3 <b>∍</b> ≠∩n  | 5.861 <b>±</b> +nn | 1.325.01                   | 4.022#+01          |
| /.700×+01                               | 1.323.+02               | 6.7n6±+nn   | 5.732.+nn          | , 349 <u>m</u> =n          | 4.157#+01          |
| /.bnn=+n1                               | 1.346.+12               | 6.911m+nn   | 5.619##11          | 1.372.01                   | 4.294=+01          |
| 7,900×+01                               | 1.369.+02               | 7,120+00  | 5.49 la* nn        | 1.396m=n1                  | 4.434 * 11         |
| 8.000 <b>±</b> +01                      | 1.392.+02               | 7,332,+00   | 5,377 + nn         | 1.419×DI                   | 4.576=+01          |
| 8.100=+01                               | 1.415.+02               | 7,547,+00   | 5,268 <b>•</b> † n | 1.443. = 01                | 4,/20++01          |
| 8.200x+111                              | 1,438,+02               | 7,765=+00   | 5.162.+00          | 1.467. 01                  | 4.866+01           |
| 8.300 = + 01                            | 1,461+02                | 7,987,+00   | 5,060++00          | 1,490,=01                  | 5•u15=+01          |
| 8.400x+01                               | 1,485.+02               | 8,212#+00   | 4,962=+00          | 1.5 4. 01                  | 5. 166++01         |
| 6,500x+01                               | 1,508-+02               | 8,440=+00   | 4,060=+00          | ,538 <b>.=</b> 0           | 5.319#+01          |
| 8,000≖+01                               | 1.531=+02               | 8,671,+00   | 4,770,+00          | ,56   <b>p</b> =0          | 5.474 <b>*</b> +0  |
| 8,700x+01                               | 1,5540+02               | 8,905,+00   | 4,088 <b>,+</b> 00 | ,585 <b>,</b> ≖0           | 5,032**01          |
| 8,600 <b>*</b> +01                      | 1,578.+02               | 9,143.+00   | 4,003=+00          | ,6 <u>(</u> 9 <b>,,=</b> 0 | 5.19   + 0         |
| 6.900x+01                               | 1,001.+02               | 9,383.+00   | 4.>20=+00          | 1.033.01                   | 5,953**01          |
| <b>∀</b> •000±+01                       | 1.022.0+02              | <b>7,02/=</b> 00  | 4,441,0*00         |                            | 0,11/==01          |
| 7 • 1 0.0 # + 1) 1<br>6 - 6 a m - 6 1   | 1,040,02                | 7,074p+00   | 4.3030+00          |                            | 0,204#+01          |
| 7 • ∠ () () × + () 1                    | 1+071±+02               |   | 4,2075400          | 1+7046301                  | 6 6220+01          |
| 9 400 +01                               |                         | 1 1 1 3 3 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1                                 | 4 2 4 6 + 2 0      | 1.752                      | 6 /95++01          |
| 2 + 400x + 01                           |                         | -juoosi-u <br> .n89+n   | 4 578.+00          | 1.776                      | 6. 470**01         |
| 9.600+41                                | 11745-12                |   | 4.012.+00          | 1,00,0,00                  | 7. 47#+01          |
| 9.700++11                               |                         | 1.142.*01   | 3 949 + 00         | 1.824.01                   | 7. 126×+01         |
| - • • • • • • • • • • • • • • • • • • • | 1.812.+n2               | 1.169.+01   | 3. 897 + 00        | 1.848                      | 7, 50,20 - 01      |
| 7.900×+01                               | 1.835.+02               | 1.196±+01   | 3.620 <b>∍</b> +nn | 1.872 ni                   | 7.69i#+ni          |
| τ.ου-(υ]<br>Γ.οοο-(υ]                   | 1.859.+02               | 1.224.+01   | 3./68.+00          | 1.896                      | 7.876##01          |
| 1.100#+02                               | 2.094+02                | ן היים אות אות היים אות היים אות היים היים היים היים היים היים היים היי | 3.260p+nn          | 2 136 m 1                  | 9.846# <b>*</b> n1 |
| 1.200x+02                               | 2.329.+n2               | •¤4.1±+∩1   | 2.08 <u>0</u> .+nn | 2,375 ni                   | 1.202**02          |
| 1.300=+12                               | 2.564,+02               | 2,195,+11   | 2,574.+00          | 2.015.01                   | 1.438#+02          |

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| DIAMETER                  | VELOCITY           | RE                      | DRAG CUEF          | RELAX TIME            | ,98 DIST              |
|---------------------------|--------------------|-------------------------|--------------------|-----------------------|-----------------------|
| 1.400++02                 | 2,798_+02          | 2,579,+81               | 2.328**00          | 2,853,-01             | 1.694=+02             |
| 1,500++02                 | 3,031,+02          | 2,994.+01               | 2,120,+00          | 3,091,0=01            | 1.967#+02             |
| 1.600*+02                 | 3.262.+02          | 3,437=+01               | 1,958,+00          | 3,326,01              | 2,258++02             |
| 1.700=+02                 | 3,492,+02          | 3,908,+01               | 1.816.+00          | 3,2610=01             | 2,965+02              |
| 1,800*+02                 | 3,719=+02          | 4,408=+01               | 1.694.+00          | 3,793,*01             | 2.888**02             |
| 1.900*+02                 | 3,945,+02          | 4,936=+01               | 1,589.+00          | 4.023=01              | 3.226#+02             |
| 2.000=+02                 | 4,169=+02          | 5,491,0+01              | 1,498,+00          | 4,252,+01             | 3.578+02              |
| 2+100++02                 | 4,391.+02          | 6,072,+01               | 1,418,+00          | 4,478,01              | 3, 45+02              |
| 2,200=+02                 | 4,611.+02.         | <b>6,68<u>0</u>,</b> ≠0 | 1.347.+00          | 4,702,=01             | 4.324==02             |
| 2.300++02                 | 4,829=+02          | 7,3 3=*0                | 1,284,+00          | 4.924. 01             | 4./17++02             |
| $2 \cdot 400 \times + 02$ | 5.042.+02          | /.972.*01               | 1.5580+00          | 5;   44±=0            | 5,122**02             |
| 2.500*+02                 | 5.250,+02          | 8,656,+01               | 1.17/=+00          | 5,362.01              | 5.539#+02             |
| 2.000++02                 | 5,470+02           | 9,364=+0                | 1.132=+00          | 5,578 <sub>#</sub> •0 | 5.967#+02             |
| 2./00++02                 | 5,679,+02          | 1.010+02                | I+090=+00          | 5,791,01              | 6,406++02             |
| 2,800*+02                 | 5,880++02          | 1.085#*02               | 1,052,00           | 6,003.01              | 6.855++02             |
| 2.900=+02                 | 6,091.+02          | 1.163.02                |                    | 6,212,01              | 7.314==02             |
| 3,000×+02                 | 0,297=+02          | 1+243=*02               | 9,057=01           | 0,4 9="   <br>(       | 7. /83=+02            |
|                           | 0,490 <u>p</u> +02 | 1.320#*02               | 9,0000*0           | 0+024x*0              | 8.262=+02             |
| 3 300 +02                 |                    |                         | 9.290.00           | 7 02/07 01            | 8,7490+02             |
| 3.400++02                 | 7.087.+02          | 1,587,+02               | 9.0400000          | 7.227                 | 9,245## []2           |
| 3.500-+02                 | 7.280.+02          | 1.678-+02               |                    | 7.424.=01             | 7,749##UZ             |
| 3.6HB+H2                  | 7.472.+02          | 1.771.+02               | 8,396m##1          | 7.620.00              | 1. u78 m + 0.3        |
| 3,700++02                 | 7.061.+02          | 1.867.+02               | 8.208.01           | 7.813 <b>.</b> • 11   | 1.131#+13             |
| 3.800++12                 | 7.849.+02          | 1.964.+02               | 8.031 <b></b> ni   | 8.004.=01             | 1. 184##n3            |
| 3.400+02                  | 8,035,+02          | 2,063,+02               | 7,060,001          | 8,194,01              | 1,238++03             |
| 4.000=+02                 | 8,219+02           | 2,165=+82               | 7.710==01          | 8,381 <u>,</u> •01    | 1.293=+03             |
| 4+100++02                 | 8,401.+02          | 2,268,+02               | 7,564.01           | 8,267.01              | 1. 349 = 03           |
| 4,200*+02                 | 8,582 <u>m</u> +02 | 2,373=+02               | 7,425.01           | 8,7510-01             | 1.405+03              |
| 4.500++02                 | 8,761,+02          | 2.481.+02               | 7,295.01           | 8.934.000             | 1.461#+05             |
| 4.400=+02                 | 8,930,+02          | 2.290+02                | 7.171.01           | 1 () = a < 1   + Y    | 1.218*+03             |
| <b>7</b> ,200x+02         | 9+117#*02          |                         | 7,0220001          | 9+294± []]            | 1.7/0#+03             |
| 4.7.00.4.32               | 9,200,402          | 2.928.+02               |                    | 9.647                 | .034#+03<br> .034#+03 |
|                           |                    | 3. 044 + 02             | 6 738 meni         | 9.821.*01             | 1. 1520+03            |
| 4.900++02                 | 9.800-+02          | 3. 162.+n2              | 6 043mmm           | 9,994,201             | 1.722403              |
| 5.000++02                 | 9,968.+02          | 5.282.+02               | 6.552m=01          | 1.016st00             | 1. 720+03             |
| 2.100x+02                 | 1.013.+03          | 3.4n3=+n2               | 6.466 <b>.</b> =ni | 1.033+00              | 1.9330+03             |
| 2.200x+62                 | 1.030+03           | 3.526.+12               | 6.383±+ni          | 1,050×00              | 1. y94n + n3          |
| 5.300+02                  | 1. n46 + n3        | 3.651.+12               | 6.302.01           | 1.067.+00             | 2. 156 - 13           |
| 5,400x+02                 | 1.062.+03          | 5,778,+02               | 6,229 <u>-</u> ni  | • <u>0</u> 83∞+00     | 2.117.+03             |
| 5,500x+02                 | 1,078,+03          | 3,906,+02               | 6,157.01           | 1.100+00              | 2.18.0+03             |
| 5,600x+02                 | 1.094.+03          | 4,036=+02               | 6,08801            | 1.110.+00             | 2.242*+03             |
| 5,700*+02                 | 1.110.+03          | 4,167=*02               | 6.022.01           | 1,132,+00             | 2.305++03             |
| 5,800++02                 | 1,120,+03          | 4,300-+02               | 5,95801            | 1.148.+00             | 2.369*+03             |
| 2,900x+02                 | $ , 4 _{p}+03$     | 4,434,+02               | 5,897 <b>.</b> •01 | 1.164.+00             | 2.432++03             |

| DIAMETER               | VELOCITY                        | RE  | DRAG CUEF               | RELAX TIME                      | ,9a p∔ST                            |
|------------------------|---------------------------------|---|-------------------------|---------------------------------|-------------------------------------|
| 6,000±+02              | 1,157 <b>,+</b> 03              | 4,570=+02                                 | 5,839 <b>0=</b> 0       | <b>,  80≠</b> 400               | 2.496#+03                           |
| 6.100++02              | 1.172+03                        | 4.708.+02                                 | 5,782==01               | +195 <b>=+</b> 00               | 2, 56   =+ 03                       |
| 0.200#+02              | <u>+</u>  87 <u>+</u> 03        | 4,847.+02                                 | 5,728 <sub>#</sub> ≢ĝ   | 1+211##00                       | 2,025**03                           |
| 6.300++02              | 1.202.+03                       | 4,987,+02                                 | 5,676±=D                | 1+226+00                        | 2.090++03                           |
|                        |                                 | 2,129±≠02                                 | 5,020**0                | 1+44 +00                        | 2./55++03                           |
|                        | 1.2340+03                       | D 4/7 + 02                                | 5,2//=0                 | [ + <b>∠</b> ⊃0 ⊭ † []          | 2.0210+03                           |
| 0,000 + 02             | 1 26 L + 03                     | 2+71/#7UZ                                 | 5,2310701               | + <b>≤</b> / ∞≖00<br> -286,,+00 | 2,00/#*[3                           |
| 6.800±+02              | 1.276.+03                       | 5.711==02                                 | 5 442                   |                                 | 3. 190+03                           |
| 6.900 + 02             | 1.290.+03                       | 5.86n+a2                                  | 5.400mmni               | 1.315+00                        | 385** 03                            |
| 7.000=+02              | 1.3n4.+n3                       | 6.niiµ≠n2                                 | 5.36 <u>0</u> # 01      | 1.330.+00                       | 3. 152**n3                          |
| 7.100++02              | 1.318.+03                       | 6, 163, + 02                              | 5.321#"ni               | 1.344.+00                       | 3.219++13                           |
| 7,200=+02              | 1.332.+03                       | 6,316,+02                                 | 5,283. 01               | 1,358,+00                       | 3.286=+03                           |
| /,300#+02              | 1.340 =+ 03                     | 6,47 <sub>0=+02</sub>                     | 5,246=01                | 1. 37 3m + 00                   | 3. 353= 03                          |
| 7,400=+02              | 1,360,+03                       | 6,626+92                                  | 5,211="01               | 1,387 + 00                      | 3.421=+03                           |
| 1.200=+02              | 1.374=+03                       | 6,783,+02                                 | 5,  77, m= 0            | 1.401.400                       | 3.488=+03                           |
| /.00#+02               | 1.38/.+03                       | 0+941++02                                 | 5, 143, 01              | 1,414,+00                       | 3, 556 ** 03                        |
| / / / 00 = + 82        | 1+401+03                        | /,lol#*02                                 | 5.111.0                 | 1.428.+00                       | 3.024=+03                           |
|                        | 1+417+13                        | 7 404 + 02                                |                         |                                 | 3.092#+03                           |
| /+>UU≠+UZ              | 1.440.+03                       | 7.588.+02                                 |                         | 1.469.+00                       | 3 # 29###3                          |
| 0,000x+02              | 454+03                          | 7.753.+02                                 | 4.992 mm n l            | 1,482,+00                       | 3.898×+03                           |
| 8,200=02               | 1.467.+03                       | 7.919.+02                                 | 4.964                   | 1+496+10                        | 3.967**13                           |
| 8,300x+02              | 1.479 =+ 03                     | 8,086,+02                                 | 4.937.0-01              | 1,509=+00                       | 4, 136 * 13                         |
| 8,400++02              | 1,492,+03                       | 8,254,+02                                 | 4,911=*01               | 1.522++00                       | 4.105=+03                           |
| 8,500*+02              | 1.502+03                        | 8,424=+02                                 | 4.886. 01               | 1,535 <b>,</b> +00              | 4. 174=+03                          |
| 8,000x+02              | 1.518.+03                       | 8,594,+02                                 | 4,86201                 | 1,548,+00                       | 4.243=+03                           |
| 8.700*+02              | 1.530.+03                       | 8,766,+02                                 | 4.030.01                | 1,560+00                        | 4.313=+03                           |
| 0.000*+02              | 1. 243 + 03                     | 0, <b>7</b> 37±+02                        | 4.8 4.8                 | 1, 7/3=+00                      | 4.382#+03                           |
| Ŭ,7()(⊭+()∠<br>Ŭ,7()   |                                 | 7 • [ ] 3 <b>■</b> 7 [] 2<br>9 0 9 0 + -0 | 4,776=01                | 1,200m+00                       | 4,422#+03                           |
| ✓•UUU×+0∠<br>ダ・IOO++02 | 1,28/+03                        | 9,465,+02                                 | 4.//U#*[] <br>4.749.=01 | 1, 590, 700                     | 4,522#*83                           |
| 9.200x+82              | 1.592x+n3                       | 9.643.+02                                 | 4.728 m = 01            | 1.623n+00                       | 4.0620+03                           |
| 9.300x+02              | 1.6n4 <sub>2</sub> +n3          | 9.822.+12                                 | 4.7 n8 ni               | 1,636,+00                       | 4./32++13                           |
| 9,400x+02              | 1.616.+03                       | 1,000=+03                                 | 4.688                   | 1,648,+00                       | 4.002#+03                           |
| 9.500 + 02             | 1,628 + 03                      | 1,018=+03                                 | 4,669.=01               | 1,660=+00                       | 4.872#+03                           |
| 9,000x+02              | 1.640=+03                       | l.036±+03                                 | 4,050 <b>0</b> =01      | 1,672=+00                       | 4.942=+03                           |
| 9,700x+02              | 1,651x+03                       | 1,055=+03                                 | 4,632=01                | <b>•</b> 684 <b>»+</b> 00       | 5 • j   3 <del>*</del> <b>*</b> j 3 |
| <b>9,800±+02</b>       | 1,663,+03                       | 1.073=+03                                 | 4.014.01                | 1,096,+00                       | 5. 183*+03                          |
| <b>7,700=+02</b>       | 1.0/2.+03                       | 1.0920+03                                 | 4,59/ <b>∌</b> ≡[]      | ,/(8 <b>±</b> ≑00               | 5, 154#* 03                         |
| I+UUUx+0>              |                                 | I+ [][)≠"[]3<br>   20 + ¤3                | 4,70U#*0 <br>4 543 ==:  | 1+/170*00                       | , 2·224** [] 3                      |
| I,020,                 | •090 <u>8</u> ≠03<br>  7:₀0 ±02 | 1. 148-+03                                | 4.JOU⇒=[] <br>A 547     | 117010TUU<br>1.74%+00           | フ・2778 - []J<br>5 ・65m± n7          |
| i∎u∠u#≖u3<br>i∎u≾n⊶n3  | 1 + 7 0 7 5 7 03                | I, 167⊶±03                                | 4.532====               | 1.754-+00                       | 5,436=+13                           |
| 1.040±+03              | 1.732.4.03                      | 1.186.+03                                 | 4.517                   | 1.766.+00                       | 5. 2070+03                          |
| 1.050*+03              | 1.743.+03                       | 1,205.+03                                 | 4,502=01                | 1.777.+00                       | 5.578**03                           |



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## Table 2

#### Settling Velocity, Reynolds Number, Drag Coefficient, Relaxation Time and Acceleration–Distance as a Function of Diameter for Rigid Spheres Falling Freely in Water.

Water Data

| Temperature         | 20° C                        |
|---------------------|------------------------------|
| Pressure            | 760 mm Hg                    |
| Viscosity           |                              |
| Density             |                              |
| Particle Parameters |                              |
| Diameter            | microns (110 <sup>3</sup> )  |
| Velocity            | cm sec                       |
| Re                  | nondimensional               |
| Drag Coef           | nondimensional               |
| Relaxation Time     | sec                          |
| .98 Dist            | cm                           |
| Density             | grams cm <sup>-3</sup> (2l3) |

| DIAMETER           | VELOCITY                    | RE                 | DRAG CUEF                    | RELAX TIME   | ,9a DIST                 |
|--------------------|-----------------------------|--------------------|------------------------------|--|--------------------------|
| I•000#+00          | 5 <b>.</b> 437 <b>.</b> •05 | 5,426±=07          | 4,423++07                    | 5 <b>,</b> 544 <b>∞</b> ≠ 08   | 8./49#=42                |
| I.100×+00          | 6,579 <b>±</b> 05           | 7,222,*07          | 3,323=+07                    | 6,7 <sub>0</sub> 9,⊭08   | 1.2820-11                |
| 1.200*+00          | 7.829                       | 9.376. n7          | 2.560++07                    | 7.984× 7.8   | 1.818#711                |
| 1.300**00          | 9.189 05                    | 1.192. 16          | 2. 113.+17                   | 9.37 n= n8   | 2.506#711                |
| 1.400*+00          | 1. 160                      | 1.489.m=n6         | 1.612++07                    | 1. n87. • n7   | 3. 3730011               |
| 1.500++00          | 1.223.*04                   | 1.831.00           | 1 31 Lat 07                  | 1.248 = 07   | 4 449 - 11               |
| 1.600.+00          | 11220000                    | 2.223.#06          | 080.+07                      |  | 5 264 - 11               |
| 1.700×+00          |                             | 2,2235 00          | •∐0 <b>∪</b> m♥∐/            | 1 4 4 9 4 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7  | 7 (5-5-1)                |
| 1.00**00           |                             | 2,000 - 10         |                              |  |                          |
|                    | <u> </u> /04 m = []4        |                    | / / / 8 / - 6                | () / / / / / / / / / / / / / / / / / / /   | 7.244891                 |
| 1.700*+00          | 1,700mm [4                  | 0,7220 10          | 0,440,490                    | <b>2</b> , <b>0</b> , <b>2</b> , <b>0</b> , <b>0</b> , <b>1</b> | 1.140.4410               |
| <.000x+00          | 2+1/2=04                    | 4+94 »"[0          | 2.2220400                    | 2.2100701  | 1.411.**10               |
| 2.100 <b>*</b> +00 | 2,390 <u>m</u> = 04         | 2,025=*00          | 4.//0.+06                    | 2,445=01   | 1./15##10                |
| 2.200*+00          | 2,632,04                    | 5,778∍=06          | 4,154=+06                    | 2,684,=07  | 2.067**10                |
| 2,300=+00          | 2,876 <u>,</u> ,04          | 6,602=06           | 3,03⊅∍+06                    | 2,933n=07  | 2.47   # = 10            |
| 2.400**00          | 3,132.04                    | 7,501 <u>=</u> 06  | 3,200,+06                    | 3,194 <u>,</u> ≠07   | 2,9310-10                |
| 2.500x+00          | 3,39804                     | 8,478 <b>=</b> 06  | 2.831=+06                    | <b>3,465∞</b> ≖07  | 3.452**10                |
| 2.600=+00          | 3,675∍≈04                   | 9,537 <b>=</b> 06  | 2,517=+06                    | 3,748, = 07  | 4. 14 0                  |
| 2,700++00          | 3,964                       | I,068 <b></b> ,∎05 | 2.247 + 16                   | 4,042.07   | 4,/110+10                |
| 2,800++00          | 4.263m=n4                   | 1,191, 705         | 2. 115+16                    | 4.347 = n7   | 5.439 + in               |
| 2.900++00          | 4.573 - 14                  | 1.323 05           | 1.814 <sub>2</sub> +n6       | 4.663 - 17   | 6. 26 (s= 1 n            |
| 3,000x+00          | 4.893 <u></u> n4            | 1,465, • 05        | 1.638 + n6                   | 4,99 nm = n7   | 7.173-10                 |
| 3.100#+00          | 5.225. 14                   | 1.017 15           | 1.485 <b>±</b> +n6           | 5.328 07   | 8. 18 10 - 10            |
| 3.200±+00          | 5.56704                     | 1.778.=05          | 1.350+06                     | 5.678 n7   | 9. 292× 1 n              |
| 3.3nn++ nn         | 5.921.=04                   | 1.950.705          | 1.231n+n6                    | 6.038.07   | 15                       |
| 3.400++00          | 6.285 04                    | 2. 133. * 05       | 1,25,406                     | 6.409. = 07  | 1. 185## 09              |
| 3.500+00           | 5.550 g = 04                | 2.326.305          | 1. 032++06                   | 6.792-07   | 1. 13.00.09              |
| 3.600-+00          | 7 046 = 04                  | 2 5 3 2 7 0 5      | 9 48 0 + 05                  | 7 186. • 07  |                          |
| 5.700 + 00         | 7 443.= 04                  | 2,749, 55          | 9,40 (jat (j)<br>9,710 at of | 7,59 au # a7   |                          |
| 3.800×+00          | 7 851                       | 2,977              | 8 04/02=02                   | 7,7/10 <sup>0</sup> 107<br>8.006-∎o7   | 1,003000                 |
|                    | 8 070 = 04                  | 2,778 yz           | 7 456                        |  |                          |
|                    | 0+2/UsrU4                   | 3 477 8 65         | /,450,4705                   | 8 87 7   |                          |
|                    | 0+0772*04                   | 3740 005           |                              | 0.07 10 07   | 2.2/40007                |
|                    |                             | 4 0 2 0 7 0 5      | 6,4 0 6 + 0 5                | 0 7 <u>0</u> 7   | 2.21 1.09                |
|                    | 5, 27 m - 07                |                    | 5, 7, 00 - 05                |  | 2. /0007                 |
|                    |                             | 4 600 = 05         | 5,2036705                    | 1.073.006  | S• 040≠=0≯<br>4 137⊨= 29 |
|                    |                             |                    | <b>5</b> , 172×105           | 1. U/ 3 UO   | 3.333000                 |
|                    | 1•101 <b>»</b> •03          | 5 590 55           |                              | 1. 177 - 26  | 3,040##D¥                |
|                    | 1+1200-03                   | 5 674 - 55         | 4,249,84 []2                 |  | 3,9040009                |
| <b>7</b> •/00×+00  | • 2     <u>•</u> = ( \      | J,034m≡05          | 4,20()*())                   | 1,220,00   | 4,343##[7                |
| <b>4.000*+00</b>   | 1,200,00                    | o,001=02           | 3, 777 = []2                 | 1. 2/ / p. 00  | 4./250-07                |
| 4•700×+00          | 1.502=+05                   | 0,384,=05          | 3,/00,+05                    | 1.331=06   | 5.133#=09                |
| <b>2•000=+00</b>   | 1.359 03                    | 0,783,05           | 3.530.+05                    | 1, 386 06  | 5. 3660 - 09             |
| 2+100×+00          | 1.414±03                    | /,198.05           | 3. 34=+05                    | 1,442.000  | 0. <sub>1</sub> 26=09    |
| 2.200*+00          | 1.470=03                    | /,630=05           | 3.140,+05                    | 1,499 <b>.</b> = 06  | 6, 2 4= 09               |
| 5.300x+00          | 1.52/== 03                  | ¤,078∎*05          | 2,97   =+ 15                 | 1.257= 06  | <u>/•u31**09</u>         |
| <b>2.400=+00</b>   | 1.582 03                    | ö,544 <u>»</u> ⁼05 | 2,0040+05                    | 1,017.00   | /, , 79 • • 09           |
| 5,500×+00          | I•04⊅∎≡03                   | ¥,028 <b>∍</b> *05 | 2,059=+05                    | <b>.</b> 677 <b>⊭</b> ≢ <u>0</u> 6   | 8.157##09                |

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PARTICLE DENSITY = 2.0 GRAMS PER CUBIC CENTIMETER

| DIAMETER                    | VEFACILA                            | RE  | DRAG COEF                       | RELAX TIME                                   | ,9a DIST            |
|-----------------------------|-------------------------------------|---|---------------------------------|--|---------------------|
| 5.000×+00                   | 1.7 <sub>0</sub> 5 <u>∞</u> ≖03     | 9,529=05                                  | 2,519=+05                       | ,739, <b>⊳</b> #06                           | 8,/69==39           |
| >.700x+00                   | 1,760,-03                           | 04 ‴ م 5 0 . ا                            | 2.388 <b>#</b> +05              | . <sup>8</sup> 0  <b>..</b> 06               | 9.4140-09           |
| > <b>,</b> 800±+00          | 1.029.03                            | 1.059.04                                  | 2.267 + 15                      | 1,865m=06                                    | 1.11 <b>09</b> ==08 |
| 5.900x+00                   | 1,893=03                            | 1.114.04                                  | 2.154.+05                       | 1,93n=n6                                     | 60 a a 1 8 a a 1    |
| 6.000x+00                   | 1,957 m+ 03                         | 1,172=04                                  | 2. 140 .+ 15                    | 1,996m=06                                    | 1.156=-08           |
| 6.100x+00                   | 2.023.03                            | 1.232. 04                                 | <u>1,949,05</u>                 | 2.06306                                      | 1.236==08           |
| 9.200#+00                   | 2.09003                             | 1.293. = 04                               | ι.856∎+n5                       | 2.131m=n6                                    | 1. 31987.08         |
| 0.300±+00                   | 2.158 - n3                          | 1.357 n = n4                              | 1.769+05                        | 2.2010-06                                    | 1.4060000           |
| 6,400x+00                   | 2.227                               | 1.422×= n4                                | 1.687 <b>∍</b> +n5              | 2.271  | 1.498.000           |
| 6,500x+00                   | 2.297 03                            | 1.490.04                                  | 1.611.015                       | 2.342  | 1. 394              |
| 6,600x+00                   | 2.368 - 13                          | 1.260                                     | 1.539+05                        | 2.415.006                                    | 1.095##08           |
| 6.700x+00                   | 2.441.=03                           | 1.632.*********************************** | 1.471n+05                       | 2.489  |                     |
| 5.8µ0±+00                   | 2.514.= n3                          | 1.7 <u>n6</u>                             | 4.4.07.+.05                     | 2.564. 06                                    | 1.911.8* 08         |
| 6.900±+00                   | 2.589 - 03                          | 1.783.m= 04                               | 1.340+15                        | 2.640  | 2                   |
| 7.000x+00                   | 2.664                               | 1.861.0904                                | 1.290.+05                       | 2.7.7  | 2. 46.0 - 08        |
| 7.100x+00                   | 2.741.=03                           | 1.942. = 04                               | 1.230+15                        | 2.795.***                                    | 2, 97 2 m n 8       |
| 7.200×+00                   | 2.818 03                            | 2. n25. n4                                | 1.185.+15                       | 2,874= 16                                    | 2.4.130-18          |
| 7.300*+00                   | 2.897 - n3                          | 2.111=04                                  | 1.137 + 15                      | 2,955 - n6                                   | 2. 24 04 08         |
| 7,400×+00                   | 2.977 n 13                          | 2.199. 14                                 | 1. n92=+ n5                     | 3. n36 n6                                    | 2.082==08           |
| /.>00×+00                   | 3. n58. n3                          | 2.289. 714                                |                                 | 3.190=n6                                     | 2.83n==n8           |
| 7.600+00                    | 3. 40 03                            | 2.382.704                                 | 1.00 <sup>8</sup> ,+05          | 3,2 <sub>0</sub> 2 <sub>p</sub> = <u>0</u> 6 | 2. 985 - 08         |
| 7.7 <sub>00*</sub> +un      | 3.224 - 13                          | 2.477 - 14                                | 9,089,+n4                       | 3,287, * <u>6</u> 6                          | 3. 1450008          |
| 7.000*+00                   | 3.30 <sup>8</sup> .703              | 2,575, 04                                 | 9,321=+04                       | 3,373 <b>∞</b> ≖ <u>0</u> 6                  | 3.312=18            |
| 7,900x+00                   | 3, 393, -03                         | 2.675 <b>.</b> =04                        | 8,972 <b>+</b> 14               | 3,46 <sub>00</sub> =06                       | 3.486               |
| 8.000=+00                   | 3,48 De= n3                         | 2,778 n = 14                              | $.8, 0.39_{m}+0.4$              | 3, 548 m n6                                  | 3.667 mm n8         |
| b.100x+00                   | 3,567 03                            | 2,884,-04                                 | 8.323 = 04                      | 3,638 <sub>2+0</sub> 6                       | 3,854 = 08          |
| 8,200x+00                   | 3.650 <sub>m</sub> =03              | 2,99204                                   | 8.023 <sub>2</sub> +04          | 3,728 <sub>m</sub> =06                       | 4.048=-08           |
| 8.300*+00                   | 3,745,=03                           | 3,102,=04                                 | 7.736.+04                       | 3,819,=06                                    | 4.2500008           |
| 8.400×+00                   | 3,836 <sub>m</sub> =03              | 3,216=04                                  | 7,463,+14                       | 3.912n=06                                    | 4.459.008           |
| 8°200*+00                   | 3.928.03                            | 3.332.0*04                                | 7.203 <b>*</b> +04              | 4, <u>0</u> 06, <b>-</b> 06                  | 4.0760-08           |
| 8,600x+00                   | 4,021.03                            | 3.45   = 04                               | 6,954 <b>.+</b> 04              | 4,100=06                                     | 4.¥0 <u>0</u> **08  |
| 6./00±+00                   | 4.1150+03                           | 3,573=04                                  | 6,///+04                        | 4 <b>,</b>  96 <b>⊭</b> ≠ <u> </u> 6         | 5.1330-08           |
| 0,00*+00                    | 4,2 <u>1</u> 0=03                   | 3,698,=04                                 | 6,49 <u>1</u> =+04              | 4.293 06                                     | 5. 374= 08          |
| 8,900*+00                   | 4,360 - 03                          | 3,825 <u>m=</u> 04                        | 6,275,+04                       | 4,392 <b>=</b> 06                            | 5.023= 08           |
| • 0 0 0 <b>* *</b> 0 0      | 4,404,-03                           | 3,955¤"04                                 | 6, <sub>0</sub> 68 <b>⊾+</b> 04 | 4,49   = 06                                  | 5,38   # + 08       |
| 9•100 <b>≠</b> +00          | 4,5 <sub>0</sub> 2 <sub>m</sub> =03 | 4 <b>.</b> 089 <b>⊳</b> ⁼04               | 5,¤70 <b>»+</b> 04              | 4,59   = 06                                  | 6. 147 = B          |
| Y•200≠+00                   | 4.6020-03                           | 4,225.8704                                | 5.0810+04                       | 4,693 <u></u> ,06                            | 6,4230-08           |
| 9.3 <u>00x</u> +00          | 4,702.03                            | 4 <b>.</b> 364 <b>.</b> =04               | 5,499 <b>±+</b> 04              | 4 <b>.</b> 795 <b>⊳</b> ≖ <u>0</u> 6         | 6./ŋ7##ŋ8           |
| 9 <b>.</b> 400 <b>.</b> +00 | 4,804=03                            | 4,5 <sub>0</sub> 7∞⁼ <u>0</u> 4           | 5,320=+14                       | 4,899 <u>»</u> •06                           | 7                   |
| 9,500x+00                   | 4,90 <sup>7</sup> ,=03              | 4,652#=04                                 | 5,159±04                        | 5,004#=06                                    | 7.305#=08           |
| 9,600x+00                   | 5, <u>0 </u> 0ø*03                  | 4,500=04                                  | 5,00∞+04                        | 5 <b>,   <sub>0</sub>9∞≖</b> 06              | 7,618=08            |
| <b>9</b> ,700≠+00           | 5,115,03                            | 4,952==04                                 | 4, 047 + 04                     | 5,216,-06                                    | 7,942000            |
| 9.800×+00                   | 5,22ju=03                           | 5.107.04                                  | 4. <sup>7</sup> 00 <b>+</b> 04  | 5,325 <u>»</u> = 06                          | 8.2750-08           |
| A+A00*+90                   | 5,32 <sup>8</sup> , <b>*</b> 03     | 5,2650=04                                 | 4,55%+04                        | 5,434 66                                     | 8.019×=08           |
| 1•000 <b>**</b> )           | 5.43/0-03                           | <b>5.426</b> ∎⁼04                         | 4,424=+04                       | 5.544 × G6                                   | 8, y73#=08          |
| I• IU0≖+(;]                 | 6,578 <sub>∞</sub> =ŋ3              | /.222# 04                                 | 3.324±+04                       | 6,⁄ <sub>0</sub> 8∞≖06                       | 1.3150-07           |

| DIAMETER         | VELOCITY                    | RÉ                 | DRAG COEF             | RELAX TIME             | ,98 DIST      |
|------------------|-----------------------------|--------------------|-----------------------|------------------------|---------------|
| 1.200#+01        | 7,828,*03                   | 9.375=+04          | 2.560=+04             | 7,983,000              | 1.064##07     |
| 1,300x+01        | 9 <b>,</b> 187 <b>,</b> •03 | 1,192=03           | 2,0 4*+04             | 9.369.06               | 2, 570**07    |
| 1,400=+01        | 1,06502                     | <b>1,489∞≡03</b>   | • 0   3 <b>n +</b> 04 | 1,086,=05              | 3.460=707     |
| 1,500×+01        | 1,223=02                    | 1.831 03           | 1.3110+04             | 1.247.05               | 4, 563#=07    |
| 1.600=+01        | 1,391==02                   | 2,222==03          | 1.080 + 04            | $1, 4   9_{\mu} = 05$  | 5.911#=07     |
| 1.700++01        | 1,571,02                    | 2,665 <b>±</b> =03 | 9.00°¤+03             | 1,602=05               | 7,539##07     |
| ,800≖+0          | 1,761.02                    | 3,163=03           | 7,590=+03             | ,/96 <b>#</b> =05      | 9,481=7       |
| 1.900=+01        | 1.962.02                    | 3,720==03          | 6,455=+03             | 2.001=05               | 1. 178= 00    |
| 2:000*+01        | 2.174.02                    | 4,338.=03          | 5,535×03              | 2,210 - 02             | 1,44/#=00     |
| 2.100=+01        | 2,396 02                    | 5,022=03           | 4,782,+03             | 2,445,07               | 1./29 = 00    |
| 2.200++01        | 2,629,02                    | 5,773==03          | 4.160.+03             | 2,00                   | 2.120.00      |
| 2.300=+01        | 2,874=02                    | 0,596.03           | 3.042.+03             | 2, 730= 02             | 5.224m+00     |
| 2.400=+01        | 3,129,02                    | /,494 <u></u> ∎03  | 3,200,+03             | 3,190pe02              | 3,000 == 00   |
| 2.500*+01        | 3.394=02                    | 8,469=03           | 2.03/10+03            | 3,747                  | 3, 34   # 00  |
| 2.600**01        | 3,671.02                    | 9.225=03           | 2,223=+03             | 3,743,09               | 4, 1448 00    |
| 2.700+411        | 3,958 02                    | J, <u>0</u> 6/∍•02 | 2,254,+03             | 4,030,000              | 4.0210        |
| 2,600*+01        | 4,250,02                    | 1.189=02           | 2,0210+03             | 4,340,00               |               |
| 2+900++01        | 4,504=02                    | 1.251**05          | 1.020-+03             |                        | 7 . 57        |
| 3.000×+01        | 4.884.02                    | 1,402=02           | 1.042,0+03            | 4,700p#02<br>5 3.7.=05 | 8.910         |
| S. [00±+0]       | 2,2,7,02                    |                    | 1,4710 [3             | 5,664-= 05             | 9.53.00.06    |
| 3.200=+01        | 5, 5540 - 02                | 1.945              |                       | 6.022.05               | 78==05        |
| 3.300#+01        |                             | 2 107 = 02         | 1.132.+03             | 6.391.05               | 1.21588.05    |
| S.400**01        | 0,20/0-02                   | 2 3 9              | j, [32∞+03            | 6.77                   | 1. 165# 05    |
| 3.200×+01        | 0,040±02                    | 2.0 7.0 .02        | 1.030.000             | 7. 16 1. 7. 95         | 1. 529        |
| 3.000+01         | 7 4 6 2                     | 2,728,702          | 8 /97 + 02            | 7,562,05               | 1. / 06 88 05 |
| <b>3.700=+01</b> | 7,4(0,00)                   | 2,966,702          | B 125++ 02            | 7.974.05               | 1. 1990 - 15  |
| 5.000x+01        | 8 034 - 02                  | 3.205-202          | 7 5214+02             | 8.397 m n 5            | 2.107=05      |
| 4 000 + 01       | 8.65902                     | 3. 457. * 02       | 6. 970 + 02           | 8.830 05               | 2.333** 15    |
|                  | 0,09402                     | 3.721.402          | 6.482+102             | 9.274.05               | 2. 575= 15    |
| 4.200**01        | 9,539,02                    | 3.999. 02          | 6. 035+ 02            | 9.728= n5              | 2. 837** n5   |
| 4.300++01        | 9,995                       | 4.289 02           | 5. 6 28 + 12          | 1.019.04               | 3. 117 - 15   |
| 4.4.0            | 1. 04601                    | 4.594 - 12         | 5. 257.+ 02           | 1. n67= n4             | 3. 4 19 5     |
| 4.500++01        | 1. 09401                    | 4.912= 12          | 4.918.+12             | 1.115=04               | 3. /4 1= 05   |
| 4.6nn+n1         | 1.142                       | 5.244 02           | 4.009.+02             | 1,165=04               | 4. u86= 05    |
| 4.700++01        | 1, 192, -01                 | 5, 59 10 7 82      | 4.325=+02             | 1.210.004              | 4.454= 05     |
| 4.600+01         | 1.243,01                    | 5,953.=02          | 4.064.+02             | 1.267. 04              | 4.8460-05     |
| 4.900=+01        | 1.294.01                    | 6, 330× 02         | 3, 024.+02            | 1.320-04               | 5,264=05      |
| 5.000++01        | 1.347.+01                   | 6,722=02           | 3. 003.+02            | 1, 374 - 04            | 5,109=05      |
| 5.100*+01        | 1.401=01                    | 7.129. 02          | 3, 399.+02            | 1.428. = 04            | 6. 18         |
| 5.200=+01        | 1.4550=01                   | 7,553m+02          | 3.210++02             | 1. 484. 04             | 6.68   ** 05  |
| 5,300=+01        | 1.5   1.0 = 0               | 7,992**02          | 3.035**02             | 1.24   04              | 7.212=05      |
| 5.400=+01        | 1,568 01                    | 8,448              | 2.873.+02             | 04 <del>م</del> و99 وا | 7.//3×= 05    |
| 5.500+101        | 1,625.01                    | 8,920=02           | 2. / 23.+ 02          | 1,00/=04               | 8,30/0=05     |
| 5,600++01        | $1.684_{m} = 01$            | 9.409m 02          | 2. 283. + 02          | 1.717=•04              | 8.9940 05     |
| 5.700×+01        | 1.743 <u>.</u> 01           | 9.916= 02          | 2. 453.+ 02           | • / /8 <b>∞</b> * 04   | A. 0204 . 02  |



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| DIAMETER                     | AFFOCILA                      | RE                                  | DRAG CUEF                       | RELAX TIME                    | 98 DIST                             |
|------------------------------|-------------------------------|-------------------------------------|---------------------------------|-------------------------------|-------------------------------------|
| >.800x+01                    | 1.804=01                      | 1.044=01                            | 2,331=+02                       | 1 • 8 39 <b>•</b> 04          | I. U35# * 04                        |
| 2.900 <u>=</u> +01           | 1,862                         | 1.098.01                            | 2.2180+02                       | 1,702=704                     | 1+109##04                           |
|                              | 1+92/==01                     |                                     | 2,112,02                        | ,705p=04                      | 00#=04                              |
| C+[[[[#+[]]<br>C+200++0]     | •99U≥■0 <br>2.555.■0          | 1+412070                            | 2,010±≠02                       | 2,095,04                      | 1.2070-04                           |
| 6.3nn+el                     | 2.120                         | 1.3336701                           | 1.033.02                        | 2.162.04                      | •323⊭⊚ [] <del>4</del><br> •443⊭≡n4 |
| C.400x+01                    | 2,186,+11                     | 1.396. • n i                        | 1.752.+02                       | 2.229 n = n4                  | 1. ⊐37⊭ • 14                        |
| 6.500x+01                    | 2.252. 1                      | 1,46 ja=n j                         | 1.675.+n2                       | 2,297. n4                     | 1.035==04                           |
| 6.600x+01                    | 2.320.01                      | 1.528.01                            | 1.003=+02                       | 2,366, 04                     | i./38.=04                           |
| 6,700=+01                    | 2.389 = 01                    | 1,597 <u>m</u> =01                  | 1.535=+02                       | 2,436=04                      | .046 <b>-</b> 04                    |
| 0.800++01                    | 2,45801                       | ,668⊪⁼0                             | +47 =+02                        | 2,507.04                      | 1, 96 00 + 04                       |
| 6,900x+01                    | 2,529=01                      | 1./41.01                            | 1.411#*02                       | 2,579,04                      | 2• <sub>0</sub> 78⊭≡ 04             |
| /•000=+01                    | 2.000.01                      |                                     | 1,354=+02                       | 2.05 10 04                    | 2.2010004                           |
|                              | 2,0/2,0"()                    | •093 <u>m</u> =[]                   | 1.300=+02                       | 2,722=04                      | 2. 3200 04                          |
| /∠UU≠+UI<br>/.300++01        | 2.819-*01                     | 2.053.501                           | 1.2979702                       | 2.874 - 04                    | 2, 427=*/[4                         |
| 7.400±+01                    | 2.893                         | 2. 137. • ∩ 1                       | 1.150±+n2                       | 2.95 nm = n4                  | 2. / 25. 7.04                       |
| 7.500x+01                    | 2,968, 11                     | 2.222=01                            | 1.13.+12                        | 3.027                         | 2.0650+04                           |
| 7.600+01                     | 3.045 - 01                    | 2,309.01                            | 1.072++02                       | 3, 105×=04                    | 3. <u>µ</u> 08∞∞ 04                 |
| 1.700**01                    | 3,122=01                      | 2,399=01                            | 1.033=+02                       | 3, 183, <b>∞</b> # <u>0</u> 4 | 3.155==04                           |
| 7.800=+01                    | 3.199.01                      | 2•490="01                           | 9,964=+01                       | 3,262,04                      | 3. 3060004                          |
| (•Y08++01                    | 3,278,01                      | 2,584, 01                           | 9,0,2,0+01                      | 3, 342 = 04                   | 3.402=04                            |
| 2+000 <b>×</b> +01           | 3,37 mm 0  <br>3,437 m 0      | 2,000=01                            | 9,2°2¤401<br>8 966              | 3.5.5                         | 3.021**04                           |
| °•IUU≭≠UI<br>8-200++01       | 3,9379701<br>3,5184801        | 2,879, - 01                         | 8,065×+01                       | 3.587.704                     | 3. 453.004                          |
| -, 200 ± 101                 | 3.599                         | 2.981                               | 8.378 + ni                      | 3.67 nm = n4                  | 4. 125 # 84                         |
| 5.400× 01                    | 3,681                         | 3, <u>086, •01</u>                  | 8.115.401                       | 3,754. 04                     | 4.301=004                           |
| 8.500x+01                    | 3.764.=01                     | 3.  93 <b>.</b> = 0                 | 7,045,+01                       | 3,838,*04                     | 4.4820004                           |
| 8.600x+01                    | 3,847 = 01                    | 5,5020-01                           | 7.596.+01                       | 3,923,=04                     | 4,667 <b>∍</b> ≖ <u>0</u> 4         |
| 8.7U0x+01                    | 3.932.01                      | 3.4 4                               | 7,359∍+0                        | 4,009,04                      | 4.857**04                           |
| 0,000 <b>=</b> +01           | 4.010.01                      | 3,527,01                            | 7.132.+01                       | 4,096,04                      | 5, ∪51∞≖04                          |
| (0, 7)(0x+0)                 | 4 • 1 0 < • = 0 1             | 3.043#*[]                           | 0,910+01                        | 4, 10 3p # 04                 | 2,2200-04                           |
| 7,000±+01                    | 4,  00 ± ● ()  <br>4, 275 ± 0 | 3.882⊭≖01                           | 6 5 Lintol                      | 4 + 4/   = 04                 | 5,453## []4<br>5,061##04            |
| Y.2nn++bil                   | 4.362                         | 4. ຄມ5∞ຈາຕ1                         | 6.32 m + n 1                    | 4.449.07                      | 5.074×*04                           |
| 4.3nor+01                    | 4.450.+01                     | 4 • 13 Le = 01                      | 6.140±+01                       | 4.538 04                      | 6. <u>9</u> 10 = 0.4                |
| 9.4nn=+01                    | 4.53901                       | 4.258. 1                            | 5.960 + ni                      | 4,629 04                      | 6.313=-04                           |
| 9.500=+01                    | 4,628,=01                     | 4,388. 01                           | 5,799=+01                       | 4,720=04                      | 6. 74 0 = 04                        |
| 9,600*+01                    | 4.7 8.01                      | 4,520=01                            | 5.639=+01                       | 4.811.04                      | 6, 17 10 - 04                       |
| Y . / 00# + 01               | 4,808,000                     | 4 <b>,</b> 055 <b>⊭</b> •0          | 5,480,+01                       | 4, 9 03. * 04                 | 7. UD7. * 04 ·                      |
| 7•00±+01                     | 4,097                         | 4 / 7 2 = 0                         | 5,350 ± 0  <br>5 197 ± -        | 4,770p+04                     | 7.2490=04                           |
| 1,700×+01                    | 4,77   # 0  <br>5 083 - 01    | דויזי,<br>5 ח7סי=חי                 | <b>2</b> ,  7/₩₹0 <br>5 061 ±01 | 5 183 - 04                    | 7 146                               |
|                              |                               | ✓• U / ∠ ▷ ™ U  <br>6. 6 19 • ■ 0 1 | ⊋,ც⊻⊺ຍ≂[]}<br>3.956∞+ດ⊧         | ン。148mmの4                     | 158000014                           |
| I • 100≝ * 04<br>I • 200±+02 | ⊽∎uz∵≡∼υ!<br>7.ni8⊾∗ni        | 8,4 <u>15</u> ,411                  | 3, 185±+ni                      | 7,157,04                      | 1.383mm n3                          |
| 1.300=+02                    | 8, 043 <b>.</b> * 01          | 1.043.00                            | 2,620+01                        | 8.202.04                      | . /67 <u>m</u> = <u>0</u> 3         |



| DIAM&TER  | AFFOCILA           | RE                | DRAG CUEF                             | RELAX TIME                           | ,98 DIST                              |
|---|--------------------|-------------------|---------------------------------------|--------------------------------------|---------------------------------------|
| 1.400++02                                       | 9.099.01           | 1+271=+00         | 2.211.**01                            | 9 <b>,</b> 279 <b>,</b> ≡04          | 2.2070003                             |
| 1.500×+12                                       | 1+019+00           | 1.525.+00         | 1,889 <b>*</b> +01                    | [•039 <b>»</b> •03                   | 2./n3==n3                             |
| 1.600*+02                                       | 1.132.+00          | 1.8.08.+00        | 1.032»+ni                             | 1 • 154 = n3                         | 3. 259 = n3                           |
| $1 \cdot 7 \cdot 0 \cdot 1 = + \cdot 0 \cdot 2$ | 1.250.+00          | 2.122.+00         | 1.421.+01                             | 1.275                                | 3.4730=03                             |
| 1.800+02  | 1.375.+00          | 2.470.+00         | 1.245 <u>+</u> +ni                    | 1.402. = 03                          | 4.547.5503                            |
| 1.900×+02                                       | 1.505.+00          | 2.854.+00         | 1, 096 <b>•</b> • 01                  | 1.535.*03                            | 5. 282**03                            |
| 2.000+02  | 1.638.+00          | 3.270-+00         | 9 /43-+00                             | 1,671, 103                           | 6 79 - 03                             |
| 2.100++02                                       | 766.+00            | 3.700-+00         | 9,790240U                             | 1,07)B*00<br>1.801                   | 6 437 03                              |
| 2.200++0 <b>2</b>                               |                    | 4.107.+00         |                                       |                                      | 7 857                                 |
| 2.300.402                                       |                    | 4.569.+00         | 7 591                                 |                                      | 8 43903                               |
|   |                    | 5.057.*00         |                                       | 2,153,+03                            | 0,007=004                             |
|   |                    |                   |                                       | 2 277 - 13                           | 9,0030-00                             |
|   | 2,200,000          |                   | 0,000,000                             |                                      |                                       |
|   | 2,355,+00          |                   | 0,127=+00                             |                                      | 1.210**02                             |
| < + / UU = + UZ                                 | 2,4/0,+00          | 0,0//"+00         | 5,/20#+00                             | 2,22/2=00                            | 1.339##.[]2                           |
| 2.000+02  | 2.001.00           | /,269.+00         | 5,410×+00                             | 2,053=03                             | 1.468=02                              |
| 2.900=+02                                       | 2,722=+00          | /,887,+00         | 5,10 <sup>5</sup> **00                | 2,79,03                              | 1.004=02                              |
| 3.000×+02                                       | 2,850,+00          | 8,2310+00         | 4,8310+00                             | 2,9.06,•03                           | 1./450=02                             |
| 3,100x+02                                       | 2.974.+00          | 9,201×*00         | 4,282#+00                             | 3.033∞≖03                            | 1.893=02                              |
| 3.200++02                                       | 3,099,#*00         | 9,897 <u></u> +00 | 4,356,+00                             | 3,160,=03                            | 2. u47*=02                            |
| 3,300x+02                                       | 3,224∍+00          | 1,062=+01         | 4,150#+00                             | 3,288 <b>∞</b> ≖03                   | 2.207×=02                             |
| 3+400×+02                                       | 3,350#+00          | 1.137.+01         | 3,962=+00                             | 3.416.=03                            | 2.373**02                             |
| 3,5∐0≖∔(12                                      | 3,475,+00          | 1.214#*01         | 3,/89∞+00                             | 3,544,=03                            | 2, 545= 02                            |
| 3.600x+02                                       | 3,601=+00          | 1,294,+01         | 3.030.+00                             | 3.672.03                             | 2.1230002                             |
| 3.700++12                                       | 3,727.+00          | 1,376,+01         | 3,484,+00                             | 3,8 <sub>000</sub> ,03               | 2.9.00=02                             |
| 3.800x+02                                       | 3,852,+00          | 1.461.+01         | 3. 340 .+ 11                          | 3.929                                | 3. 1960 02                            |
| 3.9nn++12                                       | 3,978,+00          | ,548ø*∩j          | 3.222**nn                             | 4, 057× 03                           | 3. 192 . 02                           |
| 4. 000=+02                                      | 4.104+00           | 1.638m+n1         | 3.105.400                             | 4. 185m n 3                          | 3.49300 02                            |
| 4. inn++n2                                      | 4.23n+nn           | 1.731.+11         | 2.996±+nn                             | 4.313p=n3                            | 3./00**02                             |
| 4+200++02                                       | 4.350 + 10         | 1.026.+11         | 2.895.400                             | 4.442= 03                            | 3. Y 130 P n 2                        |
| 4. 3nn±+ 62                                     | 4.481.+00          | 1.923±+ni         | 2.000.00                              | 4.57                                 | 4. 32*7:02                            |
| 4.400=+02                                       | 4.607+00           | 2. n23#*n1        | 2./11=+00                             | 4.698. • n3                          | 4. 356** 02                           |
| 4• \$nn≠+ 02                                    | 4,732,+nn          | 2.125=+11         | 2.027.+00                             | 4.826= 13                            | 4. 286= 02                            |
| 4.600+02  | 4.858 + 00         | 2:230=101         | 2.549.+ 11                            | 4.954. n3                            | 4.0220-02                             |
| 4.700++02                                       | 4.983 <u>*</u> +nn | 2.337.+ni         | 2.475+00                              | 5. n8 i. n3                          | 562= 02                               |
| 4.℃nn≠+.a2                                      | 5. 1.08 + 0.0      | 2.447.01          | 2.405+00                              | 5.209.03                             | 5.5090002                             |
| 4.9 n n + 92                                    | 5.233.+00          | 2. 259. * 01      | 2. 34 Ap + AA                         | 5. 336n + 03                         | 5. 26 10 - 02                         |
| בא =00<br>ליממים + כ2                           | 5. 357.+00         | 2.673.+01         | 2 278 + 00                            | 5.463                                | 5.018=02                              |
| ントゥー <sub>ー</sub> + 82                          | 5.482.+00          | 2.790.+01         | 2 2 1 9 + 0 0                         | 5.590.03                             | 68 nm = 0.2                           |
| 2 - 2 - 4 - 4 - 2                               | 5 6 6 . + 6 6      | 2,909 + 01        | 2 163 + 00                            | 5.717                                | 6 48. 02                              |
|   |                    | 3.03.04 01        |                                       | 5.844                                | 6.6210=02                             |
| 5.400.4.4 <sup>2</sup>                          | 5 854 ± 22         | 3. 155. + 0 1     |                                       | 5.97                                 |                                       |
| 5 6 6 6 6 1 - 2                                 | UU TOTO            |                   |                                       | 6 006 m 0 <sup>3</sup>               |                                       |
|   |                    |                   |                                       | 0, U7087 U3                          |                                       |
|   |                    |                   | · · · · · · · · · · · · · · · · · · · | 0.2220 [] 3                          | 7 4/10702                             |
|   |                    | 2 4 7 4 1 b T U   |                                       | U • ′UH / p⊤ [] O<br>≮ . A 77.7° - 7 | · · · · · · · · · · · · · · · · · · · |
| 2.800**02                                       | 0.34/#+00          | 3,0/4s+01         | 1,002++00                             | 0,1473±=03                           | 0.004=02                              |
| 2• A 0 0 ≈ + 0.5                                | 6.4/De+00          | <b>℃   0 +</b> 0  | ,043»+00                              | 0, 2,48× 03                          | 0.3070-02                             |

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| DIAMETER                             | AFFQCILA.                  | RE  | DRAG COEF  | RELAX TIME                                   | ,98 DIST         |
|--------------------------------------|----------------------------|---|--|--|------------------|
| 6,000 <b>=</b> +02                   | 6,592 <u>m</u> +00         | 3,947=+01                                     | 1.8 <u>05</u> ±+00   | 6,722,03                                     | 8.676##.02       |
| 6.100.+02                            | 6,714,+nn                  | 4,087,+01                                     | 1.769**nn  | 6,84703                                      | 8, 989== 02      |
| 0.200++02                            | 6.836.+nn                  | 4,231=+11                                     | 1.735 <b>.</b> +nn   | 6,971.03                                     | 9.318**12        |
| 6.300+02                             | 6.958.+nn                  | 4.374.+11                                     | 1.7 02 + 00  | 7.095.03                                     | 9.0310=02        |
| 6.400.+02                            | 7.079.+00                  | 4.521.+01                                     | 1.670.+00  | 7.219.03                                     | 9.9590=02        |
| 6.500++02                            | 7.200.+00                  | 4.67 nu+01                                    | 1 640-+00  | 7.342 = 03                                   | 1                |
| 6 600 + 02                           | 7 326+00                   | 4.822.+01                                     |  | 7.465  | 1+ 0275001       |
|                                      | 7 . 0 2 0 8 4 0 0          | A 975 + 01                                    | • <u><u></u><u></u><br/> •<u></u><u></u><u></u><br/> •<u></u><u></u></u> | 7: 589 - 7                                   | 1.00000000       |
|                                      | 7+4416400                  |   | 1,2020700  | 7, 7, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, | 1.07/2701        |
| 0.000+02                             | 7,201,0+00                 | 2+131#*UI                                     | .252m=00   | 7 8 7 0 = 17                                 | 1.132.01         |
| 0.400*+05                            | /,080=+00                  | 2.2890 01                                     | 1.254 . 00   | 7.032.03                                     | 1.101=01         |
| /+000++02                            | 7.800»+00                  | 2,449=*01                                     | 1.204=*00  | ·/•×5%**03                                   | 1.202**01        |
| 7+100++02                            | 7,919+00                   | · <b>⊅</b> , <b>○</b>     <b>□</b> + <b>○</b> | • <sup>48</sup> 0∞ <b>*</b> 00   | 8.0/5.03                                     | ,∠38==0          |
| 1.200++02                            | 8,038,+00                  | 5,776=+01                                     | 1:457=+00  | 8,197, <b>,</b> ,,03                         | ,275×=0          |
| 7.300=+02                            | 8,150,+00                  | 5,9420+01                                     | 1,435=+00  | 8.317=03                                     | 1.31200          |
| /400=+02                             | 8,272,+00                  | 6.       <b>*</b> 0                           | 1.413.+00  | 8,438 <b>,</b> =03                           | 1.349#*01        |
| 7.500+02                             | 8,392 <b>.+</b> 00         | 6,282#+01                                     | 1,3920+00  | 8,⊅58∍≖03                                    | 1.387==01        |
| 7.600#+02                            | 8,510+00                   | 6,455 <b>±</b> *.01                           | j.372=+00  | 8,678, <b>=</b> 03                           | ,425ו0           |
| 7.700++02                            | 8,627 <b>∍</b> +ŋŋ         | 6,630,+:01                                    | ,35 <b>3∞+</b> 00  | 8,798 <u>m</u> •03                           | 1.464=01         |
| 7.800=+02                            | 8,744=+00                  | 6,807,*01                                     | 1.334+00   | 8,917 <b>#</b> #03                           | 1.2030-01        |
| 7.900#+02                            | 8,861,+00                  | 6,786,+01                                     | <b>,</b> 3 <b> 6</b> ∎≢00  | 9. 036× 03                                   | 1. 342 - 701     |
| 8,000++02                            | 8,977,+00                  | 7,167,+01                                     | 1,298,+00  | 9,154 <u>,</u> 03                            | 1, 5820-01       |
| 8,100=+02                            | 9, 193,+01                 | 7.35   + 0                                    | ,28  ∎+nn  | 9,273=• 03                                   | ,023 <b>=</b> =0 |
| b.200++02                            | 9,209,+00                  | 7,536,+01                                     | 1.264.+00  | 9,3910=03                                    | 1.063=01         |
| b, 300=+112                          | 9,324,+00                  | 7, /23, +01                                   | 1.240.+.00   | 9,5 <sub>0</sub> 8"•03                       | <b>./∩4</b> ¤⇔∩  |
| 6,4nn*+02                            | 9.439.+nn                  | 7.913p+n1                                     | 1.2350+00  | 9,626. n3                                    | 1. /46 . ni      |
| $b_{1}^{0} = 5 n n_{1} + n^{2}$      | 9,554 + nn                 | 8,104,+01                                     | 1.218+00   | 9,742, 13                                    | 1. 188 m = n1    |
| 8.000+02                             | 9.668.+00                  | 8.298.+01                                     | 1.273+70   | 9,659, n3                                    | 1.330-701        |
| 8.7nn±+n2                            | 9.782.+00                  | 8.493m+n1                                     | 1.189+00   | 9.975 n3                                     | 1.073.0001       |
| 5.000±02                             | 9.896.+00                  | 8.69 i . + n i                                | 1,175,+00  | 1.009.02                                     | 1.9160-01        |
| b.900+02                             |                            | 8.89  | 1.162.100  | 1.021.02                                     | 1.959#en1        |
| 5.000+02                             |                            | 9, 192, + 11                                  | 1.148m+00  | 1.032.02                                     | 2                |
| 9.100.+02                            | 1.024.+01                  | 9,295.+01                                     | 1.130.+00  | 1.044.002                                    | 2                |
| 4.200++02                            | 1,035,+01                  | 9.501.+01                                     | 1.123-+00  | 1.055-02                                     | 2                |
| 4 300-+02                            |                            | 9.708-+01                                     |  |  | 2+072=*01        |
| ¥•000∎•02                            |                            | 9.9.7.+01                                     |  |  | 2. 8200          |
| 9 boo+12                             | 10027#*01                  | 1.013+202                                     |  | 1.089.202                                    | 2. 102 - 01      |
|                                      |                            |   |  |  | 2.22011          |
| 7 ∎ ¤ [] [] # + [] ∠                 | + [/ 7 ± + ]               | ] • [] 3 4 ± 7 [] ∠<br>1 = 05 € ± 00          | 1.0//#*00  |  | 2.2/48701        |
| <b>9</b> • 7 () () <b>x</b> + () 2   | 1.040=01                   |   | 1.00/0700  |  | 2.251.           |
| <b>2.0</b> 0 0 <b>x</b> + 0 <b>Z</b> | •   <u>0</u> <∞ + <u>0</u> |   | · [ • 870 # 7 00   | 1 12007 02                                   | 2. 300 # 7 01    |
| 2.200x+02                            | 1.113.+01                  | 1.0770*02                                     | 1.040 <u>w</u> +00   |  | 2.412#*01        |
| 1.000#+03                            | 1.127.01                   | 1.12  | 1.000000000  |  | 2.40.200         |
| 1 • 0'1 0 × + 0 S                    | 1+ 132+01                  | 1.440702                                      | 1.02°×*00  | I+12/#*02                                    | 2.210"".01       |
| 1.020x+03                            | 1,142,+01                  | 1.100 <b>m</b> +02                            | • 0   <b>♀• +</b> 0′0  | •  00»=02                                    | 2.2700000        |
| 1.030=+03                            | 1.150+01                   | 1.10.7 =+ 0.5                                 | 1.00' <b>*</b> +00   | 1.1/7.02                                     | 5.00/0+01        |
| 1.040++03                            | •   <u>0/</u> =+0          | 1,211++02                                     | 9.90 0   | 1 · 1 × 0 = • 02                             | 5.020=01         |
| 1.050 =+ 03                          | 1, 178 m + 01              | 1.234=+02                                     | 9,892.01   | 1.2010-02                                    | 2./05**01        |



| DIAMETER           | AFFACILA               | RE                                 | DRAG CUEF                            | RELAX TIME                      | ,98 DIST             |
|--------------------|------------------------|------------------------------------|--------------------------------------|---------------------------------|----------------------|
| I+000x+00          | 1.08704                | 1,085=*06                          | 2.212+07                             | 1.109==07                       | 3. 208**11           |
| 1.100++00          | 1.316=04               | 1.444=*06                          | 1,062=+07                            | 1.342=07                        | 5.1410711            |
| 1.200×+00          | .560 <b>=</b> 84       | 1.875=06                           | 1.280=+07                            | • 597 • • 07                    | 7,289 11             |
| 1,300x+00          | <b>.</b> 838 <b>04</b> | 2,384 <b>.</b> =06                 | 1,007=+07                            | <b>,874,</b> ≢07                | 1.05**10             |
| 1.400*+00          | 2 + 131 = 04           | 2,978,+06                          | 8.059 <b>#*</b> 06                   | 2.173.07                        | 1.353#=10            |
| 1.500x+00          | 2,44704                | <b>3,663≠</b> =06                  | 6,553 <b>±+</b> 06                   | 2,495 <b>,∗</b> 07              | 1.784==10            |
| 1.000=+00          | 2,784,04               | 4,445=06                           | 5,399=+06                            | 2,839,07                        | 2.3110010            |
| 1,700*+00          | 3, 143, -04            | 5,33206                            | 4 <b>.</b> 5 <u>0</u> 1∞+ <u>0</u> 6 | 3.205p=07                       | 2.947##10            |
| 1.800=+00          | 3,523,+04              | 6,329=06                           | 3,792∍+86                            | 3,593 <u>s=0</u> 7              | 3./06##10            |
| 1.900#+00          | 3,926, 04              | 7,444                              | 3,224=+06                            | 4,003,=07                       | 4.0040=10            |
| 2.000*+00          | 4.350=04               | 8,682 <u>,</u> * <u>0</u> 6        | 2,/64,+06                            | 4,436,*07                       | -5,056==10           |
| 2+100=+00          | 4,792=04               | 1.0050-05                          | 2,388.+06                            | 4,890=07                        | 6.878#=10            |
| 2.200++00          | 5,263=04               | 1,156,05                           | 2,077,+06                            | 5,367 <u></u> =07               | 8,289##d0            |
| 2.300++00          | 5,752,-04              | 1.320.05                           | <b>.8 8±</b> +06                     | 5,866 <sub>p</sub> = <u>0</u> 7 | 9.9070+10            |
| 2,400**00          | 6,263=04               | 1,500,05                           | .600∞♦06                             | 6,387 <u>s</u> =07              | 1.175**09            |
| 2.500=+00          | 6,796 <u></u> 04       | 1.696                              | 1,4 5 <b>+</b> 06                    | 6,93 jp=07                      | 1.384=09             |
| 2.00r+00           | 7.351=04               | <u>5</u> 0 • «7 <sub>0</sub> • ا   | 1,258,+06                            | 7,496                           | 1.020=09             |
| 2./00*+00          | 7,92/=04               | 2.136= 05                          | 1,124=+06                            | 8,084,=07                       | 1.085=-09            |
| 5.800=+00          | 8,527=04               | 2,382=05                           | 1.007.+06                            | 8,69407                         | 2.181.09             |
| 2.900=+00          | 9,142=04               | 2,047,05                           | 9,068,+05                            | 9.326p=07                       | 2.510=-09            |
| 3.000=+00          | 9,78/=04               | 2,930="05                          | 8,191,+05                            | 9,980×=07                       | 2,876=09             |
| 3+100=+00          | 1+042=*03              | 3.2330 05                          | 7,423=+05                            | • 066 <b>⊭ =</b> 06             | 3.280=09             |
| 2.200x+00          | •     Sm = [] S        | 3.256=*05                          | 6./49.+05                            | 30 p = [] 6                     | 3.126=-09            |
| 3.300=+00          | 1.184 03               | 3,900=05                           | 6,154=+05                            | 1.208.06                        | 4.2150-09            |
| 3.400=+00          | 1.25/03                | 4.265.805                          | 5,62/#+05                            | 1+282=06                        | 4./51.0.09           |
| S.⊃(0≠≠00          | 1.332. 7 03            | 4.0530-05                          | 5, 150=+ 05                          | 1.358.00                        | 5.370-04             |
| 3.000++00          | 1,40%=03               | 5.063× 05                          | 4,/40=+05                            | 1.437. 06                       | 5.975****            |
| 3,/00=+00          | •487 <b>∞</b> ≖03      | <b>2,49/∞*()</b> 5                 | 4, 300=+ 05                          | 1. 2   8 = 00                   | 6.0/0°°09            |
| 3.000 <b>u</b> +00 | 1.570=03               |                                    | 4.030×+05                            |                                 | 7.4234709            |
| 3,900x+00          | 1.740 - 47             | 0,43/b705<br>6 945 8 5             | 3./20== [5                           | 7746                            | 0.238**09            |
|                    | +/4Ue*U3               | 7 479 905                          |                                      | • / / 4æ™ []O                   | *0 = <u>40</u>   • * |
| 4.200++00          | 1.918                  | 7,779,∞05<br>8.040⇒■05             | 3,207=102<br>3,985=105               | 1.956.*06                       | 1. 10/2 - 08         |
| 4.300++00          | 2.011.03               | 8.628.505                          | 2.782.+                              | 2.050.00                        | 1.949mm 08           |
| 4.400-+00          | 2, 105. = 03           | 9.244.305                          | 2,702,405                            | 2, 147, = 06                    | 1. 360 - 08          |
| 4.500+00           | 2.202.03               | 9.889.05                           | 2.427+05                             | 2.245 m n6                      | 1.462## 08           |
| 4.600+00           | 2.301.03               | 1. 156 14                          | 2. 272×+ n5                          | 2.346                           | 1. 597 08            |
| 4.700++00          | 2.402 03               | 1.127.04                           | 2.130p+n5                            | 2.45                            | 1./410=08            |
| 4.800×.00          | 2.502.03               | 1.200.00                           | 2.000+05                             | 2,555, 16                       | 1.895=-18            |
| 4.9nn±+nn          | 2.611.03               | 1.277#****                         | L, 08 n∎ + n5                        | 2.662p=n6                       | 2.158== 18           |
| 5.00°+ 00          | 2.718 13               | 1. 357. an4                        | 7.69 <b>+</b> n5                     | 2,772 • n6                      | 2.232==n8            |
| 5.100*+00          | 2.828 13               | 1.44 <u>n</u> = <u>1</u> 4         | 067 <b>∌</b> + n5                    | 2,884                           | 2.416= 18            |
| 2.200±+00          | 2,940.03               | <b>.</b> 526 <b>.</b> • <u>0</u> 4 | 573++n5                              | 2,998 <sub>2</sub> = <u>0</u> 6 | 2.012=08             |
| 5,300+00           | 3, 054, - 03           | ,6 6 <u>⊨</u> ≂ <u>0</u> 4         | 1, 486 + 05                          | 3,   5 <b>, =</b> <u>0</u> 6 -  | 2. 5   9             |
| 5,400=+00          | 3. 17 1. 03            | 1,7 <sub>0</sub> 9, • 04           | 1.405.+05                            | 3. 233. * 06                    | 3. 139×= 08          |
| 5,500=+00          | 3, 289 × 03            | 1.8 06. 9 04                       | 1, 329=+ 05                          | 3,354 <b>∞</b> ≖ 86             | 3• 27 j≈ n8          |

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| DIAMETER                              | AFFOCILA                     | RE  | DRAG COEF            | RELAX TIME                            | ,90 DIST                 |
|---------------------------------------|------------------------------|---|----------------------|---------------------------------------|--------------------------|
| 5.600x+00                             | 3.410=03                     | 1,906=04                                  | 1.259.+05            | 3,477,0=06                            | 3. 216= 708              |
| 5.700=+00                             | 3,533,=03                    | 2.010="04                                 | 1.194=+05            | . 3, ° [ 3, ° [ 0                     | 3.//40=00                |
| 5.800x+00                             | 3,658 <sub>0</sub> =03       | 2.117.04                                  | 1.134 <b>.</b> +05   | 3,/30,m=00<br>7,86                    | 4. 047                   |
| 2, Y 0 0 = + 0 0                      | 3,787, 703                   | 2.229.04                                  | . 0// == 02          | 3,00 (p. )0<br>7,900 - 05             | 4,334##00                |
| ··000=+00                             | 3.9 2 ** 03                  | 2,044,04                                  |                      |                                       | 4.03/00/00               |
| <b>○</b> •100≠+00                     | 4.040 <sub>10</sub> +03      | 2 694 - 04                                | 9,/449=14            | 4, 262, -06                           | 4,900##00<br>5 -88mmo8   |
| 0, 200 + 00                           | 4 10 0 0 0 0 0               |   | 9,2000×04            | 4.401.00                              | 5. 639 8 8               |
|                                       | 4.5 0 0 0 0 0                | 2,845,04                                  | 8 437 + 04           | 4.542                                 | 6. u o 7 m = 08          |
| 6.500++00                             | 4.594.=03                    | 2.980.004                                 | 8.053×+04            | 4.685.*06                             | 6. 192## 18              |
| 6.6n0++00                             | 4.737                        | 3.12n.=04                                 | 7.693 + 14           | 4.830 16                              | 6.796==08                |
| 6.7.nn+0n                             | 4.881                        | 3.264. 04                                 | 7.354.+14            | 4.978±=n6                             | 7.218** 18               |
| 6.800±+00                             | 5. 128 13                    | 3.412.14                                  | 7. 134 <b>.</b> + n4 | 5. 127 06                             | 7.06                     |
| 6.900=+00                             | 5, 177 03                    | 3, 565. 04                                | 6.733m+04            | 5.279. 06                             | 8.1220-08                |
| 7.000++00                             | 5,328, 03                    | 3.722= 04                                 | 6,448.+04            | 5.433. 06                             | 8.005 - 08               |
| 7.100=+00                             | 5,481.=03                    | 3,884.=04                                 | 6,180 <b>+</b> 04    | 5,590=06                              | 9,10808                  |
| 7.200=+00                             | 5,637. 03                    | 4.050=04                                  | 5,926=+04            | 5, /48, - 06                          | 9.034. 08                |
| 7.300++00                             | 5,794, 03                    | 4,222=04                                  | 5,085,04             | 5, 9 09 = 00                          | 1. 18=0/                 |
| 7.400=+00                             | 5,954. 03                    | 4, 397 - 04                               | 5,450,+04            | 6.072.06                              | 1. 075 . 07              |
| 1.500++00                             | 6.110.00003                  | 4. 578 04                                 | 5,243=+04            | 0. 23/0 00                            | 1.137 0/                 |
| /.600±+00                             | 6,280m=03                    | 4,/04=04                                  | 5,037=+04            | 0,402p+00                             | 1, 19/10 []/             |
| · · · · · · · · · · · · · · · · · · · | 0,44/==03                    | 4,7 <b>7</b> 4,8704                       | 4.042.4              | 6 746 = 06                            |                          |
| 7.000 <b>±</b> +00                    | 6 786 m 03                   | ン, (シUm <sup>-</sup> 04<br>つ, 35 on = 0.4 | 4.00                 | 6.920                                 | 1. <u>198</u> . 07       |
|                                       | 6 959 - o3                   | 5.556.*04                                 | 4,400m+04            | 7. 096. • 06                          | 1.47 oper 07             |
| Ŭ•UUU#+UU<br>Ŭ•L00++00                | 7.134.03                     | 5.767 04                                  | 4,162,0+14           | 7.275. no                             | 1.245=07                 |
| 8.200++00                             | 7.311.03                     | 5.983p - 14                               | 4.012+04             | 7,456, = 16                           | 1.023== 07               |
| 5.3nn#+00                             | 7.49103                      | 6.215. 14                                 | 3.568 .+ 14          | 7,639m=06                             | 1./04=07                 |
| 8.400+00                              | 7,672. n3                    | 6,432=04                                  | 3.732+04             | 7,824p=06                             | 1.788=07                 |
| 8.500++00                             | 7,856 <sub>p</sub> =03       | 6,664. 7 84                               | 3,002=+04            | 8.0110-06                             | 1.075==07                |
| 8.600.+00                             | 8,04203                      | 6.9020-04                                 | 3,478,+04            | 8.201.00                              | 1.9650-01                |
| 8.700=+00                             | 8.230. 03                    | 7.146= 04                                 | 3,359±+04            | 8,3920 - 06                           | 2• u <sup>5</sup> 8∞• 07 |
| 8,800≖+00                             | 8,420=03                     | 7,3950=04                                 | 3,246=+04            | 8.586                                 | 2.155= 07                |
| 8.900=+00                             | 8.612.03                     | /.050.*04                                 | 3.   30 = 04         | og * 40 5 * 90                        | 2.254=0/                 |
| ¥•000≠+00                             | 8.80/03                      | /.9110=04                                 | 3,034=+04            | 8.98   <b>s</b> = 00                  | 2,358**0/                |
| 9.100×+U0                             | 9.004.00                     | 8.1//==04                                 | 2,932,04             | Y+.   0.2∞" []0                       |                          |
| 9,200=+00                             | 9,203=03                     | 0,450,*04                                 | 2.041=+04            | 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 2.5/5# []/               |
| 9.300x+00                             | 9.404000                     | 0,/20±*U4                                 | 2,7.7 () + ()4       | 9,29 <u>0</u> ,00<br>9,797,06         | 2.009==07                |
| 7,4UU#+UO<br>9 500 ±00                | 9,00/mm03<br>9,813 - 63      | 9,303.en4                                 | 2.58n-+n4            | 1.001-*05                             | 2, 4 29                  |
| 4 600 × 00                            |                              | 9,6nn                                     | 2,500±+04            |                                       | 3. 154. 07               |
| 9,700+00                              | 1. n23 n2                    | 9.9 n3⊾* n4                               | 2. 424±+ n4          | 1. 043 n5                             | 3. 18 40 - 07            |
| 9,800++00                             | 1. 044. * 02                 | 1. 12 1. 13                               | 2. 35 No + n4        | j, <u>n</u> 65 <sub>#</sub> = n5      | 3. 318 - 07              |
| 9,900×+00                             | 1.060.02                     | 1.053×=03                                 | 2,28 <u>n</u> + n4   | 0 <sup>87</sup> .05                   | 3.456= 7                 |
| . I• 000≤ + 01                        | 1. <u>1</u> 8.7 . <u>1</u> 2 | 1. 0850 - 03                              | 2.212=+04            | 1. 109=05                             | 3. 298 17                |
| 1.100=+01                             | 1.316 m = 02                 | 1.444×*03                                 | · 06/2=+04           | 1.342=-05                             | 5.273=07                 |

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| DIAMETER          | VELOCITY               | RE                  | DRAG CUEF                         | RELAX TIME               | .95 DIST               |
|-------------------|------------------------|---------------------|-----------------------------------|--------------------------|------------------------|
| 1.200=+01         | 1,565. 02              | 1,875= 03           | <b>,</b> 280 <b>∍</b> +04         | 1. 596= 05               | 7.476×*07              |
| 1.300+01          | 1.837. 02              | 2,383=03            | 1.007 <b>-+</b> 04                | ,873 <b>⊵</b> ≈05        | , <sub>U</sub> 3 ∞∞06  |
| 1.400+11          | 2.130==02              | 2,977#=03           | 8,060#+03                         | 2,173 <b>∍</b> *05       | 1.3870-06              |
| 1.500x+01         | 2,445, = 02            | 3,66   = 03         | 6.559=+03                         | 2,494, 05                | <b>.</b> ♂3ე∞≖ე6       |
| 1.600*+01         | 2,782,02               | 4,442=03            | 5,400,+03                         | 2,837 <b>∍</b> ∗05       | 2. 3700 - 06           |
| 1.700**01         | 3.140.02               | 5,328 03            | 4,508 <b>*</b> +03                | 3,202∍•05                | 3. <sub>0</sub> 23¤¤06 |
| 1.600**01         | 3.520.+02              | 6,324=03            | 3,798±+03                         | 3, 59 0, * 05            | 3.001=00               |
| 1.900=+01         | 3,922==02              | 7,436 <b>.</b> =83  | 3.231=+03                         | 3,999                    | 4./22.00               |
| 2.000#+01         | 4,345,02               | 8,672=03            | 2.771.+03                         | 4.430.05                 | 2.2010-00              |
| 2.100=+01         | 4,789_+02              | 1.004 <b>=</b> *02  | 2,394,+03                         | 4,88402                  | 00-4660.1              |
| 2.200*+01         | 5,255 <sub>0</sub> -02 | 1,154=02            | 2,083=+03                         | 5,359,000                | 8.2050=00              |
| 2:300*+01         | 5,742.02               | ,3 8 <b>.</b> =02   | 1,024,+03                         | 5,050,05                 | 1.0100-05              |
| 2.400×+01         | 6.251.02               | I,497 <b>∍</b> =02  | 1.000+03                          | 6,374p=05                | 1.2020-02              |
| 2.500*+61         | 6,781 <b>.</b> -02     | 1,692.=02           | 1,4220+03                         | 6, 9   9, 10 €           | 1.420**02              |
| 2.600+01          | 7,332,02               | 1,903=02            | 1,265+03                          | 7,47/2000                | 1.002=00               |
| 2.700*+01         | 7,904.02               | 2.130=02            | 1,130,0+03                        | 8,001=07                 | 1.93300002             |
| 2.00x+01          | 8,498 <sub>x</sub> =02 | 2.375¤=02           | 1.014×+03                         | 8,066,05                 | 2.23/0= []             |
| 2.900x+01         | 9,113=02               | 2.637.02            | 9,132=+02                         | 9,2930 705               | 2.3/5**05              |
| <b>ऽ</b> ,000≖+01 | 9,748.02               | 2,919.02            | 8.252.+02                         | 9.94   2 02              | 2, 320                 |
| 3.100±+01         | 1.040=01               | 3,219= 02           | 7,488+12                          | 1.0010-04                | 3.3040 - []2           |
| 3.200=+01         | 1.108.01               | 3, 239 = 02         | 6,814=02                          | •   <b>5 () = * () 4</b> | 3.82 0 0 0 2           |
| 3.300x+01         | 1.178.01               | 3,880=02            | 6,210=+02                         | 1.275 - 04               | 4, 3230 00             |
| 3,400++01         | 1,270=*01              | 4.2410702           | 5.091**02                         | 1.2/20 04                | 4,0/3×+05              |
| 3.200 = + 01      | 1.324×=01              | 4,024.02            | 5.220=+()2                        | 1,00 [a + 0 +            |                        |
| 3.600x+01         | 1.400=01               | 2,029,02            | 4.0020+02                         |                          | 6 44 10 05             |
| S. / QOx + 0      | •4/0∞●[] <br>□ □ □ □   | 5 9 - 8 - 7 - 02    | 4,43 (0+ 02                       | 1, 589, • 04             | 7.6.307.05             |
| 3.000x+01         | 1, 220, * []           | 5,7000 02           | 4, 17, 2, 12                      | 1.672.*04                | 8. 449 = 05            |
| 3. 7 ( [ * + j ]  | •04U==0 <br>• 704 = 01 | 6 880 = 02          | 3. 7. 700 + 02                    | 1.758.404                | 9. 520 - 05            |
|                   |                        | 7.405-02            | 3. 27.5n t 02                     | 1.846p*04                | 1. J33#* n4            |
|                   | 1,00,00                | 7.955-7.02          | 3+2700 02                         | 1.935= 04                | 1. 37×= 04             |
| 1• 200≝ + 01      | 1.988                  | 8.530. 82           | $3 \cdot 0^{2} 0^{2} \cdot 0^{2}$ | 2. n27. * n4             | 1.250**04              |
| 4.400r+01         | 2.080.00               | 9.132. 02           | 2:0610+02                         | 2.121.04                 | 1. 37 j## n4           |
| 4.500.+01         | 21173                  | 9.760.=02           | 2:49-1:+ 12                       | 2.216=04                 | 1. 7 1 1               |
| 4.680*+81         | 2.269 - 01             | 1. n42. n1          | 2.337.+02                         | 2.3 4= 04                | 1.03804                |
| 4.700x+01         | 2. 360                 | 1.1.0.0.0.1         | 2. 195.+12                        | 2.4 3. 04                | 1. /86= 04             |
| 4.0 nnx + n1      | 2.460 11               | 1.181.01            | 2. 064.+02                        | 2, 515= 04               | 1. 7430 + D4           |
| 4.900+01          | 2.567.01               | 1,255, 01           | 1.944.+02                         | 2,618 <u>s</u> •04       | 2.111=04               |
| 2.000=+01         | 2.670-01               | , 332p = 0,1        | 1.034=+ 12                        | 2. 723= 04               | 2.289#*04              |
| 5.100+111         | 2.775 -01              | 1.413= 01           | 1,/32=+02                         | 2.830. 04                | 2.478== 04             |
| 2.200++01         | 2,882.01               | 1.496=01            | 1.037.+02                         | 2.939=•04                | 2.6790004              |
| 5.300+111         | 2.9900-01              | 1.582.01            | 1.550+02                          | 3,049.04                 | 2. 09 1 04             |
| 5.400×+01         | 3.100=01               | 1.67.10=01          | 1.469.02                          | 5. 10 20 - 114           | 3.11/0-04              |
| 5,500x+01         | 3.212.01               | • /63 <b>∞ =</b> 01 | 1, 594=+02                        | 3,276= 04                | 3. 3550 - 04           |
| 5,600x+01         | 3,320 = 01             | 1.859 01            | 1.324=+02                         | 3. 39 20 04              | 3.506=04               |
| 5,700=+01         | 3,441 01               | <b> .958⊳</b> ¶ ()  | 1. 224 + 05                       | 4 <u>0</u> ≋≪9 ⊂ • S     | 3•302 <b>≈</b> ∎ []4   |

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| DIAMETER                                     | AFFGCILA                   | RE          | DRAG COEF              | RELAX TIME      | .98 DIST            |
|--|----------------------------|-------------|------------------------|-----------------|---------------------|
| 5.8nn+ni                                     | 3,558,01                   | 2.060.001   | 1,198,+12              | 3.629           | 4.126**04           |
| 5.900++01                                    | 3.677                      | 2.165       | i.141±+02              | 3.75            | 4.399=-04           |
| 6.000+01                                     | 3.797.01                   | 2.274.101   | 1.088.+02              | 3.872 4         | 4.681               |
|  | 3.919                      | 2.386       | 1 039 + 02             | 3.996 - 04      | 4. 47.30=04         |
| ¢ i u u≢+ u i<br>6. 200+ o i                 | 4 042 - 01                 | 2.501.00    | 9 923-+01              | 4.122           | 5.276=04            |
| 6.300++01                                    | 4.167                      | 2.620.00    | 9 488                  | 4.249.704       | 5.588==04           |
|  | 4 293                      | 2.74201     | 0 080-+01              | 4.378           | 5 4 1               |
| 6.500.+01                                    | 4,421,=01                  | 2.868.00    | 8 696 4 61             | 4.5.8           | 6. 45 - 04          |
| 6.600++01                                    | 4.550                      | 2,99701     | 8.335++01              | 4.64            | 6. 289              |
| 6 700 + 01                                   |                            | 3.130.201   | 7 496                  | 4.774           | 6. 945= 04          |
| 0.800-+01                                    | 4,8,3,00                   | 3.266.201   | 7 076.401              | 4.9.8           | 7. iinen4           |
|  |                            | 3.406-201   | 7 574 + 01             | 5.044-=04       | 7.089               |
|  |                            | 3.550.201   | 7 090 - 101            | 5. 182 04       | 878 mm 04           |
| 7.100++01                                    | 5.217.*01                  | 3.697       | 7.0208*01<br>6.821stol | 5. 32 n n4      | 8.478.704           |
|  | 5.35501                    | 3.848       | 6 566+01               | 5.46            | 8.89.00.04          |
| 7 × 2 0 0x + 0 1                             | 5 49301                    | 4.002.01    | 6 326 + 01             | 5.6.2           | 9.514.88.04         |
|  | 5.633.001                  | 4.160.201   | 6 098-+01              | 5.744           | 9. / 49 4           |
| 7.500=+01                                    | 5.774                      | 4.322.7.01  | 5 082++01              | 5.888. • n4     | 1                   |
|  | 5.946.=01                  | 4.487.01    | 5 678 + 1              | 6. 033. 04      | 1                   |
| 7.700 + 01                                   | 5,060,001                  | 4.657. = 01 | 5 484 + 11             | 6.17904         | 1.130003            |
| /.80m.+01                                    | 6.2 <b>.4</b> . <b></b> 01 | 4.830.00    | 5.299 + 11             | 6.327. n4       | 1. 161#*03          |
|  | 6.350                      | 2.006 m 01  | 5.124.+01              | 6.475.m         | 1.21107:03          |
|  | 6 496 - 01                 | 5.187       | 4 957 + 01             | 6.6.25 4        | 1.26.00=03          |
| *•UUU#*UI                                    | 6.64401                    | 5.371.001   | 4 799 + 01             | 6.775 04        | 1.51403             |
| ~• 100×+01                                   | 6 792 - 01                 | 5,559       | 4 648 + 01             | 6.927 4         | 1. 467## 03         |
|  | 6 942 - 01                 | 5.750       | 4 2 1 4                | 7. 079. 04      | 1.421## 03          |
| 0.400m+01                                    |                            | 5.946m CI   | 4.567 + 01             | 7.233.04        | 1.477e=n3           |
|  | 7.244                      | 6.145-01    | 4 230 m + 01           | 7.387           | 1. 34 # 03          |
|  | 7.396                      | 6.348.201   | 4.11/10/01             | 7.542. 0.4      | 1.29.30 - 03        |
|  | 7.549.=01                  | 6.555.701   | 3.992+01               | 7.698.=04       | 1.0530=03           |
| C • 7 () () <b>k</b> + () [                  |                            | 6.765       | 3.078.+01              | 7.856           | 1./14=03            |
|  | 7.858                      | 6.98n, • 01 | 3 769                  | 8.013.04        | 1. /76# 03          |
| 5.000×+01                                    | 8.014.=01                  | 7.19801     | 3.065.0                | 8.172m=04       | 1.d4n∞≖n3           |
| 7 • U 0 0 • • 0 1                            |                            | 7.42.0.0    | 3.565+1                | 8.332n= 04      | 1. 9 05 0 0.        |
| Y.200.+01                                    | 8.328                      | 7.646. 7.1  | 3.469.+01              | 8.492n=04       | 1. 47 Le n 3        |
| Y•∠UU≠+01<br>Y ≾uo∞+01                       | 8.485                      | 7.876       | 3 378 .+ 1             | 8.653.04        | 2                   |
|  | 8.644.=01                  | 8.109.201   | 3 29.0 . + 01          | 8.8.5.7.04      | 2.107.87.03         |
|  | 0.0-1-16-01<br>8 8-4 - 01  | 8.347       | 3,2-0=-01              | 8,978,04        | 2. 78 = 03          |
| ו->υ <u>υ</u> ×+υΙ<br>Υ δαο <sub>2</sub> +αΙ | 8.964                      | 8.588.201   | 3 1 2 4 - + 01         | 9.141.04        | 2. 49 3             |
| 9 7 ob + c l                                 | 9 125 - 01                 | 8.833       | 3 . 47 . 4 . 1         | 9.305-04        | 2, 1230 - 03        |
| ·•/UU≭7UI<br>У пао∷≠о1                       | 9.28601                    | 9. n82-= n1 | 2.9724 hi              | 9.47 nu = n4    | 2.397 3             |
| 2 9 0 0 ± 0 1                                | 9 448 - 01                 | 9.335.301   | 2 9 0 8                | 9.635           | 2.47.30003          |
| <pre>* * UUx ▼ UI</pre>                      | 9 6 1                      | 9,592-00    |                        | 9.8 n i • • • 4 | 2. 25               |
|  |                            | 1.238.+00   | 2. 263                 |                 | 3. 399              |
| F F F F F U C = + + 2                        |                            | 1.557-+ 0.0 | 2+2000+01              | 1. 326 mm n.3   | 4. <u>19 imen</u> z |
| F ≤ U U × 7 U ≤                              | 1.482.+00                  | 11-27-100   | 1 548 m + n i          | 1,511,703       | 5. 5. 5. 5.         |

| DIAMETER                | AFFOCILA               | RE                          | DRAG CØEF                  | RELAX TIME                | ,98 DIST               |
|-------------------------|------------------------|-----------------------------|----------------------------|---------------------------|------------------------|
| 1.400=+02               | 1,675=+00              | 2,340+00                    | 1.30 <sup>5</sup> =+01     | 1.7 <sub>0</sub> 8=03     | 6.020=03               |
| 1.500*+02               | 1.880 <b>.+</b> 00     | 2.814.+00                   | 1.110=+01                  | 1.9 7.0 - 03              | 8,262=03               |
| 1,600*+02               | 2.090=+00              | 3.338=+00                   | 9,574,+00                  | 2.132.03                  | 9.858=03               |
| 1./00++02               | 2,285,+00              | 3,876,+00                   | 8,516,+00                  | 2,330=03                  | 1.161=02               |
| 1,000++02               | 2,457,+00              | 4.41/#*00                   | 7,/84=+00                  | 2,200,*03                 | 1.352**02              |
| 1,900=+02               | 2,021=+00              | 2,020±+00                   | 7,0/2=+00                  | 2, / [] 3= "] 3           | 1.220## 02             |
| 2.000=+02               | 2,847=+00              | 2,0/0,+00                   | 6,400,e+00                 | 2,700,00                  | 1.100.00               |
|                         | 3,034,00               | 7 100 +00                   | 5,77()»*()()<br>5,502,400  | 3,070,00<br>3,208 - 0.3   | 2. 110 - 12            |
|                         | 3 430 +00              | 7 874 + 00                  | 5 1 2 + 00                 | 3.498                     | 2, 2/ 1=- 12           |
| 2.400**02               | 3.628.+00              | 8,689,+00                   | 4.769.+00                  | 3.699 n3                  | 2.825=02               |
| 2.500++02               | 3.826.+00              | 9.545.+00                   | 4 467 + 00                 | 3.901.03                  | 3.125==02              |
| 2.600+02                | 4.024.+00              |                             | 4.199.+10                  | 4.104.03                  | 3.44 n#= 02            |
| 2.700+02                | 4.223 + 00             | 1.138.+01                   | 3,959,+10                  | 4,307.03                  | 3.1710-02              |
| 2.800+02                | 4.422.+00              | 1.236.+01                   | 3./44.+00                  | 4.510.03                  | 4.1160-02              |
| 2.900+02                | 4.622.+11              | 1.338.+01                   | 3.55n.+nn                  | 4.713. 13                 | 4.477.0012             |
| 3,000++02               | 4,822,+00              | 1.444.+01                   | 3.374.+00                  | 4,917.03                  | 4.052=02               |
| 3,100++02               | 5.021.+00              | 1,554.+01                   | 3.215+00                   | 5,121=03                  | 5.243#=02              |
| 3.200=+02               | 5,221,+00              | 1,667,+01                   | 3.070=+00                  | 5.324.03                  | 5.648 = 02             |
| 3,300x+02               | 5.4210+00              | <b>,</b> 785≠+⊖             | 2,937,+00                  | 5,528,=03                 | 6, j67∎• j2            |
| 3.400++02               | 5,620#+00              | 1 <b>,9</b> 07 <b>,+</b> 01 | 2,015=+00                  | 5.731.03                  | 6.2010-02              |
| 3,500+02                | 5,82 <u>0</u> +00      | 2.033m+01                   | 2,702=+00                  | 5. 935                    | 6, 949= 02             |
| 3,600x+02               | 6+017+00               | 2.162.01                    | 2.299.+00                  | 6, 138±= 03               | 7.411##02              |
| 3,/00++02               | 6,218+00               | 2,296=+01                   | 2.2030+00                  | 0, 34 [10 7 [3            | 7.887#=02              |
| 3.800=+02               | 6.4 0 .+ 00            | 2.433=+01                   | 2.414=+00                  | 6,2430 03                 | 8.3//==02              |
| 3.900+02                | 6.6[4±+00              | 2. 2/4= 0                   | 2.331=+00                  | 0,/40m 00<br>6 947 = 03   | 0.001=02               |
| 4.000#+02               | 0,012+00               | 2.19270                     | 2,2540400                  | 7 144 = 3                 | 7,370≠=02              |
| 7∗100≠+02               |                        | 2+000×101                   | 2,1020-00                  | 7. 349. = 03              | 7.727#=01              |
| 4.300++02               | 7,403,+00              | 3. 177. + 01                | 2, 172, 10<br>2, 552, t 00 | 7.550.03                  | 1.1030701              |
| 4.400++02               | 7.599.+00              | 3. 337. + 01                | 2 92 + nn                  | 7.75n#*n3                 | 1.160***01             |
| 4.500=+02               | 7.795.+00              | 3.501#*01                   | 1.937 <b>∍</b> +nn         | 7,949. • 13               | 1.∠18°≖∩1              |
| 4.600*+02               | 7.9900+00              | 3.668.+01                   | j,884 <b>±+</b> 00         | 8,   48, " 03             | 1.278=01               |
| 4.700 + 02              | 8, 185,+00             | 3,839=+01                   | 1.835=+00                  | 8,347⊅• ₿3                | 1. 339# = 01           |
| 4,800x+02               | 8.379.+00              | 4.014=+01                   | 1,788=+00                  | 8,5440+03                 | 1.401-01               |
| 4.900x+02               | 8,572+00               | 4, 1920+01                  | 1.744=+00                  | 8.7420-03                 | 1.464=01               |
| 2.000x+02               | 8,765_+00              | 4,374 + 01                  | 1.702=+00                  | 8,939=03                  | 1.258=01               |
| 2.100++02               | 8,958 <sub>0</sub> +00 | 4,559+01                    | 1.662=+00                  | 9,135 <sub>0</sub> =03    | 1. 39 40 = 01          |
| 5+200++02               | 9+149+00               | 4,748=+01                   | 1,624+00                   | 9.330× 03                 | 1,0610-01              |
| 2.300+02                | 9,341,+00              | 4.74   = + 0                | 1,2870+00                  | Y,725∞●()5<br>0 70 7      | 1.729**01              |
| 2.400++02               | 9,531±+00              | 2.13/01                     |                            | 7, / <u>/ 0</u> , 7, 0, 3 | 1. 170                 |
|                         | Y₁/21⊎+00              | 5 570 - 01                  |                            |                           | 1.009#=01              |
|                         | A+A110+00              | 5,746_+ni                   | 1.461-+00                  | +U  #*U4<br> +O30=#02     | 1+740+701<br>2.013mm01 |
| 5.8nn-+02               | 10 - 40 - 11 - 1       | 5.955.+01                   | 1.433-+00                  | 1. 049                    | 286#*                  |
| 5,900×104               | 1.046-+01              | 6.168.+n1                   | 1.4 <b>n6</b> ++nn         | 1.168.*02                 | 2.1610 - 01            |
| - * • u u* • U <b>=</b> | 110.2                  |                             | IV · ↓ = = · ∪ U           |                           |                        |

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| DIAMETER                                       | VELOCITY               | RE                            | DRAG CUEF               | RELAX TIME   | ,98 DIST           |
|--|------------------------|-------------------------------|-------------------------|--|--------------------|
| 6,000x+02                                      | 1+066+01               | 6,384 <u></u> +01             | .380 <b>∞+</b> 00       |  | 2.237              |
| 0.100=+02                                      | •0°°••0                | 6.827.+01                     | 1,332×+00               | 1.125.02   | 2. 392=01          |
|  | 1+102+01               | 7.054.+01                     | 1. 3n2 + 00             | 1.144.=02  | 2.472-01           |
| 6.400 + 02                                     | 1,1240+01              | 7.283±+11                     | 1.287 <b>.</b> +nn      | 1.163 02   | 2. 552 - 01        |
| 0.500++02                                      | 1.159.+01              | 7.516.+01                     | 1.266.+00               | 1.182.02   | 2.033==01          |
| 6.6n0x + n2                                    | 1.177.+01              | 7,753=+01                     | 1.240.+00               | 1.200.**02   | 2.115=01           |
| 6.7n0++n2                                      | 1.195.+01              | 7,992=+01                     | 1.220=+00               | 1.219.02   | 2.198.01           |
| 0.800=+02                                      | 1.213+01               | 8,235,+01                     | 1.208.+00               | 1.237.02   | 2,883#*01          |
| 6.900=+02                                      | 1,232,+01              | 8,481=+01                     | 1.190×+00               | 1,256,*02  | 2, 968= 01         |
| 7.000=+02                                      | 1,250x+01              | 8 <b>.</b> 730.+01            | 1.172.+00               | 1.274.02   | 3. 154=01          |
| /.100++02                                      | 1,268,+01              | 8,982=+01                     | 1.150 + 00              | 1.2930 * 02  | 3, 14   = 01       |
| 7.200*+02                                      | 1,285,+01              | 9,237=+01                     | 1.139 = 00              |  | 3.230**01          |
| 7.300++02                                      | 1,303+01               | 9,495m+ 01<br>0 257 + 01      | 1.124#700               | 1 347 - 7 02   | 3.4.900            |
| 7.400=+02                                      | , 32   <b>s</b> + []   | ¥,/2/₩*() <br>  002,+02       | 1. 10 <sup>9</sup> 0+00 | 1.365  | 3.2000001          |
| 7.500x+02                                      | 1,357,+01              | I ∎ UUZ = UZ<br>I. 829 . + 82 |                         | 1.383. 02  | 3. 992-01          |
| 7.700 + 02                                     | 1.374.+01              | 1.056.+02                     | 1. <u>166</u> + 00      | 1.401=02   | 3.084 - 01         |
| 7.800.+02                                      | 1.392.+01              | 1.083.+02                     | 1.05J±+00               | 1,419.02   | 3. /78= 01         |
| 7.900=+02                                      | 1,409+01               | 1+111=+02                     | 1.040.+00               | 1.437.02   | 3,873=01           |
| 6.000++02                                      | 1.427 + 01             | •  39 <b>»</b> +  2           | 1.028++00               | 1.455.02   | 3.908=01           |
| 8.100x+02                                      | 1,444 p+01             | 1.167 <b>m</b> +02            | 1.010+00                | 1.4/2=02   | 4. 104             |
| 8,200x+02                                      | 1,461,+01              | 1. 1900 + 02                  |                         | 1, 7, 0, 0, 2, 0, 2<br>1, 7, 0, 0, 2, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, | 4. (6.00 0.0       |
| 8,300+02                                       | 1.4/0.+01              | 1.2220 02                     | 9,930,000               | 1.525.=02  | 4.359**01          |
| 0,400x+02                                      | 1,490 <b>b</b> + []    | 1,283,+12                     | 9.714.01                | 1.543. 02  | 4.458=-01          |
| $b_{1} = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = $ | 1,230,+01              | 1.3130+92                     | 9.010.01                | .56 <sub>0∞</sub> =02  | 4. 259 = 01        |
| $b_{1}700 \pm 02$                              | 1.547.+01              | 1.343m+02                     | 9.510.00                | 1,577 <u>,</u> •02   | 4.060-01           |
| 8.800++02                                      | 1.564.+01              | 1.373=+02                     | 9.4120-01               | 1,595.02   | 4./62**01          |
| 6,900x+02                                      | 1.580.+01              | 1.404=+02                     | 9.31 -01                | 1.012002   | 4.865#*01          |
| 9,000±+02                                      | 1.59/.+01              | 1.435=+02                     | 9.224.01                | 1,0290 02  | 4.9090 ()<br>5.740 |
| 2.100×+02                                      | 1.614#+01              | 1 + 400 ± + 02                | 9, 34#*0                | 1.663.0002   | 5,79,8701          |
| 9.200x+02                                      | 1,031m+01              | 1.529.4.02                    | 8.962pm                 | 1.68 nm n2   | 5. 285. 1          |
| $7,300 \pm 102$                                | 1.664.401              | 1.561.102                     | 8.879                   | ,697 <u></u> ,02   | 5. 392= 01         |
| 9.500r+02                                      | 1.681m+11              | 1.593m+n2                     | 8.798                   | 1.7 140 = 02   | 5.200 ** 01        |
| 9.6nn±+n2                                      | 1,697 <u></u> +n1      | 1.626=+02                     | 8.719.01                | 1,73 <sub>0∞</sub> ≠02   | 5.oj8≠≡ ŋ          |
| 9.700x+02                                      | 1.7 3 + 01             | 1.659=+02                     | 8.042=*01               | 1.747. 22  | 5./180001          |
| 9.8 <sub>00x</sub> +02                         | 1.730=+01              | 1.692=+02                     | 8.56/01                 | 1,764×*02  | 5,027≥≡01          |
| 9,900#+02                                      | 1.740 + 01             | 1. 1220+02                    | 8,494,01                | 1.707 - 02   | 5. ¥ 30 # • []     |
| $1 \cdot 0 = 0 + 0.3$                          | 1.778                  | 792 + 02                      | 8 35301                 |  | 6, 16 10 m 0 1     |
| 1.010=+03                                      | 794                    | 1+1,120TU2                    | 8 285                   | 1.83n==n2  | 6. 74× ni          |
| 1.020=+03                                      | 1+117#TU1<br>1-810-+01 | 1.061m+02                     | 8,218,01                | ,846 <u>m</u> ≢∩2  | 6.388#*ni          |
| 1+000±+00                                      | 1,826_+ni              | 896 + 12                      | 8,154, ni               | 1.862=02   | 6.202#=01          |
| 1. n5n±+n3                                     | 1.842 <b>.</b> +n1     | 1.931=+02                     | 8,090=01                | 1,879 <b>±</b> ≠02   | 6.0170-01          |
| ··· u = ···                                    |                        |                               |                         |  |                    |

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| DIAMETER               | AFFOCILA                     | RE                             | DRAG COEF                 | RELAX TIME                              | .98 DIST                  |
|------------------------|------------------------------|--------------------------------|---------------------------|---|---------------------------|
| I+000#+00              | ]+63 <b> </b> ≠04            | .628∍*()6                      | <b>,474∞+</b> 07          | <b>,</b> 663 <b>⊨</b> • <u>0</u> 7      | 7.905**11                 |
| • 00 <b>×+</b> 00      | •974 <b>»=</b> 04            | 2,167,06                       | , 0 <sup>8</sup> *+07     | 2·0/3=07                                | 1.159=10                  |
| 1,200++00              | 2,349 <b>.</b> •04           | 2,813,=06                      | 8,532=+06                 | 2,395 <b>. •</b> 07                     | 1.042#=10                 |
| 1.300++00              | 2,757.04                     | 3,576=06                       | 6.711=+06                 | 2 <b>.8</b>    <b>.*</b> 0 <u>7</u>     | 2.264=10                  |
| 1+400=+00              | 3,19/m≖04                    | 4,467=06                       | 5.373 <b>»</b> +06        | 3,260,07                                | 3. 148 - 10               |
| 1.500=+00              | 3,670m=04                    | 5,494=06                       | 4,368m+06                 | 3,743 <b>⊭</b> 07                       | 4, 1200-10                |
| 1.600±+00              | 4,176 04                     | 6,668                          | 3,599=+06                 | 4,258,*07                               | 5.2070-10                 |
| 1./00x+00              | 4,/ 4 <sub>10</sub> =04      | /,998≥=06                      | 3.001=+06                 | 4,80/2*07                               | 6.04   #= 10              |
| 1.000=+00              | 5+282±+04                    | <b>7.474</b> ∎₹00              | 2.520 = + 10              | 5,389 s 0/                              | 8.352**10                 |
| 1.700=+00              |                              |                                | 2. 47. 00                 | 0,000=0/                                | 1. 1370 - 09              |
| <.000x+00              | 0,227,04                     |                                | •040 <b>∞</b> ●[]0        |   | 1.2/4##()7                |
| ∠•100±+00              |                              | ,⊃[ Ŭゅ▼[ 5<br>  327 - of       | 1,59 <b>∠</b> ≥+00        |   | 1.350*=04                 |
| 2.200++00              | /,892 <b>=</b> [4            |                                | 1,382.0+00                |   | 1.008¤=07                 |
| 2.300x+00              | 8,027,0* []4                 |                                | 0] + 2   2 + 0            | 0,797,p#07                              | 2.232##09                 |
| ∠•408×+00              | 9.392                        | ∠,25()⊎₹()5<br>2,544 - 05      | (, () 0 / ± + () 0        | 9 <b>,</b> 28 ∌≓∏/                      | 2,048==09                 |
| 2.200*+00              | • []   <sup>y</sup> • • [] 3 |                                | 9,430±+()5                |   | 3+119## 89                |
|                        |                              | ζιαίοΩ<br>3 2ο4 πο5            |                           | 00 ************************************ |                           |
|                        |                              | 3 572                          | /.49Um▼UD                 |   | 4.24/08 (9                |
| 2.000±+00<br>2.900±+00 | + 477m= UO<br>  472 - 03     | 3,970,+05                      | 0./j0m≠U5                 | 1.300 m.6                               | 4.9 4##[]9<br>5.55709     |
| 3.000++00              | 1.468                        | 4.395                          | 5 461.+05                 | [•0996 [0<br>[•497∎06                   | 5,007 = 09                |
| 5.100×+00              | L-567                        | 4.849.05                       | A 949 min n6              | 1.598.mn6                               | 7 4920-09                 |
| 5.2nnx+en              | 1.67n n.3                    | 5.334= 05                      | 4.499++05                 | 1.703m 706                              | 8.396= 19                 |
| 3.3nn+ nn              | 1.776_= n3                   | 5,850=05                       | 4.103=+05                 | 66 + ما الأقوا                          | 9.499** 19                |
| 3.4nnx+nn              | 1.086 m = n3                 | 6,398±= 15                     | 3. /51. + 05              | 1.923n=16                               | 1. 17 18 - 08             |
| 3,5nn+ in              | 1.998 m n 3                  | 6,979=n5                       | 3.439.+15                 | 2. 138 16                               | I•≥n3=▼n8                 |
| 3,600=+00              | 2.114=03                     | 7,595,• 05                     | 3.160+05                  | 2, 150= 06                              | 1. 347## 08               |
| 3,700=+00              | 2.233-03                     | 8,245= 05                      | 2. 7110+ 05               | 2.277p= 00                              | I• > n3¤ = ∩8             |
| 3.800x+00              | 2,3550-03                    | 8,932= 05                      | 2.087.+05                 | 2,4020-06                               | 1.073=08                  |
| 3.900=+00              | 2,48 lo=03                   | . 9 <b>.</b> 656 <b>.</b> " (5 | 2,4800+05                 | 2•53 <b>0≈</b> ₹06                      | ∙¢56¤‴ 08                 |
| 4.000×+00              | 2.6   0.0 + 03               | 1.042="04                      | 2,304=+05                 | 2.06 10 - 00                            | 8₀ • • 55⊔ • 2            |
| 4.100=+00              | 2, /42, = 03                 | 1.122.04                       | 2. 139=+ 05               | 2. 796                                  | 2.269=08                  |
| 4.200=+00              | 2.0//03                      | •∠[]0ø=[]4                     | <b>[, 77 ] # [7</b>       | 2,7340700                               | 2,4990=08                 |
| $7 \cdot 300 = +00$    | 3 610 ₪ * 83                 | • <b>2</b> 9 4 <b>•</b> 7 0 4  | (), □ <b>2 4 ± 7 () 2</b> | 3. 0/⊃∞▼00<br>7. 00 = 06                | 2,740,00                  |
|                        | 3, 100 == 03                 | 1,0078=04                      | •/3 ≌+05<br> •/3 8:+05    | 3:2200-00<br>7 468 - 06                 | 3• jj2∞+ jo<br>7 .94∞- s8 |
| <b>4.6</b> 00++00      | 3,300mm 03<br>3,451.403      | 1,584,404                      | 1.0105+05                 | 3,500 - 00                              | 3.2760-08                 |
| 4.700++00              | 3.6n3.+03                    | 1.69 n. • n4                   | 420+15                    | 3.674 mm n6                             | 3. 924#= 08               |
| 4.800+00               | 3.75803                      | 1.0nn=14                       | 1. 333.+05                | 3.832.+06                               | 4. 269                    |
| 4.900**00              | 3.910.=03                    | 1.915.704                      | . 1. 253=+ n5             | 3.994. • n6                             | 4.637 <b>⊭</b> ∎nô        |
| 5. nnn*+nn             | 4. 78 13                     | 2, 035, = 04                   | 1.18n=+n5                 | 4,158,=n6                               | 5. u29##n8                |
| 2.100×+00              | 4.242.03                     | 2. 159== 04                    | 1.112×+n5                 | 4.326                                   | 5.445= 18                 |
| 5.200++00              | 4.410-03                     | 2,289 04                       | j. 049 + 05               | 4,498                                   | 5.086==08                 |
| 5.300=+00              | 4.582 03                     | 2.423.004                      | 9.904=+04                 | 4,672=06                                | 6. <u>353</u> = 08        |
| 5.400+00               | 4,750=03                     | 2,563=04                       | 9.364=+04                 | 4,850=06                                | 6.47=08                   |
| 5+200++00              | 4,934,=03                    | 2,7 <sub>0</sub> 8.=04         | 8,862=+04                 | 5.031=06                                | 7• ა7 <u>ე∞≖</u> ე8       |



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| DIAMETER                                   | VELOCITY                                   | RE  | DRAG COEF              | RELAX TIME             | .90 DIST                        |
|--|--|---|------------------------|------------------------|---------------------------------|
| 5,600*+00                                  | 5.15.03                                    | 2,859==04                                 | 8,396.+04              | 5,216,00               | 7. 923= 08                      |
| 2.700x+00                                  | 5,299,0003                                 | 3,015 <b>m</b> *04                        | 7.962+04               | 5,404.00               | 8,906=08                        |
| 5,000x+00                                  | 5 678 - 63                                 | 3,1/0x*()4<br>3,343.=04                   | 7 179 404              |                        | A 150m 00                       |
| 2•200#+00<br>0•000x+00                     | 5.872 <sub>4</sub> =n3                     | 3.516 <u>∞</u> =n4                        | 6.826s+n4              | 5.988 m n6             | 1                               |
| 6.100×+00                                  | 6, 69 03                                   | 3,695 = 04                                | 6,496 <b>m</b> +n4     | 6,  89 <b>,,</b> = 06  | l•i16#≡n7                       |
| 6,200#+00                                  | 6,270.03                                   | 3,879 <u>n</u> =04                        | 6,187=+04              | 6,394 <b>.</b> =06     | 1.192=07                        |
| 6.300x+00                                  | 6,474 <sub>0</sub> =03                     | 4.070=04                                  | 5,897=+04              | 6.601.000              | 1.271=07                        |
| 0,400*+00                                  | 6•68   <u>∎</u> ≢03<br>6 80   <u>∎</u> ≠03 | 4.20/0*04                                 | 5,022×+04              | 0,0,3,000              | • 554#= <u>0</u> /              |
| 6.6n <u>n+</u> 00                          | 0,0910=03<br>7.10503                       | 4.68 p. = 04                              | 5,007#+14<br>5 109-+-4 | 7,245,=00              |                                 |
| 6.7nn+un                                   | 7.322 <u>.</u> *n3                         | 4,896 <u>m</u> = 14                       | 4.9.n3±+n4             | 7.466. • n6            | 1.027= n7                       |
| 6.800+00                                   | 7,542.=03                                  | <b>5,    8,∞ # (</b> 4                    | 4.090=+04              | 7,69   <b>p</b> = 06   | I • / 26# = n7                  |
| 0.900×+00                                  | 7,765. 03                                  | 5. 347= 04                                | 4, 489 - 04            | 7,9 <sub>1</sub> 9,=06 | 1• × 30* • 07                   |
| 7.000×+00                                  | 7,992. 03                                  | 5, 58 3= 04                               | 4. 299 . + 04          | 8.150.*06              | .  • ¥ 39#* 07                  |
| $7 + 100 \pm + 0.0$<br>7 + 200 $\pm + 0.0$ | 8.455.=03                                  | 2,020 <b>m</b> []4<br>6. n75. <b>n</b> a4 | 4.120#*04<br>3.951#*04 | 0,004±=00<br>8,622±=06 | 2. 123** 0/                     |
| /.3.nn#+nn                                 | 8.69 la= n3                                | 6,332 n4                                  | 3.79   <b>a</b> + n4   | 8,863 <u>, - 1</u> 6   | 2, 294 m n7                     |
| 7.400*+00                                  | 8.931.003                                  | 6.596. 04                                 | 3.639.+04              | 9,108.06               | 2.423 <b>∞</b> • <sub>0</sub> 7 |
| 7.500*+00                                  | 9.174.03                                   | 6,867.04                                  | 3.495.+04              | 9,355p-06              | 2. 57 - 07                      |
| + 000×+00                                  | 9,420,00                                   | /, 45m=04                                 | 3.357#+ []4            | 9,0°0/#=00             | 2.697.07                        |
| /+/00*+00<br>/.800*+00                     | 9,92303                                    | 7,724,=04                                 | 3,2300+04              |                        | 2.0420-07                       |
| /•000±+00                                  | 1. n +8 m = n2                             | 8.025pr04                                 | 2,99 at 14             | 1.038±=05              | 3. 150##07                      |
| 8•000 <b>×</b> +00                         | 1.044.02                                   | 8.334n = 04                               | 2.080.+04              | 1,064 <u>,</u> ,05     | 3. 3   3∞ = n7                  |
| 0.100×+00                                  | 1.070=02                                   | 6,65 <sub>0=04</sub>                      | 2.775 + 14             | 1.091=05               | 3.4820-07                       |
| 0.200#+00                                  | 1.09/02                                    | 8,974,04                                  | 2.675.+14              | +  8 <sub>0</sub> =05  | 3.0580707                       |
| 0.300x+00                                  | 1,124,02                                   | 9.50/x=04                                 | 2.579 + 04             |                        | 3.840×=07                       |
| 0,400±+00<br>0,500±+00                     | 1,178 mm 02                                | 9.996p=04                                 | 2.401.404              | 1.2020705              | 4. 25mm n7                      |
| 8.6 nnx+10                                 | 1.200 = 02                                 | I. n35. • n3                              | 2.319=+04              | 1.23 0 = 05            | 4.428×= n7                      |
| d.700±+00                                  | 1.234. 02                                  | 1.072=03                                  | 2.240=+04              | • 259 <b>⊭</b> = 05    | 4.038 = 07                      |
| 6.900x+00                                  | 1,263.02                                   | 1.109=*03                                 | 2. 164=+04             | 1.288 05               | 4.055=-07                       |
| 8.900*+00                                  | •292 <u>∞</u> ≖02                          | 1.147. 03                                 | 2, 692+04              | •3 7∞ <b>≂</b> 05      | 5• u <sup>8</sup> g∞= 07        |
| 7 + 0 0 0 # + 0 0<br>9 - 1 0 0 # + 0 0     | 1.321=02                                   | 1+10/m=03                                 | 2,0230+04              | +347±€05               | 5.3 3°° 0/                      |
| 9.200++00                                  | 1.3800-02                                  | 1.267. 13                                 | 1.894×14               | 1.408.07               | 5.0030007                       |
| 9.300x+00                                  | 1.410=02                                   | 1,5090=03                                 | 1.034=+04              | 1.438=05               | 6. <u>16 0 × 7</u> 07           |
| 9.400×+00                                  | 1.44 1. = 02                               | 1.3520-03                                 | 1.776 + 04             | 1.469 <b></b> = 05     | 6.326= 07                       |
| Y,500×+00                                  | <b>.</b> 472 <b>..</b> ●02                 | 1.395=03                                  | 1.720=+04              |                        | 6.000=07                        |
| 9 700=+00                                  | [, ⊃ <u>]</u> 3 <u>8</u> = <u>0</u> 2      | 1.485.m.o.3                               | 1 + 007 + 04           | 1,233=*02<br>1,565=*05 | 0.003±=0/<br>7.75±=7            |
| 9,800±+00                                  |  | 1.532m=n3                                 | 1.567 . + n4           | 1.597.05               | 7.477 mm n7                     |
| 9.900#+00                                  | 1.598 02                                   | 1.579a= 03                                | j.⊅20∞+n4              | 63 n= n5               | 7./87× n7                       |
| 1.000++01                                  | 1.031.02                                   | 1.627 03                                  | 1,475 <b>,+</b> 04     | ,663 <sub>₽</sub> = 05 | 8, <sub>10</sub> 8, -07         |
| 1.100**01                                  | 1,973,-02                                  | 2. 166. 3                                 | 1.10 <sup>8</sup> ,+04 | 2.012.05               | . 88× 06                        |

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| UIAMETER                            | AFFACILA  | RE                                      | DRAG COEF   | RELAX TIME                       | ,90 DIST               |
|-------------------------------------|---|---|---|----------------------------------|------------------------|
| 1.200-+01                           | 2 348 - 02  | 2 8 12 = 03                             | 9 578. + 07   | 2 394 05                         |                        |
| 1.300++01                           | 2 755   | 3.575                                   | 6,717,493   | 2.8.005                          | 2 . 220 - 06           |
| 1.400.+01                           | 3 195   |   | 5 479 403   | Z = 0   UB = 0 0<br>Z = 258 = 05 | 2.3220-00              |
| 1.500.401                           | 3 667 - 02  | 5 40 m = 0 3                            |   | 3,2,00,00                        | 3. 12000 00            |
|                                     |   | 6 660 = 03                              | 4,3/2#*[]3  | 3 + / + ()≱ + ()⊅<br>A 254 = 5   | 4. 230000              |
|                                     | 1 7 0 - 01  | 7 9 9 9 9 7 3                           | 3,000000000   |                                  | 2,34   # 00            |
| 1+/00**01                           | 9+/U/#=U2   | 0 400 - 03                              |   | 4,0020*05<br>5 390 - 05          | 0+0  #=00              |
|                                     | 5,270,02  | 7,702×00                                | 2,23787 03  |                                  | 0.0000000000           |
|                                     |   | 1.1120-02                               | 2,100 + 10  |                                  | 1.004000               |
|                                     |   |   | 1,042,0400  |                                  | .30/##0/               |
| 2 200 + 01                          | /+ /?=?U≰<br>7 876 -n2  | 1.729                                   | 1 391 403   | 8 032 - 05                       | 1.370**                |
| 4 • 2 0 0 # + 1) 1<br>2 3 0 0 - + 1 |   | 1,7278-02                               | 1,0218-4-7  |                                  | 1.710×07               |
|                                     | 0,000,000   | 20-244 -02                              | 1,210 = 03  | 0,770,000                        | 2.270000               |
| 2+7U0#401                           | 9.00/ = 02  | 2,2749102                               |   | 9,252x=05                        | 2.7100000              |
|                                     |   |   | 9,200002  |                                  | 3 1998005              |
|                                     |   |   | 8,450,0402  |                                  | 3./440+02              |
|                                     |   |   | 7,000,02  | + <b>€</b>  /∌♥  4<br>  209 = 04 | 4.3200000              |
|                                     | 1 • 2 / S • 0   | 3,250 = 12                              | 6./01.02  | 1 290 0 14                       | 2, 140, 10             |
|                                     |   | 3,749, 02                               | 6.110#*02   | •39 ⊭≖()4<br>  488 = a4          | <b>2,802 * 02</b>      |
|                                     |   | 4.907 m - 00                            | 5,5278+02<br>5,5278+02  |                                  |                        |
|                                     | 1+227±==[]  | 5 294 m 02                              |   | , 200≥ ()4<br>  60   = 04        |                        |
|                                     |   |   | 4,2040402   | +07 æ≭04<br>- 707 = -4           | 0,0110=00              |
| 3.300x+01                           |   | <b>2.002</b> = 02                       | 4.10/0+02   | 1 + / 7 / m • () 4               | 9.742**02              |
| J. 400x+01                          | • • / U = * 0   | 6 9 5 7 7 9 2                           | 3.010.02  | 1,7000004                        | • <u> </u> 98#*04      |
| 3.200#+01                           | [• 98 (m= 0   | 7 5 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 | 3.203=+02   | 2.0190-04                        | 1.234 # 04             |
| 3.000x+01                           | 2.093.01  | /,2 8, 02                               | 3.222=+02   | 2. 134. 04                       | 1.38   04              |
| 3•/00 <b>±</b> +0                   | 2+207=01  | 0.156.02                                | 2.772=+02   | 2.2520=04                        | 1.242** 04             |
| 3.800x+01                           | 2.320=01  | 0.05/0.05                               | 2. / 5   = + 02   | 2.3/4=04                         | 1./16**04              |
| 3.900=+01                           | 2.449.01  | 9,233=02                                | 2,220=+02   | 2.498. 04                        | 1. 7040 = 04           |
| 4 000=+01                           | 2+5/4=01  | 1.0580-01                               | 2,300=*02   | 2,0250*04                        | 2.10/004               |
| 4 100 = + 01                        | 2./010=01   | 1.102=01                                | 2.204=*02   | 2, / 55∞ <b>™</b> <u>1</u> 4     | 2.32/0=04              |
| 4.200++01                           | 2,832. 01   | • 8/m=0                                 | 2, 1, 2, 2, 4, 1, 2, 2, 4, 1, 2, 2, 4, 1, 2, 2, 4, 1, 2, 1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, | 2,088                            | 2. 563** 04            |
| 4.4.00                              | 2.90,   | 1,2/2=01                                | 1.7170702   | 3.0230404                        | 2.01/2.04              |
| 7. 400x + 01                        | 3, 101m 01  | 1.0020-01                               | 1.1.2.0.4.05  | 3. 102. 14                       | 3. 0 3. 04             |
|                                     | 3.237.0-01  |   | 1.0020702   | 3.3030000                        | 3.300**04              |
|                                     | 3.30 Un Ul  |   | 1.0770702   | 3, 74/07 04                      | 3.0928=04              |
|                                     | 3, 227, 01  |   | 1.4020402   | 3, 2740 - 14                     | 4. (24=*)4             |
| 4,000 <b>±</b> +01                  | 3,0/Uµ≠0 <br>7 0,0  |   |   | 3,505, -04                       | 4.3/98704              |
|                                     | 3,0[7 <sub>10</sub> = []]<br>7,071 - 01   |   |   |                                  |                        |
|                                     | 3€-7/18♥UI  |   | 1+ 27707-02   | 7.0770704                        | J. 1727 04             |
|                                     | ♥♥↓2 <b>~∞●</b> 0↓<br>∧```28↓ = ♠↓  | 2 | 1 1 3 + 02  | 4+6000704                        | 5 4584207 ()4          |
|                                     | H+ 20 10 - 01   |   | 1.1199702   |                                  | 5,7000704<br>6,0000-24 |
|                                     | 4•44°Us*0   | 2.0400                                  | 1.070**02   | 1 - 22/10 - 114<br>1 - 600 - 24  | 0.370°=04              |
|                                     | 4+0(1b <sup>+</sup> () <br>4:764 - al   | 217/70701                               | 1.001.02  | 1 858 - AA                       | 7                      |
|                                     | <br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>A<br>AA<br>A<br>AA<br>A<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>AA<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A<br>A_A_A_A<br>A_A_A<br>A_A_A_A<br>A_A_A<br>A_A_A_A<br>A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A_A<br>A_A_A_A_A<br>A_A_A_A<br>A_A_A_A_A_A<br>A_A_A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A_A_A<br>A_A_A_A<br>A_A_A_A<br>A_A_A_A_A_A | 2+ Y   787                              |   |                                  | 7.300==04              |
| 2+0()(x+())                         | 4, 93Us#0 <br>5::08 = =:  | 2. / 77                                 | 9'• 037≥* 0   | 2.02/2 04                        | /•/920=04              |
| 2•/00×+01                           | 2+040×=01   | <+ 7 () (» <sup>-</sup> () )            | ਲ਼੶ <u>ੵ</u> ਗ਼ <sub>ਗ਼</sub> ∞ <u>,</u> ]]   | フォーソウゕ゠ () 4                     | 0·275#7 04             |

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| DIAMETER                       | VELOCITY                     | RE                      | DRAG COEF         | RELAX TIME                        | . ye uist                              |
|--------------------------------|------------------------------|-------------------------|-------------------|-----------------------------------|--|
| 5.8nn*+n1                      | 5,268,                       | 3,049,-01               | 8.199m+n1         | 5,372 <b>.</b> .04                | 8,817m=n4                              |
| 5,900=+01                      | 5,440,001                    | 3,203,=01               | 7.021.+11         | 5,547 m = 04                      | 9.3580*04                              |
| 6,000x+01                      | 5.614.01                     | 3,362,-01               | 7,468,+01         | 5,725.04                          | 9. 4 8 04                              |
| 0.100#+01                      | 5,790#=01                    | 3,525,-01               | 7,137=+01         | 5,904=04                          | 1.050=03                               |
| 0.200#+01                      | 5,968,01                     | 3.693=01                | 6,828=+01         | 6,086.04                          | 1.110=03                               |
| 6.300#+01                      | 6 +   48 m = 0               | 3,866m=0                | 6,538=+01         | 6,270×04                          | 1.1710-03                              |
| 0,400=+01                      | 6,330==01                    | 4,043,01                | 6,265=+01         | 6,455p+04                         | 1.235 == 03                            |
|                                |                              | 4.220.1                 | 6,007±+0)         |                                   | 1.301=03                               |
|                                | 0+0976401<br>6 887 - 01      | 4 6 7 5                 | 5,700,0+01        |                                   | .309##[3                               |
| 6.800++01                      | 7. 07501                     | 4,802.00                | 5 328 + 11        | 7.215.*04                         | +407==[]3                              |
| 6.900±+01                      | 7.266                        | 5.004p=01               | 5.120****         | 7.410.*04                         | 1.586##03                              |
| 7.000±+01                      | 7.458.901                    | 5.210m=01               | 4.936+11          | 7.006.704                         | 1.662##03                              |
| 7.100#+01                      | 7.652. 01                    | 5.422=*01               | 4,757 <b>.</b> +n | 7.80304                           | 1.74n=n3                               |
| 7.200=+01                      | 7.847.01                     | 5,638.01                | 4.587.+01         | 8.002.04                          | 1.021=03                               |
| 7.300++01                      | 8,043,01                     | 5,860=*01               | 4.426.+01         | 8.202.04                          | 1.9040-03                              |
| 7.400++01                      | 8.241.01                     | 6.087.01                | 4,274=+01         | 8.404.04                          | 1. 989=03                              |
| /•>00≠+0                       | 8,441.000                    | 0.3 8µ#0                | 4.129.+01         | 8,008,04                          | 2.076=03                               |
| / • • 0 0 <b>* +</b> 0 1       | 8,04   m = 0  <br>8 8/3 = 0  | 6 796 - 01              | 3.772#*01         | 0,0 2p* 14                        | 2.10000003                             |
| 7+700**01<br>7-800**01         | 9.047                        | 7.042 mm 01             | 3.0020+01         | 9.205-4.4                         | 2.25/00                                |
|                                | 9.251                        | 7.294.00                | 3.021##01         | 9.434.04                          | $2 \cdot 3^{-1} = 03$                  |
|                                | 9.456                        | 7.55                    | 3.2020+01         | 9.643m = 04                       | 2. 946 ** 03                           |
| 6.100*+01                      | 9.663m=ni                    | 7.811.0                 | 3.403.+01         | $9,854_{n}=04$                    | 2.047.03                               |
| 8,200±+01                      | 9,871                        | 8.07801                 | 3.001+01          | 1.007.03                          | 2,/5,00003                             |
| b.300=+01                      | 1+008++00                    | 8,349,=01               | 3.204+01          | 1,028,03                          | 2.055.003                              |
| 8.400×*01                      | 1.029=+00                    | 8.626.701               | 3,11,2++01        | 1.049=03                          | 2. 463 ** 03                           |
| 8,500×+01                      | 1 • 0 <sup>5</sup> 0 # + 0 0 | 8,908,01                | 3.024=+01         | 1.071.07                          | 3. <sub>∐</sub> 73≠≖⊔3                 |
| 0.000 <b>*</b> +01             | 1+071=+00                    | 9.194.01                | 2.940+01          | 1.092.03                          | 3.185#*03                              |
| 0./00**01                      | 1.095+00                     | 9 7 9 7 9 9 1 ···       | 2,057=+01         | j•  4 <b>m</b> ♥[]3               | 5.300 05                               |
| 0.000x+01                      | 1+1   7#*00                  |                         | 2.7020+01         | 1.158-2.3                         | 3.4//**03                              |
| 9.000++01                      |                              | 1,000m-00<br>1.039m+00  | 2.637.+01         | 1.18n.*03                         | 3 500003                               |
| 9.100x+01                      | 1.179.+00                    | 1 • 67 <b>n • *</b> 0 0 | 2.569.01          | 1.202×703                         | 3./83####3                             |
| 9.2nn±+n1                      | 1.2n0+00                     | 1.1n2=+00               | 2.5.14.+11        | 1.224»*n3                         | 3.910**03                              |
| 9,300=+01                      | 1.222.+00                    | 1+134m+nn               | 2.442.+11         | 1.246. 13                         | 4                                      |
| 9.400=+01                      | 1.244 =+ 00                  | 1,167.+00               | 2.382 + 11        | 1.269 m = 0.3                     | 4.171.0-03                             |
| 9.500±+81                      | 1.260 .+ 00                  | 1.201.+00               | 2.324=+01         | 1.29   03                         | 4.3050-03                              |
| 9,000×+01                      | 1,288,+00                    | 1.234=+00               | 2,268=+01         | • 3   4 <b>•</b> • 03             | 4.4410-03                              |
| 5 · 7 0 0 + + 0 1              | + 3   <u> </u> + 00          | 1,269+00                | 2+215=+01         | 30 * 25 • 1                       | 4. 28 0== 03                           |
| <b>7 + ° () () ≠ + ()  </b>    | ,333 <u>m</u> +00            | 1.304+00                | 2. 103=+01        | 1. 37Y = 03                       | 4./22=03                               |
| 7.700x+01                      | 1. 350 p+ 00                 | 1.337×+00               | 2.113#+01         | 1, <u>55</u> 2, <u>9</u> 0 3      | 4,8660-03                              |
| 1.000**02                      | 1 • 3/ <sup>9</sup> # + 00   |                         | 2. 002. 01        |                                   | 2. 12** 03                             |
| I+ IUU≭704<br>I- 200≠4/2       | 1.850.+00                    | 2,225++00               | 1.364-+ni         | • = 7 ≤ p = [] ∪<br>  • 894 = ∞ K | 8.4730= 57                             |
| 1 · CUU# · UC<br>1 · 300x + 02 | 1, 1, 2, 3 m + 0,0           | 2,755_+00               | 1+0               | 2.165                             |  |
| U                              |                              | · · · · · ·             | 1                 |                                   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |

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| DIAMETER         | VELOCITY               | RE                                  | DRAG COEF              | RELAX TIME                       | .98 DIST    |
|------------------|------------------------|-------------------------------------|------------------------|----------------------------------|-------------|
| 1.400++02        | 2,399=+00              | 3.352=+00                           | 9,540=+00              | 2,447 - 13                       | 1.298==02   |
| 1.500±+()2       | 2,648.+00              | 3,963=+00                           | 8,394=+00              | 2,100,*03                        | 1.2020402   |
| 1.600*+02        | 2,884,+00              | 4,605,+00                           | 7.546=+00              | 2.94   03                        | 1.055=02    |
| 1.700=+02        | 3,∣36∍+00              | 5,320m+00                           | 6,782=+00              | 3. 198, - 03                     | 2.174=*02   |
| 1.800*+02        | 3,390=+00              | 6 <b>,</b> 089 <b>,</b> *00         | 6,145,+00              | 3,457 <b>,•</b> •03              | 2.219002    |
| 1.900++02        | 3,645 + 00             | 6,912=+00                           | 5,60 <sup>8</sup> #+00 | 3.717=03                         | 2.092**02   |
| 2.000=+02        | 3,903,+00              | 7,79 <b>0,</b> *UO                  | 5.151.+00              | 3.980⊪∢03                        | 3.291**02   |
| 2.100=+02        | 4,161=+00              | 8,721=+00                           | 4.757.+00              | 4,24403                          | 3./17=02    |
| $2.200 \pm 02$   | 4,421,+00              | 9,7 <sub>0</sub> 7 <sub>0</sub> +00 | 4,415+00               | 4,208,*03                        | 4.170**02   |
| $2.300 \pm + 02$ | 4,681,+00              | 1,075 <b>±</b> +01                  | 4.117.+00              | 4,74 <sub>p=0</sub> 3            | 4,6490=02   |
| 2.400++02        | 4.942.+00              | 1,184,±01                           | 3,854_+00              | 5,040×=03                        | 5,154=02    |
| 2,500++02        | 5,203.+00              | 1.298.401                           | 3,622*+00              | 5,3 <sub>0</sub> 6,*03           | 5,0850-02   |
| 2.000++02        | 5,465,+00              | 1,418,+01                           | 3,415.+00              | 5,573,•03                        | 6.241=02    |
| 2.700++02        | 5,727,+00              | 1,543,+01                           | 3.229 .+ 00            | 5,840,                           | 6.823##02   |
| 2,800=+112       | 5,989 + 00             | <b>,</b> 673 <b>⊳</b> +0            | 3.063.+00              | 6,1 <sub>0</sub> 7 <u>,</u> =03  | 7.430**02   |
| 2,900++02        | 6,250,+00              | 1,809,+01                           | 2,912=+00              | 6,374 <u>s</u> =03               | 8.062**02   |
| 3.000++02        | 6,512,+00              | 1.950+01                            | 2,175=+00              | 6.640×=03                        | 8.119002    |
| 3.1nn++02        | 6.773 +00              | 2,095,+01                           | 2.651.+00              | 6,906=03                         | 9.400=02    |
| 5.200=+02        | 7,033,+00              | 2.246.+01                           | 2,537.+00              | 7.172.=03                        | •u  ■♥0     |
| 3.300++02        | 7.294.+00              | 2,4n2+01                            | 2.435 + 00             | 7,438,-03                        | 1. 1830-01  |
| 3.400++02        | 7,554,+00              | 2,563=+01                           | 2, 337 =+ 00           | 7,7 <sub>0</sub> 3,*03           | 1. 590 - 01 |
| 3.500++02        | 7.813s+nn              | 2.729.+01                           | 2.249 = 00             | 7,967=03                         | 1,236×701   |
| 3,600++02        | 8,071=+00              | 2.900+101                           | 2.160.+00              | 8.23   03                        | 1.316="DI   |
| 3.7nn++02        | 8,329.+00              | 3,076.+01                           | 2.092+00               | 8,494,=03                        | 1.398=01    |
| 3.800++02        | 8.587.+nn              | 3,256.+01                           | 2.022.+00              | 8,757p=03                        | 1.483= 01   |
| 3.900+02         | 8,843 <sub>m</sub> +nn | 3,4420+01                           | 1.950=+00              | 9,018=03                         | 1. 269 . 01 |
| 4.000++02        | 9. 199. + 11           | 3,632=+01                           | 1.095+00               | 9,279, 03                        | 1.058=01    |
| 4.100++02        | 9.354.+00              | 3,828,+01                           | .838 <b>∞</b> +00      | 9,539=03                         | 1.149=01    |
| 4.200=+112       | 9,6n9±+nn              | 4,028=+01                           | 1.784=+00              | 9 <b>,</b> 799 <b>, •</b> 03     | 1.5420701   |
| 4.300++02        | 9,862±+nn              | 4,232.+01                           | .734 <b>.+</b> 00      | 1.006=02                         | 1. 437 01   |
| 4.400=+02        | 1.011+01               | 4,442=+01                           | 1.687 <b>.+</b> 00     | 1.0310 - 02                      | 2. 135      |
| 4,500++02        | 1.037.+01              | 4,656,+01                           | 1.0430+00              | 1.057.02                         | 2. 34=01    |
| 4,600+112        | 1. p62.+ p1            | 4,874,+01                           | 1, 60 l = + 00         | • 0 <sup>8</sup> 3 <b>• *</b> 02 | 2.2350 01   |
| 4,700x+02        | 1.087.+01              | 2,097,+01                           | 1.561.+00              | 1.108.02                         | 2, 339== 01 |
| 4,800=+112       | 1.12+01                | 5,325,+01                           | 1,524m+00              | 1.134. 02                        | 2.444==01   |
| 4.900=+02        | 1.130+01               | 5,558=+01                           | 1.480.+00              | 1.15902                          | 2, 252**01  |
| 2.000x+02        | 1.161.+01              | 5,794-+01                           | 1.455=+00              | I. 184 <b>∍</b> 02               | 2.06   0    |
| 5,100x+02        | 1. 180 . + 01          | 6,036,+01                           | 1,423=+00              | 1,209,-02                        | 2.172==01   |
| 5.200++02        | 1.210.+01              | 6,281.+01                           | 1,392+00               | ,234 <b>∞</b> •02                | 2,0850000   |
| 5,300++02        | 1.235.+01              | 6,531=+01                           | 1.364=+00              | 1,259.02                         | 3.∪00≖≖01   |
| 5,400+02         | 1.259.+01              | 6,786=+01                           | 1.330m+00              | ,284 <u>x</u> =02                | 3.117=01    |
| 5,500++02        | 1,283.+01              | 7.044.+01                           | 1.510=+00              | 1,309,-02                        | 3.235**01   |
| 5,600++02        | 1,308.+01              | 7.308=+01                           | 1.285.+00              | 1.333 02                         | 3.3560001   |
| 5,700x+02        | 1, 332 - 11            | 7.575.+01                           | -1.261.+00             | ,358 <b>∞</b> ≢02                | 3.478=-01   |
| 5.800=+02        | 1.350 + 01             | 7,846.+01                           | 1,230 00               | 1,382m=02                        | 3.0020=01   |
| 5,900±+U2        | 1.379+01               | 8.122=+01                           | 1.210.+00              | 1,4 <sub>0</sub> 7, = 02         | 3./27=01    |
|                  |                        |                                     |                        |                                  |             |

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| DIAMETER                                      | VELOCITY  | RE                     | DRAG COEF                | RELAX TIME                | ,98 DIST               |
|---|---|------------------------|--------------------------|---------------------------|------------------------|
| $6 \cdot 0 0 0 = + 0^2$                       | ,40 <sup>3</sup> ,*01                                   | 8,402=+01<br>8,686=+01 | 1,195,0+00<br>1,175,0+00 | ,43 ≥=02<br> ,455≥=02     | 3.855×=0 <br>3.984×=0  |
| 6.200=+02                                     | 1,450,0+01  | 8,975,+01              | 1,156,+00                | 1,479,02                  | 4.114=01               |
| 6.300++02                                     | 1.474.+01   | 9,267.0+01             | , 38±+00                 | 1,203,02                  | 4,247×=0 <br>4,38,×=0  |
| 0,400#+02                                     | 1+49/#*01<br>1-521++01                                  | 9.864+01               | . .3 <b>.</b> +∩∩        | <b>,</b> 55  <b>,</b> ∎02 | 4,5 6==0               |
| 6,600±+02                                     | 1,544,+01   | 1.017=+02              | 1.080.+00                | 1,574p=02                 | 4.053==01              |
| 6,700=+02                                     | 1,567,+01   |                        | 1.070=+00                | 1.5980=02                 | 4.432000               |
| 0,800±+02<br>6.9nn±+02                        | +29U#+0 <br> +6 3 <b>+</b> +1                           | 1.011=+05              | •04 »+00                 | 1,645p=02                 | 5, <sub>1</sub> 74×=01 |
| 1.000=+02                                     | 1,636 <b>.+</b> 01                                      | 1.143.+02              | 1.020+00                 | 1.668. 7 02               | 5.217=01               |
| 7.100++02                                     | ,658 <u>.</u> +0  | 1 + 175 ± + 02         | ,[]3#+[]<br>9,995###I    | 1,09   p=02               | 5.302##01<br>5.309##ni |
| /•200*+02<br>/•300±+02                        | ,08  <b>s</b> +0 <br> ,7 <sub>0</sub> 3 <sub>s</sub> +0 | 1.24   . + 02          | 9.868                    | 1+737=02                  | 5.056==01              |
| /,400=+02                                     | 1.726 + 01  | 1.275=+02              | 9.744==01                | ,76 <u>0</u> ,≖02         | 5.806**01              |
| /•>00=+02                                     | •/40±+0 <br> •77 ±+0                                    | 1.343.+02              | 9,0,200°01<br>9,510,0°01 | +806p=02                  | 6.108=01               |
| 7.700++02                                     | 1,793,+01   | 1.378=+02              | 9.398. 01                | 1.828. = 02               | 6.262=01               |
| 7.800++02                                     |   | 1.413.+02              | 9,290×*01                | ,92 ≥=02<br> ,873,=n2     | 0,4 0==0 <br>6,573==0  |
| <sup>6</sup> •00*+02                          | 1.859 <b>.</b> +01                                      | 1+484×12               | 9.840                    | 895 02                    | 6./30==01              |
| č. 00≠+02                                     | 1,880=+01   | 1.520=+02              | 8.9850.01                | 1.918. 02                 | 6.889=01               |
| 0.200x+02                                     | ,902 + 0  | 1.594.+02              | 8,890×101<br>9,797×101   | +940##02<br> -962##02     | 7. 249                 |
| $c_{0} = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 =$ | 1,945,+01   | 1.631.+02              | 8.707×01                 | 1,984,-02                 | 7. 574=01              |
| 0.500*+02                                     | 967 + DI  | 1,068=+02              | 8,019=01                 | 2,006,02                  | 7,938##0 <br>7,738##0  |
| °,0jj⊭+j2                                     | 1,988 <b>+ 0</b> 1                                      | ,/µ°⊭+02<br> ./745⊭+02 | 8,2340001<br>8.452mm     | ∠•0∠′⊭⁼0∠<br>2•049∍≠02    | 7.569**01              |
| $0_{*}0_{0}x+02$                              | 2•00/∍+01<br>2•031∞+01                                  | 1,783µ+02              | 8.37                     | 2.0710-02                 | 8. 137 = 01            |
| 0.900±+02                                     | 2.052.+01   | 1.822#+02              | 8.293m-01                | 2.092.02                  | 8.206#701              |
| ¥+000±+02                                     | 2,073,0+01<br>2,094,0+01                                | 1.901=+02              | 8,217#*01<br>8,143#*01   | 2.135                     | 8.2480-01              |
| 5.200x+02                                     | 2.115.+01   | 1,942=+02              | 8.071.001                | 2.156,=02                 | 8./20**01              |
| 9,300=+02                                     | 2,135,+01   | 1,982#+02              | 8.000×*01<br>7.932×*01   | 2,178,02<br>2,199,702     | 8.394∞≖0 <br>9.169⊭≂0  |
| 7+400±402<br>9-500++02                        | 2,177,+01   | 2.164.+12              | 7.865.s≂ni               | 2.220=02                  | ا <u>∎</u> ⇔∉29,∠45    |
| 9.600x+(i2                                    | 2.197.+01   | 2.105=+02              | 7.800-01                 | 2.24   = 02               | 9.422.                 |
| 9.700x+02                                     | 2,218,+01   | 2.147=+02              | 7,/3/==01                | 2,282,702                 | 9.780°±01              |
| 7.000±+02                                     | 2,258,+01   | 2,231,0+02             | 7,615,-01                | 2.30302                   | 9.960-01               |
| 1.000x + 03                                   | 2,278,+01   | 2,274+02               | 7,556 <u>,</u> =01       | 2.324 = 02                | 4»+00                  |
| 1,010x+03                                     | 2,299,+01   | 2,36 n±+ 12            | 7,442==ni                | 2,364 <u>p=0</u> 2        | 1.020+00               |
| 1.030±+03                                     | 2,339 +01   | 2,404,+02              | 7.387.01                 | 2,38502                   | 1.069#+00              |
| 1.040++03                                     | 2,359 =+01  | 2,448 + 02             | 7.334==01                | 2,405=02<br>2,425=02      | 1.0 <sup>8</sup> 8#+00 |
| 1.0204+03                                     | 2,3/0,+01   | と。『フビター ひど             | /,2010-01                | C • " 6 P B * UC          |                        |

| DIAMETER                | AFFQCILA                            | RE                     | DRAG COEF                           | RELAX TIME             | ,95 DIST                 |
|-------------------------|-------------------------------------|------------------------|-------------------------------------|------------------------|--------------------------|
| 1.000#+00               | 2.175.04                            | 2,170==06              | 1.100=+07                           | 2,218,=07              | 1.407=10                 |
| 1+100#+00               | 2,632,=04                           | 2.889.06               | 8,308,+06                           | 2,684 <u>m</u> =07     | 2.062.710                |
| 1+200=+00               | 3.132.04                            | 3,1510-06              | 6.399±+06                           | 3,194,07               | 2. 723 - 10              |
| 1.300#+00               | 3,675,04                            | 4.,/69.=06             | 5,033=+06                           | 3,/48,*0/              | 4.030 10                 |
| 1.400=+00               | 4,200 - 04                          | 2,750m=()0             | 4,030=+06                           | 4.34/##()/             | 5.4250010                |
| 1.200=+00               | 4.893                               | /,325=00               | 3.2/0=+06                           | 4,770,07               | /•154==10                |
| 1,000±+00               | 5,500±=04                           | 0,090,000              | 2./00=+06                           |                        | Y•≤08×*10                |
| 1.500+00                | 0 + 20 2 = 04                       |                        | 2.271#*[]0                          |                        | 1,1020=09                |
| 1.000±+00               |                                     |                        | 1,070,00                            | 7+100p+17<br>8 006 m07 | • 400#009                |
| 2 000++00               | 2 609 and                           | 1,7070°U2              | ,0 ≮⊎≠00                            |                        |                          |
| 2 100 +00               | 0.501                               | 2.010.005              | 1.194.+56                           | 9.780                  | 2,200==09                |
| ~+100×100<br>ン 200×+00  | 1 05303                             | 2.311.00               | 1 በ38…ቀብራ                           |                        | 3 324 - 09               |
| 2.300+00                |                                     | 2.641.=05              | 1.030⊪+00<br>0.088 <sub>∞</sub> +n5 | 1.173.=06              | 3 47% = 00               |
| 2.400-+00               | 111208-00                           | 3.800-#05              | 7 999.405                           | 1,277,=06              | 4 13                     |
| 2.500++00               | 1.359                               | 3.391.05               | 7 077 + 05                          | 1,386                  | 5 5 5 4 7 9              |
| 2.600++00               | 1.470 - 03                          | 3.815-=05              | A 291.+05                           | 1.499                  | 6.497 = 19               |
| 2.700.+00               | 1.585                               | 4.272-05               | 5.618+05                            | 1.617.+06              | 7.59**19                 |
| 2.800+00                | 1.705.03                            | 4.76505                | 5.037.+05                           | 1.739 16               | 8./46#89                 |
| 2.900++00               | 1.829.03                            | 5,294,-05              | 4.534+15                            | 1.865.=06              | 1.117=08                 |
| 3.000++00               | 1.957.03                            | 5.860.=05              | 4.095=+05                           | 1.996 06               | 1.153= 18                |
| 3,100=+00               | 2.09003                             | 6.466 05               | 3.712+05                            | 2,131,006              | 1.316=08                 |
| 5.200 + 00              | 2,227 03                            | 7.112==05              | 3,575=+05                           | 2.27 1.000             | 1.494.=08                |
| 3.300=+00               | 2,368,=03                           | 7,8 <sub>00∎</sub> ≖05 | 3,077=+05                           | 2.415=16               | 1.091==08                |
| 5,400++00               | 2.514.03                            | 8,531,                 | 2.0150+05                           | 2,564 <u>,</u> +06     | ].∀ე6⊭≂ე8                |
| ა,5ი0±+იი               | 2,664 <u></u> ,03                   | 9,306.=05              | 2,579 <b>.+</b> 05                  | 2,717 <u>,</u> -06     | 2.141=08                 |
| 3,600*+00               | 2.819.=03                           | 1.013=04               | 2,370+05                            | 2,874 <u>m=0</u> 6     | 2.397#+08                |
| 3.700x+00               | 2,977 <sub>#</sub> =03              | l.(99ø=04              | 2,183,+05                           | 3.036∍=06              | 2,675=08                 |
| 3,800×+00               | 3.140.03                            | 1 • 19   • • 04        | 2.012=+05                           | 3,202=06               | 2.977 <b>.</b> =08       |
| 3.900=+00               | 3,308,-03                           | 1.287.04               | 1.864.+05                           | 3,373m=D6              | 3.304#-08                |
| 4.000**00               | 3,480, = 03                         | 1.389.=04              | ,/20 x+05                           | 3,748, <b>⊭</b> 00     | 3.557=08                 |
| 4 100 = + 00            | 3,000 <u>n =</u> []3<br>35 876 5 a7 | 1,490,0704             | 1.004 = 05                          | 3,/20p=00              | 4.038000                 |
| 4,200++00               | ა.ია∪ <sub>2</sub> + ეა             |                        | (),490m+00                          | 3,7 [2=4]0             | 4,44/0700                |
|                         | 4.021.00                            | 1.849.004              | , 09  ∞ <b>= []</b> ⊅               | 4 • 1 () • • 0 0       | 4,300°°00                |
| 4 500 + 00              | 4.2100-03                           | 1.978                  | 1.2900+05                           | 4 49                   | 5.300m=00                |
| 4.600+00                | 4.6.2.203                           | 2.113-=04              | 1,2178402                           | 4.693                  | 5.000 = 00<br>6.406 = 08 |
| 4.700++00               | 4.8.4.=03                           | 2.253.404              | 1.065.+05                           | 4,899                  | 6. 783mm 08              |
| 4.800+00                | 5.0103                              | 2.400.704              | 9.999 + 04                          | 5. 11 m. = n6          | 7. 598 <b>m</b> 78       |
| 4.900+100               | 5.22203                             | 2.553.714              | 9.399m+n4                           | 5. 325 16              | 8530 - 18                |
| <b>ン</b> ・0.00 mm + 0.0 | 5.437. n3                           | 2.713.=04              | 8.047.+04                           | 5,544,-16              | 8.9500008                |
| >.100x+00               | 5.656                               | 2.879 N4               | 8.330.+14                           | 5,768, n6              | 9.09 <u>n</u> ##18       |
| 5.200=+00               | 5.880                               | 3.052=04               | 7.865.+14                           | 5,997 - 16             | 1.47.0-17                |
| 5.300±+00               | 6,109=03                            | 5.231.0-04             | 7.420.+14                           | 6.229 06               | 1.131.007                |
| 5.400x+00               | 6,341=03                            | 3.418.704              | 7.023=+04                           | 6,467 <u>m</u> •06     | 1.219=07                 |
| 5.500+00                | 6.578 03                            | 5.61104                | 6.647 n+ n4                         | 6.708. = 06            | 1. 120 - 17              |

| DIAMETER              | VELOCITA                         | RE                              | DRAG COEF                   | RELAX TIME                   | ,98 DIST                            |
|-----------------------|----------------------------------|---------------------------------|-----------------------------|------------------------------|-------------------------------------|
| ⊳.6ՍՕ≖+ՍՕ             | 6,820,=03                        | 3,811,-04                       | 6,297 <u>,</u> +04          | 6,955 <sub>m</sub> =06       | 1.410.007                           |
| 5,700x+00             | 7.,060. <u>,</u> =03             | 4,0190=04                       | 5,971.4                     | 7,2 <u>0</u> 5∍=06           | 1.5140+07                           |
| >,ბეე <b>∗</b> +ეე    | 7,316,03                         | 4.235.404                       | 5,668 <b>"+</b> 04          | 7,460 <u>,*</u> 06           | 1.023=+07                           |
| 5+200*+00             | 7.570p=03                        | 4,457 <b>.</b> =04              | 5,385 <b>*+</b> 04          | 7,720,=06                    | 1./38#=07                           |
| 6.000x+00             | 7,829∍•03                        | 4,688,=04                       | 5.120=+04                   | 7.984.=06                    | 1.060==07                           |
| 6,100++00             | 8.09203                          | 4,92604                         | 4.872.+04                   | 8,25206                      | 1.987                               |
| 6.200.+00             | 8,359,03                         | 5,172,0704                      | 4.640.+04                   | 8,525,000                    | 2.121==07                           |
| 6.500=+00             | 8,631,03                         | 5,427=04                        | 4,423=+04                   | 8,80206                      | 2.262=07                            |
| 6,400x+00             | 8.907 <u>m</u> =03               | 5,689m=04                       | 4,219=+04                   | 9,083m=06                    | 2,409==07                           |
| 6.500*+00             | 9 <b>,</b> 188, <del>,</del> ,03 | 5,960p=04                       | 4,027.04                    | 9,369,00                     | 2,564=07                            |
| 6.600x+00             | 9,473 <b>.</b> =03               | 6,23904                         | 3.847 == 04                 | 9,66 <b>0.</b> *06           | 2./26==07                           |
| 6,700±+00             | 9,762.=03                        | 6,527∍=04                       | 3.677=+04                   | 9,955 06                     | 2.0950-07                           |
| 6,800±+08             | 1.000-02                         | 6,024,004                       | 3,517±+04                   | _l.025_=05                   | 3.⊎72∞+07                           |
| 6,900x+00             | 1.035.02                         | 7. 29 04                        | 3,367 <u>+</u> 04           | I, 056 = 05                  | 3,257 4 07                          |
| 7.000±+00             | 1.060                            | 7.444==04                       | 3,224+04                    | 1,087 <u></u> ,05            | 3,45   = 07                         |
| 7.100x+00             | 1,096,=02                        | 7,768,=04                       | 3.090=+04                   | l, 118 p = 0.5               | 3,053++07                           |
| 7,200*+00             | I.127 m≠02                       | 8.100#704                       | 2,963,+04                   | l,150m=05                    | 3,064=07                            |
| 7,300±+00             | 1.159.02                         | 8.443,-04                       | 2,843 <b>"</b> +04          | . 82 <b>.=</b> 05            | 4. 084 . 07                         |
| /.400=+00             | 1,191,m=02                       | 8.794.04                        | 2,729±+04                   | -  <b>.</b> 2 4 <b>∞</b> ≠05 | 4.313==07                           |
| 7.200=+00             | 1.223 = 02                       | 9,156=04                        | 2,622=+04                   | 1.24705                      | 4,95,⊨∞07                           |
| 7,600=+00             | 1.250 - 02                       | 9,527,-04                       | 2,520++04                   | 1,281,05                     | 4.8 <u>00</u> ##07                  |
| /./00#+00             | 1,289.02                         | 9 <b>,</b> 9 <sub>0</sub> 8∎≂04 | 2.423 + 04                  | 1,315 <sub>m</sub> -05       | 5, <sub>U</sub> 58, <sub>#0</sub> 7 |
| 7,800±+00             | 1.323 - 02                       | 1.030 <b>.</b> =03              | 2,331,+04                   | $ , 349_{\mu} = 05$          | 5 <u>.327×+0</u> 7                  |
| 7,900x+00             | 1.357 -02                        | l+070#=03                       | 2.243 + 04                  | 1,384 p= 05                  | 5.006∞∞07                           |
| 8,000=+00             | 1.392 02                         | l,ll1∎‴03                       | 2,160,+04                   | 1.419.0=05                   | 5,⊴96≖∙07                           |
| ×.100++00             | 1,42/0=02                        | 1,153,03                        | 2.081.+04                   | 1,455,=05                    | 6.197==07                           |
| 8,200x+00             | 1.462.02                         | . 97 <u></u> .≖03               | 2,000+04                    | 1,49                         | 6.5 0007                            |
| 8,300=+00             | 1.49802                          | 1.241=03                        | 1,934=+04                   | 1.228,-05                    | 6.034.07                            |
| 8.400×+00             | 1,534 = 02                       | 1.286. 03                       | 1.060+04                    | 1,265 = 05                   | 7.170**07                           |
| 00++00c+00            | 1.571.002                        | .333 <b>n</b> ▼03               | 1.001.404                   | 1,002-05                     | 7.219=07                            |
| 8,000 <b>*</b> +00    | 1.000.0002                       | 1.380=03                        | 1./39±+04                   | 1,040=05                     | 7.880×=07                           |
| 0,/00x+00             | 1.640 02                         | 1,429=03                        | 1,680,+04                   | 1.078m=05                    | 8,254×=07                           |
| 0,000x+00             | 1.084.02                         | 1,4./9 <b>m</b> *03             | 1.023=+04                   | 1./1/=02                     | 8.0410-07                           |
| 0.900±+00             | 1.724=02                         | 1,230,03                        | 1,269=+04                   | 1./20m=02                    | 9.042**07                           |
| <b>7 • 000 # + 00</b> | 1,/01,02                         | 1,282,03                        | 1.21/0+04                   | 1+/96p#85                    | 9.456=.07                           |
| 7.100±+00             | 1,8010=02                        | 1.0,35 = []3                    | <b>,468∞+</b> ()4           | 1,030=05                     | 9.085007                            |
| 9.200=+00             | 1.840.0=02                       | 1.0190=03                       | 1,421,+04                   | 1,877 <sub>2</sub> =05       | 1.133=06                            |
| ·9.300±+00            | 1.881.02                         | 1+1,45=03                       | 1,375=+04                   | 1.7 8 05                     | 1.079==06                           |
| 9.400±+00             | 1.921.=02                        | 1.8 <sub>1</sub> 02=03          | 1,3320+04                   | 1,959 <sub>p</sub> =05       | 1.126# <u>#0</u> 6                  |
| 7.200x+00             | 1,962,02                         | 1.000000                        | 1.290+04                    | 2,001.05                     | 1.175=06                            |
| 7,000x+00             | 2,004=02                         | 1,920=03                        | 1,200=+04                   | 2,043=05                     | 1.225=00                            |
| 7+/00×+00             | 2.040 02                         | 1,700,00                        | 1.2120+04                   | 2.086,05                     | 1.277=06                            |
| <b>7.000x+00</b>      | 2,000,02                         | 2.042=03                        | 1,1/2=+04                   | 2,129=05                     | 1.33   = 00                         |
| 2.700x+00             | 2, 3.1 = 02                      | ∠• 1102 = ° 03                  | 1.140=+04                   | 2.1/3.707                    | 1.386=06                            |
| ••••••                | 2.1/4.=02                        | <b>∠ • 1/ 0 = "</b> 03          | 1.100 + 04                  | 2,21/0=05                    | 1.443= 06                           |
| I•100≠+0.             | 2.030                            | ∠,ందర∞ా ⊕న                      | 8,3 4 <b>¤</b> + <u>0</u> 3 | 2,082 <b>n-</b> 05           | 2.115==06                           |

| DDIAMETER         | VELOCITY                            | RE                 | DRAG COEF              | RELAX TIME                      | .78 HIST              |
|-------------------|-------------------------------------|--------------------|------------------------|---------------------------------|-----------------------|
| 1.200.+01         | 3.130.=02                           | 3.749.=03          | 6.415-+13              | 3.192.*05                       | 2.998==00             |
| 1.308=+01         | 3.673.+02                           | 4.765. 03          | 5.039+03               | 3.746. 05                       | 4.133=06              |
| 1.400.+111        | 4.259.02                            | 5,951.03           | 4.030,+03              | 4,343,05                        | 5, 564 06             |
| 1.500=+01         | 4.88902                             | 7.31803            | 3,283,+13              | 4,985.=05                       | 7.338=06              |
| 1.600=+01         | 5,561,02                            | 8,880,-03          | 2.706.+03              | 5.671m=05                       | 9.006=06              |
| 1,700=+01         | 6,276,02                            | 1.065.02           | 2,257 +03              | 6,400,+05                       | 1.212=05              |
| <b>,800±+</b> 0   | 7.034.02                            | 1,264,02           | 1.902=+03              | 7,173,m05                       | 1.225=05              |
| 1.\$00x+01        | 7,835,+02                           | 1,486=*02          | 1.019=+03              | 7,990,=05                       | 1,094=05              |
| 2+000#+01         | 8,679,0=82                          | 1,732=02           | j.389∞+ŋ3              | 8,850,05                        | 2.326==05             |
| 2+100+01          | 9,562=02                            | 2,005=02           | 1.200++03              | 9,/54 <sub>0</sub> =05          | 2.329=+05             |
| 2.200=+01         | •047×=0                             | 2.304.02           | 1,042,0+05             | 1.0/0=04                        | 3.410=02              |
| 2.300=+01         | •   4¤ <b>⇒</b> 0                   | 2,03,07,02         | 9,150=+02              | [• [09∞•04<br> • 070 =•4        | 4. j75 = 05           |
|                   | +240±=0                             | 2,7000702          | 8,0000+02              | 1.2/2000                        | 4,034##go<br>5,504=05 |
|                   |                                     | 3 705 -02          | /. 9 ♥BZ               | ۳ <u>۳</u> ۳۳ مر <u>۱</u> ۰۵۵ ۱ | 5,094 <b>0</b> 405    |
|                   | 1.676 -01                           |                    | 0,000#402<br>5 682.400 |                                 | 7 /53 - 05            |
| 2.800-+01         |                                     | 4.734              | 5 102 + 12             | 1,728.=04                       | 8 4700=05             |
| 2.900.+01         | 1,8,6,,,0                           | 5.25602            | 4 598-+02              | 1.852                           |                       |
| 5.000#+01         | 1.942                               | 5.815.00           | 4.160.+02              | 1.980.+04                       | 1.183=04              |
| 5.180**81         | 2.072.01                            | 6.411.02           | 3.776*+02              | 2.113.04                        | 1.349== 14            |
| 3.200*+81         | 2.200.01                            | 7.045.=02          | 3,439,+02              | 2,250=04                        | 1.33==04              |
| 5.300=+01         | 2.344 - 01                          | 7,719.02           | 3.141=+02              | 2.390=04                        | 1./34=04              |
| 3,400x+01         | 2,486,=01                           | 8.43502            | 2.078 + 02             | 2.535=04                        | 1.954==04             |
| 3,500x+U1         | 2.631.001                           | 9.192.02           | 2,044 + 02             | 2,683_=04                       | 2.195=04              |
| 3,600±+01         | 2.781.01                            | 9,991=02           | 2,435=+02              | 2,836 <u>m</u> =04              | 2,458=04              |
| 3,700*+01         | 2,934,01                            | I, <u>084</u> ,≡01 | 2,240m+02              | 2,9920-04                       | 2,1440-04             |
| 3.800±+01         | 3.091=01                            | <b>  72</b> ##0    | 2,080×+02              | 3,152=04                        | 3. 153 = 04           |
| 3.900#+01         | 3,252,01                            | ,266 <u>»</u> ≢0   | 1.458 = + 05           | $3, 3 6_{10} = 04$              | 3.389=04              |
| 4 • 0 0 0 = + 0 1 | 3.410 == 01                         | 1,364× 01          | 1.792=+02              | 3,484m=04                       | 3.151=04              |
| 4 • 100 = + 61    | 3,582,01                            | 1.46/=01           | 1,009,02               | 3,055 m = 04                    | 4 4 4 4 4 4 7 0 4     |
| 4 300 +01         | 3,/20,*[]]                          |                    | 1,227 b+()2            | ა,იაელ∙ე4<br>4 ია9 იი4          | 4,0020=04<br>5 140-04 |
| 4.400.000         | 4.110                               | 1.805.01           | 1. 363 m + 02          | 4.1916-04                       | 5.497 = 04            |
| 4.5nn+01          | 4.291.+01                           | 1.9275-01          | 1.278.+02              | 4.376 - 14                      | 6.un7##n4             |
| 4.0 ((n±+ (1))    | 4.477                               | 2.055.=01          | 1.200+02               | 4.565 - 14                      | 6.932×+14             |
| 4.700++11         | 4.665.001                           | 2,188, 11          | 1.129.+02              | 4.757.0-04                      | 7.179.0014            |
| 4,800±+01         | 4,857,-01                           | 2.327=01           | 1.064.+02              | 4,953=04                        | 7.0510004             |
| 4.900=+01         | 5.052.01                            | 2.470=01           | 1.004+02               | 5, 151%=04                      | 8.2480=04             |
| 5.000++01         | 5,249° = 01                         | 2,619,=01          | .9. 490 <b>•</b> + 01  | 5,353 <sub>m</sub> +04          | 8.070=04              |
| 5.100=+01         | 5,450,000                           | 2.774=01           | 8,979=+01              | 5,558 m = 134                   | 9.719=04              |
| 2.200=+01         | 5.654.=01                           | 2.934.901          | 8,50/#+01              | 5.166p+04                       | l•u[9∞∞03             |
| 5.300x+01         | 5.861.001                           | 5.1000-01          | 8.070=+01              | 5, 71/2=04                      | 1.090==03             |
| 2.400++01         | 6.070.01                            | 3.27   = 0         | 7,062                  | 6,190, 14                       | 1.163=03              |
| 2.200*+01         | 6 • 28 2 • • 0                      | ·S•448∞•0          | 7,250,+01              | 0,400,0404                      | 1.239=03              |
|                   | 0 + 4 7 / ± = []`[<br>6 7 15' = 0 - |                    | 0,7390+01<br>6.612+01  |                                 | 1.31/##[3             |

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| DIAMETER               | VELOCITY               | · RE                         | DRAG COEF                           | RELAX TIME                          | ,98 DIST                    |
|------------------------|------------------------|------------------------------|-------------------------------------|-------------------------------------|-----------------------------|
| 5.800±+01<br>5.900±+01 | 6,934,+01<br>7,157,=n1 | 4,014 <b>01</b><br>4.214.=01 | 6,30 <sup>8</sup> »+01<br>6,024»+01 | 7,071=04<br>7.298==04               | ,484±=03                    |
| 6,000x+01              | 7,381,-01              | 4,420,001                    | 5.759×11                            | 7,527, = 04                         | 1.062×=n3                   |
| 6,100=+01              | 7,608,=01              | 4,632=01                     | 5,5110+01                           | 7.759.=04                           | 1./56=03                    |
| 6.200.+01              | 7.8380                 | 4,850,000                    | 5,279,+01                           | 7,99304                             | 1.052##03                   |
| 0.300x+01              | 8,067,0                | 5,073±01                     | 5,0610+01                           | 8,229,=04                           | 1.9520=03                   |
| 0,400±+01<br>6.500±+01 | 8 538 - 0 I            | ວ,ວ[ວມ*[] <br>5.530          |                                     | 8,40/∞=[]4<br>8,707,-04             | 2.05=03                     |
|                        | 8.77501                | 5.780.00                     | 4,000±+01<br>4.482.÷ni              | 8,949,en4                           | 2 - 10   # = []3            |
| 6,700+11               | 9,n15,+01              | 6,028,01                     | 4.312+11                            | 9.19304                             | 2.383##03                   |
| 6,800±+01              | 9,256 01               | 6,28101                      | 4,151,+01                           | 9,439 <b>.</b> -D4                  | 2.498.003                   |
| 6:900x+01              | 9.499.001              | 6,541,001                    | 4,000=+01                           | 9,687 <u>.</u> =04                  | 2.017=03                    |
| /•000≠+01              | 9,743.01               | 6,807×*0                     | 3,856,+11                           | 9,936, = 04                         | 2.1400003                   |
| /+100++01              | 9,990,00               | 7 454                        | 3,/21+01                            | 1.019=03                            | 2.065.000                   |
| 7.300.+01              |                        | 7 64 n = 0 1                 | 3,293,00                            | •044 <u>⊭</u> •03                   | 2.994##03                   |
| 7.400x+01              |                        | 7.93numni                    | 3.357.+01                           | 1,095,003                           | 3,262mm03                   |
| 7,500++01              | 1.099.+00              | 8.226. 01                    | 3.248,+01                           | 1.121                               | 3.4010003                   |
| 7:600=+01              | 1.124.+00              | 8,528=*01                    | 3, 144,+01                          | 1 • 147 • p3                        | 3, 243 = 03                 |
| 7.700++01              | 1.150=+00              | 8,837,01                     | 3.046.+01                           | $ , 73_{p}=03$                      | 3.089==03                   |
| /,800±+01              | •   70 • + 0 0         | 9,151±#01                    | 2,952=+01                           | 1.199.=03                           | 3.038#=03                   |
| 7.700±+01              |                        | 9 708 =01                    |                                     | ,220, <b>s</b> =0.5                 | 3,9910=03                   |
| 8.100++01              | 1.253.+00              | 1.813++00                    | 2,770,000                           | 1,278,+03                           | 4.1470000                   |
| 8.200+01               | 1.279.+00              | 1.047+00                     | 2.620  m + 01                       | 1.30503                             | 4.4700-03                   |
| 6.300++61              | 1,306 +00              | 1.082.+00                    | 2,540,+01                           | 1.332 = 03                          | 4.037                       |
| 8.400x+01              | 1.332.+00              | 1.117#+00                    | 2,476=+01                           | 1.358p=03                           | 4.007=03                    |
| 8.500x+01              | 1,359, +00             | 1,153,+00                    | 2,408,+01                           | 1,386 <sub>0</sub> =03              | 4.981=03                    |
| 0 + 0 [] 0 + + [] ]    | 1,382 <u>+00</u>       | 1,189 <b>,+</b> 00           | 2.344 .+01                          | 1,4 3 <sub>m</sub> =[]3             | 5.158=03                    |
| 0,/00x+01              | $ +4  \le p \ne 00$    | 1,220,0 + 00                 | 2,202+01                            | •440 <u>∞</u> ⇒03                   | 5.539##03                   |
| 8.900x+01              | 1.466.+00              | 1,207,100<br>1,3n2,+nn       | 2,222×1()                           | 1.495.*03                           | - 2+224#♥{]3<br>- 5.712m■n3 |
| 9.000x+01              | 1,493,+00              | 1.341m+00                    | 2.11                                | 1.523.0-03                          | 5. 9040=03                  |
| 9+100++01              | 1.521+00               | 1,381,+00                    | 2,058,+01                           | 1.55   n = UJ                       | 6.100=03                    |
| 9.200=+01              | 1.548.+00              | 1,422=+00                    | 2.007+01                            | 1,579 <u>=</u> 03                   | 6.299.=03                   |
| 9.300±+01              | 1.576.+00              | 1.463.+00                    | 1.959=+01                           | 1.607.03                            | 0.2020+03                   |
| ¥∎400¤+01              |                        |                              | 1.912=+01                           | 1,035 p = ()3                       | 6./09##03                   |
| 9+200x+01              | ,032, <b>,</b> ≠00     | 1,590,+00                    | ],000⊭+0 <br>  823.++               | 1.004.003                           | 0.9 9=03                    |
| <b>7.</b> 700x+01      | 1.688 <sub>m</sub> +nn | i.634.+nn                    | 1.78 <b>n</b> .+ni                  | 1.721.03                            | 7.100##03<br>7.151##03      |
| 9.000+01               | 1.717.+00              | 1.079.+00                    | 1.740.+01                           | 1.75 n 03                           | 7.972וn3                    |
| 9,900±+01              | 1.745 + 00             | 1.724.+00                    | 1.700=+01                           | 1.780m+03                           | 7./97×*03                   |
| 1.000=+02              | 1.774.+00              | 1.771.+00                    | 1,062-+01                           | 1.8 <sub>0</sub> 9 <sub>m</sub> =03 | 8. 126 = 03                 |
| 1.100#+02              | 2+0 <sup>75</sup> +00  | 2,278,+00                    | ,330 m+ []                          | 2.116.003                           | 1. 15 2 02                  |
| 1+200**02              | 2+400+00               | 2.0/4.+00                    |                                     | $2 \cdot 447 = 03$                  | 1.341=02                    |
| I•3∏0 <b>⊭</b> +02     | 2,/32=+00              | S, 244≥*00                   | 9.112=+00                           | 2,180,03                            | 1,668##82                   |



| DIAMETER                               | VELOCITY                    | RE                                     | DRAG COEF          | RELAX TIME                    | ,98 DIST                  |
|--|-----------------------------|--|--------------------|-------------------------------|---------------------------|
| 1.400 + 02                             | 3.012=+00                   | 4,208=+00                              | 8,073_+00          | 3,071=03                      | 2.034=02                  |
| 1.500.+02                              | 3.315+00                    | 4,962=+00                              | 7,139=+00          | 3,380=03                      | 2.439=02                  |
| 1.600.+02                              | 3.621.+00                   | 5,783.+00                              | 6.380.+00          | 3,693=03                      | 2.885**02                 |
| 1.700.+02                              | 3.931.+00                   | 6.669.+00                              | 5.755.+00          | 4.008.=03                     | 3.369==02                 |
| 1.800-+02                              | 4.242.+00                   | 7.620.+00                              | 5.232.+00          | 4.326 13                      | 3.0930=02                 |
| 1 900 + 02                             | 4.555.+00                   | 8.637.+00                              | 4.789.+00          | 4.64503                       | 4.456=12                  |
|  | 4 869 100                   | 9.720.+00                              | 4 411 + 00         | 4.96603                       | 5. 159                    |
|  |                             |  | 4 085-+00          | 5.287 - 03                    | 5.099**02                 |
|  |                             |  | 3 802.400          | 5.610                         | 6.178=02                  |
| 2.200+02                               | 00 ≁ ۵۱ [] ⊂ • ⊂            |  |                    | 5 933.=03                     | 795                       |
| 2.300++02                              | 2,010,+00                   |  | 7 335 +00          | 6 256 - 03                    | 7 49 - 02                 |
| 2.400=+02                              | 0,132,0+00                  | 107070701                              |                    |                               | 8 6410-02                 |
| 2.200 + 02                             | 0,454,00                    |  |                    |                               | 0.040-02                  |
| 2.000+02                               | 6./67.+00                   | 1,70,00 - 01                           | 5.2000+00          | ບຸ≯[[ປິຍຫາ][ປິ<br>7 (20) - ດ3 | 7.407.402                 |
| 2.700=+02                              | 7.080.+00                   | 1.709.01                               | 2.013.+00          | 7.620 - 03                    | 1.0330001                 |
| 2,800+02                               | 7,4020+00                   | 2,068,01                               | 2,0/0,00           | /,940p=U0                     | 1.123#*01                 |
| 2,900++02                              | 7,718,+00                   | 2.234=+01                              | 2.540.+00          | /,0/(m=0.)                    | 1.2170=01                 |
| 3,000x+02                              | 8.033.+00                   | 2,405=01                               | 2,431 . +00        | 8,192=00                      | 1.3 4#*[]                 |
| 3.100++02                              | 8,348,+00                   | 2,583=+01                              | 2,320,+00          | 8,2 3,0=03                    | ,4  <b>)</b> **()         |
| 3.200=+02                              | 8,662,+00                   | 2,766==01                              | 2.231.+00          | 8,833=03                      | 1.3 9#=0                  |
| 5,300++02                              | 8,975,+00                   | 2,956=+01                              | 2.143.+00          | 9,1520003                     | 1.050 - 01                |
| 3.400*+02                              | 9,287_+00                   | 3,151,0+01                             | 2.062.+00          | 9,47   = 03                   | 1./37==01                 |
| 3.500++02                              | 9,599,+00                   | 3.353.+01                              | 1.987.+00          | 9,788,=03                     | 1.050×=01                 |
| 3,600+02                               | 9,909+00                    | 3,560,+01                              | 1,918 <b>*+</b> 00 | 20-a010.1                     | <b>,</b> 968 <b>mm</b> [] |
| 3,700++02                              | 1.022*+01                   | 3,773=+01                              | .853 <b>∞+</b> 00  | 1.042#=02                     | 2.u88¤=01                 |
| 3.800++112                             | 1.153 +01                   | 3,992=+01                              | 1.194.+00          | 1.073.02                      | 2.2110=01                 |
| 3.900++02                              | 1. <u>n</u> 83_+ <u>0</u> 1 | 4,217.001                              | 1,738.+00          | 1.105.=02                     | 2.338*=0                  |
| 4.000+02                               | ۱۰۱۱ <sup>4</sup> م+۱۱      | 4,447,+01                              | 1.080,+00          | 1.136=02                      | 2.468**01                 |
| 4.100++02                              | 1.144.+01                   | 4,683.+01                              | 1.037.+00          | 1.167m=02                     | 2.000**01                 |
| 4.200 + 62                             | 1.175.+01                   | 4.925.+01                              | 1.591.+00          | 1,198,=02                     | 2.136 - 01                |
| 4.300+02                               | 1.205.+01                   | 5.172.+11                              | 1.549.+00          | 1.229 02                      | 2.075**01                 |
| 4.400-+02                              | 1.235.+01                   | 5.424 + ni                             | 1,508,400          | 1.26 <b>D</b> p=02            | 3.116=+01                 |
| 4.500+02                               | 1.265 + 11                  | 5,682.+0j                              | 470+00             | 1,290=02                      | 3.160-01                  |
| 4.600++02                              | 1.295.+01                   | 5.946.+0.1                             | .434 <b>.</b> +nn  | 1.3210-02                     | 3.307 -01                 |
| 4.700+02                               | 1.325.+01                   | 6.214p+11                              | 1.400+00           | 1.35   . = 02                 | 3.45701                   |
| 4.800.+02                              | 1.355.+01                   | 6.489.+ni                              | 1.360.+00          | 1.381 02                      | 3.0100-01                 |
| 4.900++02                              | 1.384-+01                   | 6.768.+11                              | 1.338 + 11         | 1.411.=02                     | 3.1650-01                 |
| 5 000-+02                              | 1.413.+01                   | 7.053.+01                              | 3 19 + 10          | 1.441 12                      | 3.923==01                 |
|  | 1.443.+01                   | 7.343.+01                              | 1.282+00           | 1.47102                       | 484                       |
| 5 200 × 204                            | 472 + 01                    | 7.638.+01                              | 256.+00            | 1.501.02                      | 4.247                     |
|  | 1,501.00                    | 7.938_+ni                              | 1.231.+00          | 1.53n-+n2                     | 4.413.                    |
| 5 400 +02                              | 1.630.+01                   | 8.243-+01                              | 1 207.+00          | 1.560.02                      | 4. 2820 = 01              |
| ************************************** |                             | 8.554-+01                              |                    | 1.589_=n2                     | 4, 1520 - 01              |
|  |                             | 01227787UI<br>8 8601451                | 111634+00          | 1.018.02                      | 4. 9260 - 01              |
|  |                             |  |                    |                               | 5.1020=01                 |
| 2./00x+02                              | 1.017.0+01                  | 7 • 1 ¥ () # 7 ()  <br>0 5 i E - 2 0 i |                    | 1:676                         |                           |
| 2,000x+02                              | 0,44,2,40                   | 7,71707U1                              |                    | 1. 7 a≦ - an                  |                           |
| 2.900x+02                              | 1:074=+01                   | ¥,04⊅ø₹0                               | 1+10***00          | 1•102#=02                     | <b>℃.40</b> 0m701         |

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| DIAMETER                               | VELOCITY          | RE                 | DRAG COEF        | RELAX TIME         | .98 UIST               |
|--|-------------------|--------------------|------------------|--------------------|------------------------|
| $6,000 \pm +02$                        | 1,700+01          | 1.018.+02          | ,086 <b>∞+00</b> | 1,734,=02          | 5.043=+01              |
| 6.200+02                               | 1.756.+01         | 1.0875+02          | [.052.±00        |                    | 2,828**01              |
| 6.300+02                               | 1.784.+0)         | 1,121,+02          |                  | 1.8.9.02           | 0.015=001              |
| 6,400++02                              | 1.811.+01         | 1.157.+02          | 1.020-+00        | 1.847.*02          | 0,2070=01<br>6.3970=01 |
| 0,500#+n2                              | 1.839.+ni         | 1.193.+02          | 1:0004+00        | 1.875.+02          | 6.791-01               |
| 6,600±+02                              | 1,860,+01         | 1,229=+02          | 9,913,01         | 1.9n3.+n2          | 6./87m=11              |
| 6.700x+02                              | 1,895,+01         | 1.266.+02          | 9.776            | 1.931.002          | 6.986=01               |
| 6.800+02                               | 1,920=+01         | 1,303=+02          | 9.644.001        | 1,958,=02          | 7.186.01               |
| 6.900x+02                              | 1.947.+DI         | 1,341=+02          | 9.510.001        | 1,986,02           | 7.388==11              |
| 7.000x+02                              | 1.974.+01         | 1,379==02          | 9.393 = 01       | 2,013,02           | 7.393.001              |
| 7.100=+02                              | 2.001.+01         | 1,418=+02          | 9.275.01         | 2.040.02           | 7.8000-01              |
| 1.200+02                               | 2,028,+01         | 1,457=+02          | 9.160.=01        | 2,068,-02          | 8.j08**0               |
| 7.300=+02                              | 2,054,+01         | 1,496 <b>»</b> +02 | 9.049.01         | 2.095, 02          | 8.219==01              |
| / • 4 0 0 <b>*</b> + 0 2               | 2.080+01          | 1,230,02           | 8.942            | 2,122,02           | 8.431=01               |
| 7.500+02                               | 2.133.101         |                    | 8,03001          | 2,148,*02          | 8.046.00               |
| 7.700-+02                              | 2,159,+01         | 1,059,+02          | 8,730,001        | 2,1/2,=02          | 8.862=01               |
| 7.800.+02                              | 2,185,+01         | 1.701-+02          | 8 547            | 2 2 2 2 4 5 7 0 2  | 9.000-01               |
| 7.900+02                               | 2.211.+01         | 1.743.+02          | 8.456            | 2,254_=n2          | 9,323=01               |
| 8.000*+02                              | 2.236 + 11        | 1.785.+12          | 8.367 <b></b> ni | 2.280.02           | 9.746                  |
| 8.100x+112                             | 2.262.+01         | 1.828=+12          | 8,28 la=ni       | 2.3.6              | 9.97.0000              |
| 8.200++02                              | 2.287.+01         | 1.872.+02          | 8.19801          | 2.332. 02          | 1.120++00              |
| 8.300x+(2                              | 2,313,+01         | 1,916=+02          | 8.117.01         | 2,358 - 02         | 1.143.+00              |
| 8,400=+02                              | 2,338 + 01        | 1,960=+02          | 8,039=01         | 2,38402            | 1.466=+00              |
| 0,500r+82                              | 2,363 =+01        | 2.004=+02          | 7.962.01         | 2,410=02           | 1.089=+00              |
| b.000x+02                              | 2.388 +01         | 2.049.+02          | 7.080.001        | 2,435.02           | 1.112=+00              |
| 0./00±+02                              | 2,4   3,5+0       | 2,095=+02          | 7.010.01         | 2,460.02           | 1.136=+00              |
| 8:000x+02                              | 2.430 +01         | 2.14               | /./40            | 2,486,-02          | 1.160=+00              |
| 9,700 + 02                             | 2,4020+01         | 2 234 +02          | 7.070.00         | 2.211=02           | 1.184 . + 00           |
| 2.100++02                              | 2,511,+01         | 2.281.+02          | 7.546            | 2, 230, -02        | 1.208=+00              |
| 9.200x+02                              | 2.536.+11         | 2.328.+12          | 7.483            | 2,586,*02          | 1.202#+00              |
| 9.300++02                              | 2.560.+01         | 2.376.+12          | 7.422m#01        | 2.611.02           | 1.290 - 00             |
| 9.400*+02                              | 2,584,+01         | 2.424.+02          | 7.36211          | 2.635.02           | 1.201-100              |
| 9,500*+02                              | 2.600 .+01        | 2.473-+02          | 7.30401          | 2,661,-12          | 1.330#+00              |
| 9.600x+02                              | 2.632.+01         | 2,522=+02          | 7,247.01         | 2.684.=02          | I.355∞+nn              |
| 4,700 <b>*</b> +02                     | 2,656,+01         | 2.571=+02          | 7.192.01         | 2,708-02           | 1.380**00              |
| 9,800++02                              | 2,680,+01         | 2,621+02           | 7.138.001        | 2,733 = 02         | 1.406+00               |
| 9,900=+02                              | 2.703+01          | 2,671=+02          | 7.085.01         | 2,757 <u>p</u> +02 | 1.4310+00              |
| $1 \cdot 0 = 0 + 0.3$                  | 2,/2/2+01         | 2,/21,+02          | 7,03301          | 2.781.02           | 1,457=+00              |
|  |                   | 2.1/2=+02          | 6.980            | 2,005-02           | .482+00                |
| 1 • 0 2 0 # + 0 3<br>1 • 0 3 0 = + 0 3 | 2+//7#+0          | 2.0240102          | 0, ¥34 № []]     | 2.029.02           | 1.208=+00              |
|  | 2.820             | 2.927-+02          | 6 839            | 2,072,0702         | 1.234#+00              |
| 1.050.+03                              | 2,843,401         | 2.979_+no          | 6 703            |                    | 1.200+00               |
|  | F + 0 + 0 B · U I | C 7 7 7 7 8 ° U 2  | 0,//00-01        | 2,0770-02          | 1.20/0+00              |

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| DIAMETER               | VELOCITY               | RE               | DRAG COEF                  | RELAX TIME                   | ,90 DIST          |
|------------------------|------------------------|------------------|----------------------------|------------------------------|-------------------|
| 1.000×+00              | 2.719=04               | 2,713=06         | 8,846,+06                  | 2,772=07                     | 2.20010           |
| 1.100#+00              | 3,289,-04              | 3,6  ⊵*06        | 6,646,#16                  | 3.354.07                     | 3,∠25⊭∍10         |
| 1.200#+00              | 3.915.04               | 4,688,∍⊽()6      | 5,119 <b>±</b> +06         | 3.992.07                     | 4.572=10          |
| 1.300x+00              | 4.594.00               | 5,961=06         | 4.026 <b>±</b> +06         | 4,685,*87                    | 6.303==10         |
| 1.400#+00              | 5,328 p= 04            | 7,445,000        | 3,224,+06                  | 5,434==07                    | 8,485==10         |
| 1.500±+00              | 6.117.04               | 9.157.06         | 2,621=+06                  | 6 <b>.</b> 238 <b>.</b> ≠07  | 1.119.09          |
| 1.000#+00              | 6,959,=04              | 1.111.05         | 2.160.+06                  | 7,097,m07                    | 1.450##09         |
| 1.700 <b>±+</b> 00     | 7,856 <sub>m</sub> =04 | 1,333.05         | ,8 <u>0</u>  ∎ <b>+</b> 06 | 8,012p=07                    | 1.8490-09         |
| 1.800x+00              | 8,808,*04              | 1,582=05         | 1.517=+06                  | 8,982,-07                    | 2,325=09          |
| 1+900×+00              | $9,8 4_{m}=04$         | 1,861, = 05      | 1.290.+06                  | 1.001##06                    | 2.588.+09         |
| 2.000*+00              | •08/∞ <b>•</b> 03      | 2.170.05         | 1.106.+06                  | 1.109.00                     | 3.548=09          |
| 5+100×+00              | , 99 <sub>B</sub> =03  | 2,513=05         | 9,552=+05                  | 1.223 .= 06                  | 4.315=-09         |
| 2.200=+00              | 1,310 03               | 2,889,=05        | 8,308,+05                  | 1.342=06                     | 5.200**09         |
| 5.200x+00              | 1.438 m = 03           | 3.301=05         | 7.271.+05                  | ,467 <b>p=</b> 06            | 6.214=09          |
| 2.400=+00              | 1,560 m=03             | 3,751=05         | 6,399=+05                  | 1,597×16                     | 7.3710-09         |
| 2.500++00              | 1,699,0=03             | 4,239,*05        | 5,062,+05                  | 1,/33m#16                    | 8.083==09         |
| 2.000++00              | 1.838 <sub>2</sub> =03 | 4,/68,05         | 5.033=+05                  | $[,0/4_{B}=0.0$              | 1.016=08          |
| 2./00++00              | 1,98203                | 2,340pm(5        | 4,494,+05                  | 2.021.0=00                   | 1.182##08         |
| 2,800x+00              | 2.131.000              | 2,750,00         | 4,000 = 00                 | 2.1/3p=(]0                   | 1,308 = [8        |
| 2,900=+00              | 2.280 = 03             | 0,0 /##U5        | 3,02/=+05                  | 2,00 8 00                    |                   |
| 3.000x+00              | 2,44/5=03              | 1,020 = ()0      | 3,2/0,+05                  |                              |                   |
|                        | 2.0 2.0                | 0,002×=02        | 2,707,0405                 |                              |                   |
| S•∠UU±+UU<br>S Son +un | 2.107±€UO<br>0.960°=03 | 0,090s=05        | 2,7000+05                  |                              | 2,33/0+08         |
|                        | 2,7000=03              |                  | 2,402=405                  | 3.0019µ≢00<br>3.005 –06      | 2.044##80         |
| 3 500×+00              | 3 140 - 03             | 1,000-04         | 2,2010+00                  | 3,200,00                     | 2.900##00         |
| 3 600 × 00             | 3,5000-00              | 1.1008-04        | 2.0000+00                  | 3,593,=06                    | 3 /48=-08         |
| 3.700-+00              | 3 722 - 03             | 1,200,04         | 746 + 05                   | 3.795 - 06                   | 4 (84 = 08        |
| 3.800±+00              | 3:92503                | 1.489.04         | 1.012++15                  | 4.003.006                    | 4.656##88         |
| 3.900++00              | 4.13503                | 1.6n9-=n4        | 491+05                     | 4.216                        | 5. 167 = 08       |
| 4.000±+00              | 4.35003                | 1.736.=04        | 1.382=+05                  | 4.435                        | 5./2n#=18         |
| 4.100**00              | 4.570 13               | 1.87             | 1.284 .+ n5                | 4.06 <b>n b</b> = 06         | 6.315##18         |
| 4.200.+00              | 4.795 03               | 2.010=04         | 194 .+ 15                  | 4,890,00                     | 6.956=08          |
| 4.300±+00              | 5, 126, 03             | 2,157,-04        | 1,113,+05                  | 5,126,=06                    | 7.645.08          |
| 4.400=+00              | 5,263,-03              | 2.3110-04        | 1.039.0+05                 | 5.367 = 16                   | 8.383=08          |
| 4.500++00              | 5.505.03               | 2,472=04         | 9,7,08,+04                 | 5,614=06                     | 9.174=08          |
| 4.600+00               | 5,752,-03              | 2.04 = 04        | 9.089.+04                  | 5,86606                      | 1.002=07          |
| 4.700 + 10             | 6,002,03               | 2.817.04         | 8.521=+04                  | 6.124 06                     | 1.192=07          |
| 4,800*+00              | 6,263,-03              | <b>3,000=</b> 04 | 7.999 <b>±</b> +04         | 6,387 <u>m</u> +06           | . 88⊭ <b>•</b> 07 |
| 4,900=+00              | 6.527.03               | 5,1920=04        | 7,520,+04                  | 6,656p=06                    | 1.291=07          |
| 5.000=+00              | 6,796 <b>.</b> -03     | 3,391=04         | 7.077.+04                  | 6,930-06                     | 1.400=07          |
| 5.100×+00              | 7.071.03               | 3,599,=04        | 6,669=+04                  | 7,210,00                     | 1.516=07          |
| >.200×+00              | 7.35003                | 3,8150-04        | 6.292=+04                  | 7,496,=06                    | 1.038#=07         |
| 5.300×+00              | 7.63603                | 4.039.04         | 5.942=+04                  | 7,787 <b>.</b> -06           | 1./68=07          |
| >•400≠+00              | 7.927                  | 4.272=04         | 5,010,+04                  | 8,083±-06                    | 1.406=07          |
| <b>り,</b> り00×+00      | 8,223#-03              | 4,214,=04        | 5,310 m+04                 | 8 <b>.</b> 385 <u>»</u> = 06 | 2.u52¤=07         |

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| PIRACIAN VERMAIN NE DRAG GUER NEÇAX  | TIME ,90 DIST  |
|--|--|
| 5,600×+00 8,525×=03 4,764×=04 5,038×+04 8,693  | 8==06 2.205=07   |
| $5.700 \pm 00$ 8.832 $\pm 03$ 5.024 $\pm 04$ 4.77 $\pm 04$ 9.006   | 5=06 2,368=07  |
| 5,800*+00 $9,144*=03$ $5,293*=04$ $4,534*+04$ $9,325$  | $b_{\mu} = 06  2, 39 = 07$                             |
| $5,500 \pm 00$ 9,462 $\pm 03$ 5,572 $\pm 04$ 4,308 $\pm 04$ 9,649  | <b>2,/ 9=07</b>  |
| 6,000*+00 $9,786**03$ $5,860**04$ $4,096**04$ $9,975$  | P==06 2.909=07   |
| $6,100 \pm 00$ $1,011 \pm 02$ $6,158 \pm 04$ $3,898 \pm 04$ $1,031$  | 1×=05 3.108×=07  |
| -6.200 + 10 $1.045 = 02$ $-6.465 = 04$ $-3.712 + 04$ $1.066$   | 5 <sub>₽</sub> =05 3,317₽=07                           |
| $6,300 \pm 00$ $1,079 \pm 02$ $6,783 \pm 04$ $3,538 \pm 04$ $1,100$  | ס,⇒פס,די פֿס,⇒מו,                                      |
| $0,400 \pm 00$ $1,113 \pm 02$ $7,112 \pm 04$ $3,375 \pm 04$ $1,135$  | 5 <sub>≠</sub> +05 3,768≠+07                           |
| 0.500 + 00 $1 + 148 - 02$ $7.450 - 04$ $3.222 - 04$ $1 + 171$  | <b>■</b> =05 4. <b>u</b>   <b>0■</b> =07               |
| $6.600 \mu + 00$ $1.184 \mu = 02$ $7.799 \mu = 04$ $3.078 \mu + 04$ $1.207$  | 4,263m=07  |
| 0.700x+00 1,220x+02 8,159x+04 2,942x+04 1,244  | 4,528×+07  |
| $0.800 \pm 0.01125 \pm 0.28130 \pm 0.4214 \pm 0.411282$  | 2,07 4,005=07  |
| $0,900 \pm 00$ $1,294 \pm 02$ $8,912 \pm 04$ $2,593 \pm 04$ $1,320$  | 7 <u>0 + «</u> 95 <u>) - 5</u> , <u>195 - «</u> 17     |
| $7.000 \pm 00$ 1.332 $\pm 02$ 9.305 $\pm 04$ 2.580 $\pm 04$ 1.358  | b=05 5.398+07  |
| $7.100 \pm 00$ 1.370 $\pm 02$ 9.709 $\pm 04$ 2.472 $\pm 04$ 1.397  | a=05 5.714a=07   |
| $1.200 \pm 00$ $1.40 \pm 02$ $1.013 \pm 03$ $2.3/1 \pm 04$ $1.437$   | \$#02 0,043#=07  |
| /•300x+00  •449x*02  •055x*03 2.2/2x+04  •4//  | (n=0) 6,387n+07  |
| /,400×+00  ,489×02  ,099×03 2,184×04  ,218   | ba=02 0./45#=0/  |
|  | ′×=02 /•118⊭=0/  |
|  |  |
| 7 + 7 = 100 + 10   |  |
| $\frac{7}{2} \frac{1}{100} \frac{1}{1$ | 0p≖02 8,33 ¤+0/  |
| $7 \cdot 9 = 10$ $1 \cdot 99 = 02$ $1 \cdot 33 = 03$ $1 \cdot 79 = 04$ $1 \cdot 73 = 03$   | a <sup>#</sup> [] <sup>2</sup> 8,/68, <sup>a</sup> #]/ |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | ·∞=0> 9,222∞=0/  |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |  |
|  |  |
| 5 400 + 00 + 918 = 52 + 508 = 63 + 403 + 54 = 1956   | ′ພ≂ປວ  , <u>ປ</u> ດຯມ⊕ປດ<br>= 05  ,ວ(ພ=ວ5              |
| $b_1 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + $   |  |
| $5 6 0 0 \pm 0 0$ $2 0 0 \pm 0 2$ $1 \pm 0 0 \pm 0 0$ $1 \pm 1 \pm 0 \pm 0 4$ $2 \pm 0 \pm 0 2$  |  |
| $8.700 \pm 00$ 2.057 $\pm 02$ 1.786 $\pm 03$ 1.344 $\pm 04$ 2.098  |  |
| 5.500++00 2.10 <sup>2</sup> +02 1.648+=03 1.209++04 2.146  |  |
| $\delta_{1} = 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, $   |  |
| 9.000 + 00 $2.201 + 02$ $1.977 + 03$ $1.214 + 04$ $2.245$  |  |
| $9.100 \pm 0.0$ $2.251 \pm 0.2$ $2.044 \pm 0.3$ $1.175 \pm 0.4$ $2.295$  |  |
| 9.200 + 00 = 2.300 + 02 = 2.112 + 03 = 1.37 + 04 = 2.346   |  |
| 9.3nn + nn = 2.351 + n2 = 2.182 + n3 = 1.1nn + n4 = 2.397  | arti2  •0 2#≂00<br>arti5  •087m=06                     |
| $9.4$ nd + 6 n 2.4 n 1 + 6 2 2.25 3 n $\circ$ 0 3 1.66 n $\circ$ n 4 2.449   |  |
| 9.5nn+nn $2.453+n2$ $2.325+n3$ $1.632+n4$ $2.5n1$  |  |
| 9.6 nnx+nn 2.5 n5 m n2 2.4 nnx n3 1.000 m n4 2.554   | m≠n5 Lyi6x≡n6  |
| 9.7nnx+nn 2.557 m=n2 2.475 m=n3 9.699 m+n3 2.6n8   | ± 05 1,997±m06   |
| 9.6 nnx+ nn 2.6 nx = n2 2.553x = n3 9.4 n5 + n3 2.662  | <u>s=05</u> 28js=n6                                    |
| 9.900x+00 2.663x+02 2.632x+03 9.123x+03 2.716  |  |
| 1. nnn+11 2.718 nn2 2.712 n 13 8.852 n+ n3 2.771   | - 15 2, 257 <b>-</b> 06                                |
| $1 \cdot 100 \times 101$ 3.288 $\times 02$ 3.609 $\times 03$ 6.653 $\times 13$ 3.353   | "•15 3.3n8##n6   |

| DIAMETER                 | AFFOCILA                       | RE                                    | DRAG CUEF          | RELAX TIME                       | ,9a DIST                    |
|--------------------------|--------------------------------|---------------------------------------|--------------------|----------------------------------|-----------------------------|
| 1+200++01                | 3,912=02                       | 4,685=03                              | 5.120 .+ 03        | 3,990=05                         | 4.0890-06                   |
| 1.300±+01                | 4,591,02                       | 5,956p=03                             | 4,033 <b>s+0</b> 3 | 4,681,0-05                       | 6,465*=06                   |
| 1.400=+01                | 5,323,-02                      | 7,437,03                              | 3.230.+03          | 5,428.405                        | 8./02**06                   |
| 1.500×+01                | 6,109,+02                      | 9,145=*03                             | 2,628=+03          | 6,230,+05                        | 1.1480+05                   |
| 1,600*+01                | 6,949,=02                      | 1.110.0-02                            | 2,166,+03          | 7,086 <u>,</u> =05               | 1.487=05                    |
| 1.700*+01                | 7,842,+02                      | 1,331.02                              | 1.507#+03          | 7,997 <b>∞</b> •05               | 1.096==05                   |
| 1.800#+01                | 8,789,02                       | 1.579.002                             | 1.523.+03          | 8,963 <u>m</u> =05               | 2.3850-05                   |
| 1.900.+01                | 9,789,-02                      | 1,856.02                              | .296.+03           | 9,983 <u>m</u> =05               | 2.962=05                    |
| 2.000++01                | 1,084=01                       | 2,164,-02                             | 1.112=+03          | 1.1000-04                        | 3,639=05                    |
| 2.100++01                | 1,195,=01                      | 2,504-02                              | 9,616,+02          | 1,218,-04                        | 4,4250=05                   |
| 2,200++01                | 1.311.000                      | 2,878=02                              | 8.372=+02          | ,337 <u>∞</u> •04                | 5.33∞∞∏5                    |
| 2,300++01                | 1,432,-01                      | 3,286=02                              | 7,335±+02          | 1,460,-04                        | 6.374##85                   |
| 2.400=+01                | <b>.</b> 558 <b>.</b> =0       | 3,732m=02                             | 6,464=+02          | 1.589,-04                        | 7 <b>.</b> 56 <u>0</u> ##05 |
| 2.500±+01                | 1,689=01                       | 4.215.02                              | 5,726,+02          | ,723 <b>∞</b> +04                | 8,405++05                   |
| 2.600*+01                | 1.82601                        | 4,738==02                             | 5.098±+02          | 1.862.04                         | 1.042=04                    |
| 2.700 +01                | · ,968_=0                      | 5,302.02                              | 4,559=+02          | 2.Q07 <b>⊳</b> ≂04               | 1.2130004                   |
| 2,800±+01                | 2.114.=01                      | 5,909=02                              | 4,094±+02          | 2.156.#04                        | 1.4030=04                   |
| 2.900+01                 | 2,266,-01                      | 6,559#*02                             | 3,692##02          | 2,311,004                        | 1,015##04                   |
| 3.000 = + 01             | 2,423,01                       | 7,254,=02                             | 3.341=+02          | 2,47  <b>⊳</b> ≓04               | 1,850=04                    |
| 3,100++01                | 2,585,01                       | 7,996∍≡02                             | 3,034∞+02          | 2,636 <sub>x</sub> =04           | 2.110=04                    |
| 3.200x+01                | 2,751±=01                      | 8,786 <b>s</b> =02                    | 2,764,+02          | 2,805,-04                        | 2.397##04                   |
| 3.300x+01                | 2.922.01                       | 9,625,02                              | 2,526=+02          | 2, 980, -04                      | 2.712#=04                   |
| 3.400x+01                | 3,098,01                       | 1 <b>,051,-</b> 01                    | 2,315=+02          | 3.160.=04                        | 3.y57⊭≖04                   |
| 3,500,+01                | 3,279,01                       | • 45 <b>∞</b> ≠0                      | 2,120=+02          | 3,344,04                         | 3.434 04                    |
| 3.600x+01                | 3,465=01                       | 1,24501                               | <b>,</b> 96 ∎+02   | 3,233,=04                        | 3,0450004                   |
| 3.700=+01                | 3,655,01                       | 1.35001                               | 1.811#+02          | 3,127 - 04                       | 4,2910004                   |
| 3.800*+01                | 3.849.01                       | 1.460=01                              | 1.077±+02          | 3.925=04                         | 4,/76=04                    |
| 3.900x+01                | 4,048,=01                      | 1.576=01                              | 1.550 + 02         | 4. 28. = 04                      | 5.3000-04                   |
| 4.000x+01                | 4.252.01                       | ,097 <b>∞</b> ≣0                      | 1,44/=+12          | 4,336,-04                        | 5.866 04                    |
| $4 \cdot 100 = +01$      | 4,459 = 01                     | 1,825,01                              | 1.340 = 02         | 4,54/10-04                       | 6,4//##04                   |
| 4.200 = +01              | 4.671=01                       | 1,958,01                              | 1.258 + 02         | .4,/63 <u>p</u> ≠04              | 7.117.04                    |
| 4.300±+01                | 4,00/                          | 2.047                                 | 1.1/1=102          | 4)≱704 <u>₽</u> ∜∐4<br>5:2⊳8 ∞04 | / . / 0 2 m m () 4          |
| 7 • 4 0 0 <b>#</b> + 0 1 | 2,   [/ m = []  <br>5, 7, 7, 1 | 2.2432 0                              |                    | 5.436 - 04                       | 0,4//20014                  |
|                          |                                | 2,094,-01                             | 0 732 401          | 5 569 -04                        | 9,2090004                   |
|                          | フォンジア 10 円 UI<br>5 70 L - 0 L  | 2716 -01                              | 9,156,401          | 5 905 -04                        | 3.3078404                   |
| 4 8 0 0 1 0 1            | 5 - 26 - 01                    |                                       | 9,10,0,0,0         |                                  | 1.0/0#+03                   |
| 4 900 +01                |                                | ζ,907≱≊UI<br>3.064≂0I                 | 9.0128401          | 6.38904                          | 47                          |
|                          | 6 6 7 - 01                     | 3 247 -01                             | 7 7 9              | 6 636 -04                        | 1.438                       |
|                          | 6 753 -01                      | 3 437 = 01                            |                    | 6.887                            | 1.430 mm n 3                |
| -+100#701<br>5.2mmu+01   | 7.002-001                      | 3.634_*11                             | .6.933w+ni         | 7.14                             | 1.3310003                   |
| 5.3nn+01 -               | 7.255                          | 3.837.00                              | -6.583m+n1         | 7.398                            | 1.0330=03                   |
| 5.400=101                | 7.510.00                       | 4.04701                               | 6.259 + n I        | 7.659. n4                        | 1./39m=n3                   |
| 5,566,401                | 7,769                          | 4.264                                 | 5.957 <b>.</b> +ni | 7.922 mm A                       | 1.849mmnR                   |
| 5.600+01                 | 8.038                          | 4.488.*01                             | 5.677 <b>s</b> +01 | 8.189                            | 1.964.00                    |
| 5.7nn + n1               | 8.295                          | 4.719==n1                             | 5.410.+11          | 8.45914                          | 2.1820-13                   |
|                          |                                | · · · · · · · · · · · · · · · · · · · |                    | · · ·                            | · u = u =                   |

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| DIAMETER                              | AFFQCILA                    | RE   | DRAG COEF                         | RELAX TIME                         | ,98 DIST      |
|---------------------------------------|-----------------------------|--|-----------------------------------|------------------------------------|---------------|
| 5,800x+01                             | 8,562,01                    | 4,956=01                                     | 5, 72+01                          | 8,73   = 04                        | 2.205+-03     |
|                                       |                             |  | 4,9426+01                         | 9.000.04                           | 2.3320=03     |
|                                       | 9+10"#"01<br>0 779          | 2+"2"(»"())<br>5 7 10 - 01                   | 4,/33,0+01                        | 9.284                              | 2.463##03     |
|                                       | 9.577.0                     | 2+/ 0#*0 <br>5 975 +ot                       | 4.2340+01                         | 9,204 <u>0</u> =04                 | 2,598**03     |
| 0+200±+01                             | 9,090,990,901<br>9,015, -01 | 6 247 mgi                                    |                                   | 9,047,e*04                         | 2./3/#=[3     |
|                                       | 1 002 ADD                   |  | 4.1/4.57[]                        |                                    | 2.00   #= []3 |
| 0.580.+81                             | 1.050.+00                   | 6.812.00                                     | 4,0000▼01<br>3,854+01             |                                    | 3,000000      |
| 6.600.+01                             | 1.079++00                   | 7.105.00                                     | 3,0040+01                         | 1.100                              | 3 14 2 - 03   |
| 6.700±+01                             |                             | 7.405.001                                    | 3.571.+1                          | 1.129                              | 3 50 500      |
| 6.8nns+n1                             | 1.136.+00                   | 7.712.01                                     | 3.442++01                         | 1.159=03                           | 3.667         |
| 6.900x+01                             | 1,166,+10                   | 8,027,01                                     | 3.328.+01                         | 1.18903                            | 3.438**13     |
| 1.000++01                             | 1,195,+00                   | 8,348,=01                                    | 3.205.+01                         | 1.219m=n3                          | 4. 114 . 03   |
| 7.100++01                             | 1.224.+00                   | 8,676.01                                     | 3,090,+01                         | .249 03                            | 4.193.0003    |
| 7,200++01                             | 1.254.+00                   | 9.012.01                                     | 2,493,+01                         | 1.279.03                           | 4.378==03     |
| 7.300++01                             | 1,284,+00                   | 9,35401                                      | 2.095.+01                         | 1,309,=03                          | 4.567==03     |
| 7,400=+01                             | 1,314 + 00                  | 9,704∍≖01                                    | 2+002+01                          | ,34 <sub>0∎</sub> =03              | 4./6 03       |
| 7.500x+01                             | 1,344 + 00                  | 1.006#+00                                    | 2.714+01                          | 1.37 m = 03                        | 4.9600003     |
| /.000=+01                             | 1,375,+00                   | 1.043.+00                                    | 2.030=+01                         | 1.4020-03                          | 5,163==03     |
| /+/00=+0                              | 1,402+00                    | 1.080=+00                                    | 2.250+01                          | 1,433p=03                          | 5.37   == 03  |
| 7,000++01                             | ,430 <sub>1</sub> +00       | •    8 <sub>*</sub> +00                      | $2.474 \pm 01$                    | 1,464 03                           | 5,384=03      |
| /+/00++01                             | 1,400 <b>,0</b> +00         | 1,150,+00                                    | 2,401.0+01                        | 1,495,03                           | 2.405*=03     |
|                                       | 1+49/s+00                   | 1.190.10                                     | 2.332#+01                         | 1,72/p=03                          | 6.024##03     |
|                                       |                             | 1+<30++UU                                    | 2.200.0+01                        | 1,279 p = []3                      | 0.27   ## []3 |
| 8.3nn+41                              | 1,591_+00                   | 1.318.+00                                    | 2.2000+01                         | 1 623 - n3                         | 0,404 == []3  |
| 8.4nn+++1                             | 1.623.+00                   | 1.361.+00                                    | 2 085 + 01                        |                                    | 6 463 - 03    |
| 8.500+01                              | 1.655.+00                   | 1.404.+00                                    | 2.029.+01                         | 1.688.=03                          | 7 2100-03     |
| b.6nnx+01                             | 1.687.+00                   | 1.448.+00                                    | 1,970,+11                         | 1.720.=03                          | 7.4620=03     |
| b.700 + 01                            | 1,719,+00                   | 1,493,+00                                    | 1.925 <b>m</b> +n1                | 1.753 - 13                         | 7./18==03     |
| 8.800x+01                             | 1.751.+00                   | 1,538,+00                                    | 1.875_+n1                         | 1.786 <b>.</b> +03                 | 7.98n#=n3     |
| 8.900+01                              | 1.784.+00                   | 1,585.+00                                    | 1.828 .+ 01                       | ,8 9 <sub>m</sub> =03              | 8.247=13      |
| l)+=000+                              | 1.817m+00                   | 1,632.+00                                    | 1.782.+01                         | ,853 <b>.</b> =03                  | 8.519==03     |
| 9.100±+01                             | <b>,850⊕</b> +00            | 1.680.+00                                    | ,738 <b>#+</b> 0                  | <b>.</b> 886 <b></b> •03           | 8.196=03      |
| 9.200x+01                             | .883 <u></u> +00            | 1,729,00                                     | ,696 <b>±+</b> 0                  | 1.920.03                           | 9.0770-03     |
| 9.300+01                              | •9 7 <b>#</b> +00           | 1.779.+00                                    | ,655 <b>=+0</b>                   | 1,955m=03                          | 9,364=03      |
| 9.400±+01                             | 1,950m+00                   | 1,830=+00                                    | 1.015.+01                         | <b>.</b> 989 <b>∞</b> + <u>0</u> 3 | 9.656=03      |
| Y•>00±+U                              | 1,982m+00                   | 1,882,+00                                    | 1.57/0+01                         | 2,02403                            | 9.4530=03     |
| <b>Y</b> •000±+01                     | 2.0190+00                   | 1,- <b>734</b> =+00                          | 1.240=+01                         | 2,059,03                           | 1.020==02     |
| 7+/00x+01                             | 2,053,0+00                  | 1,788,+00                                    | 1,204=+01                         | 2.094. 03                          | 1.126=05      |
| ✓ • ♥ U U # ♥ U U # ♥ U U             |                             | <pre><pre><pre><pre></pre></pre></pre></pre> | 1.407#+0 <br>                     |                                    | 1.08**02      |
| ★ + ₹ UU * ₹ UI                       | 211278700<br>2159 ±00       | <pre></pre>                                  | • 4 3 2 b 7 []  <br>• 4 0 2 + n + | 2 · ! 0 7 # * () 3                 | 1+119#=02     |
| 1 • U U U # 7 U 4<br>1 • 1 0 0 • + 62 | 2,531,+00                   | 2,778_+0n                                    | 1 123-401                         | 2.58.00                            | 1+172+#02     |
| 1.200**04                             | 2.917.+00                   | 3.494.+nn                                    | +!⊂∀#∓U <br>9.2:8⊶enn             | 2.975                              | 1.703#702     |
| 1.30n++02                             | 3.245.+00                   | 4.211m+00                                    | 8.369.400                         | 3.310-+03                          | 2.162-202     |
|                                       |                             |  |                                   | ~~~;;;=`;0                         | 2.00.20-02    |

| DIAMETER           | VELOCITY                   | RE                        | DRAG COEF            | RELAX TIME                      | ,90 DIST            |
|--------------------|----------------------------|---------------------------|----------------------|---------------------------------|---------------------|
| 1.400#+02          | 3,598,+00                  | 5,027 <b>*</b> +00        | 7.0720+00            | 3,669,=03                       | 2,872=02            |
| 1.500++02          | 3,954 <u></u> +00          | 5,919#400                 | 6,273 <b>±</b> +00   | 4.032 <b>.</b> +03              | 3.434=02            |
| 1.000#+02          | 4.315.+00                  | 6,887 <b>,</b> +00        | 5,623±+00            | 4,398 <sub>0</sub> +03          | 4,050==02           |
| 1.700++02          | 4.675.+00                  | 7,931,+00                 | 5,085±+00            | 4,767 <u></u> ,03               | 4./18##02           |
| 1.800++02          | 5.039.+00                  | 9.0520+00                 | 4,635,+00            | 5,138m+03                       | 5.440**02           |
| 1,900±+02          | 5,404.+00                  | 1,025_+01                 | 4,253 <b>±</b> +00   | 5,511,003                       | 6.213=02            |
| $2.000 \pm 102$    | 5,771_+00                  | l:152=+01                 | 3,926±+00            | 5,885, -03                      | 7.0380-02           |
| 2.100++02          | 6.138.+00                  | 1,286,+D1                 | 3.644∞+00            | $6,259_{n}=03$                  | 7,915=02            |
| 2.200*+02          | 6,506_+00                  | ,428 <b>.</b> *D          | 3.398.+00            | $6,634_{\mu}=03$                | 8,842=02            |
| 2,300*+02          | 6,874 <b>±+00</b>          | 1,578,+01                 | 3,183 <b>,</b> +00   | 7,009±=03                       | 9.320.02            |
| 2.400±+02          | 7.241.+00                  | 1.734.+01                 | 2,992±+00            | 7,384 <sub>p</sub> =03          | 1.0850=01           |
| 2.500*+02          | 7.609.+00                  | 1,898 <b>±</b> +01        | 2,823_+00            | 7,/59,#+03                      | 1.192#=01           |
| 2.600×+02          | 7,9 <b>7</b> 0 <u>+</u> 10 | 2,070=+01                 | 2.672 <b>+</b> 00    | 8,134 m=03                      | 1.305**01           |
| 2.700x+02          | 8,343 <sub>#</sub> +00     | 2,248=+01                 | 2,530,+00            | 8,708p+03                       | 1.422=01            |
| 2,800*+82          | 8,709,+00                  | $2,434 \pm 01$            | 2,414,+00            | 8,88  03                        | 1.7440=01           |
| 2,900++02          | 9.074.+00                  | 2,626,##01                | 2,303#+00            | 9,253p=03                       | 1.670**01           |
| 3,000x+02          | 9.438 + 00                 | 2,826=+01                 | 2.202=+00            | 9,024 m = 03                    | 1.802**01           |
| 3.100++02          | 9.801.+00                  | 3,032=+01                 | 2,110 + 00           | 9,994 m = [] 3                  | 1.93/##01           |
| 3.200x+82          | 1.010+01                   | 3,246,+01                 | 2,020,+00            | .U30m=U2                        | 2.0/7##01           |
| 3,300=+U2          | 1+052+01                   | 3,460m+0                  | 1.940 <b>s</b> +00   | i,U/3,⊭U∠                       | 2.222***            |
| $3.400 \pm +02$    | [,088 <u>m</u> +0]         | 3,093,+01                 | 1.8// <b>»</b> +00   | ∠∪ ≉ م () ا i i                 | 2.3/ #*01           |
| 3.500++02          | 1,124,01                   | 3,926,01                  |                      | •   40 p = U∠                   | 2.724000            |
| 3.000#+02          | 1,10U±+01                  | 4 10/ a 10/               |                      |                                 | 2.0010001           |
| 3,/00±+02          |                            | 4,4 4,870                 |                      | 11417#704                       | 2.0728701           |
| 3,000±+02          | 1.231.8+01                 | 4 907 +01                 | ,040≠00<br>  591,±00 | 1,291,                          | 3,77,001            |
| 3,900++02          | •2n∪m+0 <br> •2n∪m+0       |                           | 1,2710700            | 1.327                           | 3 5 1 1 2 1         |
| 4.000×+02          |                            |                           | 1.2424400            |                                 | 3 328 # 01          |
|                    |                            | 5 746 + 01                |                      | 1.398. = 02                     | 3.209000            |
| 4 300 +02          | 1 4 0 5 + 0 1              | 5.031.+01                 | 423++00              | 1.433.+02                       | 3.894##01           |
| 4 400 4 12         |                            | 6.323++01                 | 387 + 00             | 1.468.*02                       | 4 83                |
| 4.500++02          | 474 + 01                   | 6.621.+01                 | i.354_+nn            | 1.213.02                        | 4.275.01            |
| 4.600+02           | 1.508.+01                  | 6.925.+01                 | i.322.+nn            | 1.538.02                        | 4.47   = 0          |
| 4.700++12          | 1.542.+01                  | 7,235,+01                 | 1.292.+00            | 1,573 <b>,</b> •02              | 4.07   == 01        |
| 4.800+02           | .576 + ni                  | 7.551.+01                 | 1.263.+00            | ,6 <sup>°</sup> 07 <b>∍</b> ≠02 | 4.874.701           |
| 4.900+02           | 1.610.+01                  | 7,873,+01                 | 1.236.+00            | 1.642 02                        | 5, <u>j8</u> 0,*=01 |
| 2.nnn <b>∗</b> +02 | 1.643 <sub>m</sub> +01     | 8,201+01                  | 1.210++00            | 1,676,-02                       | 5.290001            |
| 5.100++02          | 677 +01                    | 8,534,+01                 | 1,180,+00            | 1,710p=02                       | 5.004==01           |
| 2.200x+02          | 1.710.+01                  | 8,874,+01                 | 1.163.+00            | 1,744 <u>,</u> +02              | 5./20#*01           |
| 5.300x+02          | 1.743.+01                  | 9,220=+01                 | 1,140×+00            | ,777 <b>⊭</b> =02               | 5,940×01            |
| 2,400x+02          | 1,770 <b>.</b> +01         | 9.571.0+01                | 1,119,+00            | <b>,</b> 8   <u>,</u> =02       | 6.163=01            |
| 5,500++02          | 1,809+01                   | 9,928=+01                 | 1.099=+00            | 1,844,02                        | 6,390=01            |
| 5,600+02           | ,84 ±+0                    | 1.029×+02                 | 1.080×+00            | 1.878.02                        | 6.0190-01           |
| 5,700=+02          | .874 <b>±</b> +0           | 1,066,102                 | 1.062.+00            | 1.911+02                        | 6.852##QI           |
| 5.800x+02          | 1,900+01                   | 1.103=+02                 | 1.044.+00            | 1,943,02                        | 7•u87≖∎01           |
| 5.900++02          | ,938 <sub>2</sub> +0       | <b>,</b>  4  <b>,</b> +02 | 1,027 <b>+</b> +00   | 1.976.02                        | 7.526==11           |

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| DIAMETER          | VEFACILA    | RE                 | DRAG COEF              | RELAX TIME              | .90 DIST                  |
|-------------------|-------------|--------------------|------------------------|-------------------------|---------------------------|
| 6.000 = +02       | 1.970=+01   | 1.180=+02          | 1.011.+00              | 2.009==02               | 7.567=01                  |
| 0 + 100 + 02      | 2.002+01    | 1,219±+02          | 9.953.0 -01            | 2,04 =*02               | 7.812001                  |
| 0,200x+02         | 2+033+01    | 1,258,+02          | 9,804=01               | 2.073.02                | 8.u59¤=01                 |
| C,300x+02         | 2,002+01    | 1,298,+02          | 9,661,=01              | 2,106,02                | 8,3090001                 |
|                   | 2,899.401   | 1,039,02           | 9,523, -01             | 2,137 <u>m</u> =02      | 8,962##01                 |
|                   | 2+12/=+01   |                    | 9,0910=01              | 2,169,*02               | 8,818==01                 |
| 0,000 + 02        | 2,189,+01   | 1 464 +02          | 9.2000701              | 2.401.02                | 9.076.001                 |
| 0.800.+02         | 2.220+01    | 1,506-+02          | 9,170,070,001          | 2,€32×°µ2<br>2,264 - 02 | 9,337me[]                 |
| 0.900+02          | 2.250+01    | 1.550.+02          | 8.908~*01<br>9.008~*01 | 2,295,+02               | 7,0010=01                 |
| 7.000+112         | 2.281+01    | 1.593.+12          | 8.797                  | 2.526.02                | 7,00/20U1                 |
| 7.100#+112        | 2.311.+01   | 1.638.+02          | 8.091                  | 2.35702                 | 1. 14 1                   |
| 7.200 + 02        | 2.341+01    | 1,682.+02          | 8,588,=01              | 2,387 = 02              | 1.068=+00                 |
| 7.300++02         | 2.371.+01   | 1,727=+02          | 8,48801                | 2,418,02                | 1,196=+00                 |
| 7,400++02         | 2,401+01    | 1,773,+02          | 8,392 01               | 2,448,-02               | 1.124.+00                 |
| 7.500=+02         | 2,431,+01   | 1,819 <b>#</b> +02 | 8,299.000              | 2,479.02                | 1.152=+00                 |
| 7.600++02         | 2,460,+01   | 1,866=+02          | 8,209=01               | 2,509=02                | 1,180=+00                 |
| /+/00#+02         | 2,490+01    | 1,913=+02          | 8.151.01               | 2,539 - 02              | 1,209=+00                 |
| 7,000x+02         | 2,517m+01   | 1,961+02           | 8.03/#*01              | 2,569,02                | 1.∠38∞+00                 |
|                   |             | 2,009±+02          | / . Y 5 2 []           | 2,298,*02               | 1.267.+00                 |
| 0,000#+02         | 2, 57, 6401 | 2,020,0402         | 7 798                  | 2,920,02                | 1.296##00                 |
| 8.200++02         | 2.635.+01   | 2.156.+02          | 7 723                  | 2,07/6*02               | 1.326#+00                 |
| b.3nn++n2         | 2.663.+01   | 2.206.+02          | 7.050                  | 2.7.602                 | 1,3250+00                 |
| b.4nn=+112        | 2.692.+01   | 2.257.+02          | 7.579                  | 2,745, 02               |                           |
| 6.500.+02         | 2,720,+01   | 2.307.+02          | 7.911.eni              | 2.774 02                | 1.446 + 00                |
| 8,600±+02         | 2.748.+01   | 2,359.+02          | 7.444                  | 2,813,=12               | 1.476±+nn                 |
| b.700x+02         | 2,776 +01   | 2,411++02          | 7.379.001              | 2,831,0-02              | 1.507+00                  |
| 6.800x+02         | 2.804+01    | 2.463=+02          | 7.310.001              | 2,860,0-02              | 1.538=+00                 |
| b.900±+02         | 2,832+01    | 2,516=+02          | 7.254⊳≖0∣              | 2,888,-02               | 1.569=+00                 |
| 9.000*+02         | 2,860,0+01  | 2.569.+02          | 7.194.01               | 2.916.02                | 1.001=+00                 |
| 7 • 1 0 0 × + 0 2 | 2,887,4401  | 2,022+02           | 7.130 »*01             | 2,944.02                | 1.032-+00                 |
| 7 • 2 U U x + U 2 | 2,712,0+01  | 2,070,002          | 7.079.01               | 2,972.02                | 1.064#+00                 |
| 9.400+12          | 2,469,+01   | 2 786 + 02         |                        | 3,000×°02               | 1,696++00                 |
| 9,500,+02         | 2,996,+01   | 2,841,+02          | 0,7/U»•[]<br>6 918.en  | 3.020.02                | 1.128.+00                 |
| 5.600×+02         | 3.023.+01   | 2.897.+02          | 6 566                  | 3.083.=02               |                           |
| 9,700++92         | 3.050.+01   | 2.953.+02          | 6.810m=ni              | 3.11n.+n2               | •///3≢♥[[]<br> •///3⊭♥[]] |
| 9,800+12          | 3.077 + 11  | 3.009.+02          | 6.768.*01              | 3.138 02                | 1.8590+00                 |
| 9.900×+02         | 3.103m+01   | 3,066 + 02         | 6.720.01               | 3,165,-12               | 1.892+10                  |
| 1.000=+03         | 3,130,+01   | 3.124.+02          | 6.073.001              | 3,192.02                | 1.925-+00                 |
| 1.010+13          | 3,150,+01   | 3.181.+02          | 6.028                  | 3.219.02                | 1.959×+nn                 |
| 1.020++13         | 3,183,+01   | 3,240=+02          | 6.58401                | 3,245,02                | 1.9920+00                 |
| 1.050±+US         | 3.207 =+01  | 5,298±+02          | 6.540.01               | 3.272=02                | 2. 126 -+ 00              |
| 1.040x+05         | 3,237,+01   | 3,357±+02          | 6,49801                | 3,299,02                | 2.060**00                 |
| 1.020#+03         | 3.20 1 m+01 | 3,41/2+02          | 6,45/0=01              | 3,325, = 02             | 2.094.00                  |

| DIAMETER                   | VELOCITY            | RE                          | DRAG COEF          | RELAX TIME                    | ,98 DIST     |
|----------------------------|---------------------|-----------------------------|--------------------|-------------------------------|--------------|
| I.000±+00                  | 3,262,=04           | 3,256 06                    | 7,372 <b>m</b> +06 | 3,327,=07                     | 3.174##10    |
| 1.100 + 00                 | 3,947 04            | 4,333,006                   | 5,538+06           | 4.025.07                      | 4.65   == 10 |
| 1.200++00                  | 4.698.+14           | 5.626 16                    | 4.266.+06          | 4.790.07                      | 6.394=10     |
| 1.300-+00                  | 5.51304             | 7.15306                     | 3 355 + 06         | 5.622.07                      | 9,1191.0010  |
| 1.400.+00                  | 6 304 - 04          | 8.934.+06                   | 0,686,+06          | 6.520                         | 1 224 = 09   |
|                            |                     |                             |                    | 7 485 -07                     |              |
|                            | 7 + 0 H U B H U H   | 1,0776=02                   | 2.1044400          | 7 + 702 = 917<br>9 5 - 6 - 67 | 1,014==07    |
| ! • • U U # + U U          | <b>შ,35 (გ∋ (</b> 4 | 1,034=02                    | 1,800+00           |                               | 2.0910=09    |
| 1./05#+00                  | 9,420,04            | <pre>c0 = e 0 0 0 + 1</pre> | 1,200##06          | 9.014                         | 2.000##09    |
| 1,800x+U0                  | 1,05/m=03           | 1,899 <u>=</u> 05           | ,264 <b>±+</b> 06  | 1.078.000                     | 3,353##()9   |
| 1.900#+00                  | 1+178=03            | 2,233,=05                   | j,075±+06          | •20  <b>•</b> *06             | 4.165#=09    |
| 2.000#+00                  | ,3 <u>0</u> 5∞≖03   | 2,605 <b>¤</b> =05          | 9,215:+05          | ,33  <b>∎</b> ≢06             | 5.117##09    |
| 2.100*+00                  | 1,439.=03           | 3,015=05                    | 7.960≠+05          | 1,467,=06                     | 6.223#=09    |
| 2,200++00                  | 1.579 = 03          | 3,467=15                    | 6.923×+05          | 1.610.0=06                    | 7,499mm []9  |
| 2.300++00                  | 1.726 13            | 3.961.005                   | 6. 159.+15         | 1,760,=06                     | 8.963#*19    |
| 2.400++00                  | 1.879.#03           | 4.501.05                    | 5.333.+05          | 1.916.=06                     | 1.063.0008   |
| 2.500+40                   | 2.03903             | 5.087.05                    | 4.718.+05          | 2.079.+06                     | 1.252.00     |
| 2 600-+00                  | 2 2 65 2 63         | 5 722 - 05                  | A 104              | 2.249                         | 1 46608      |
|                            | 0 378 -03           |                             | 7 745 405          | 2,239,6-00                    | 1,4004000    |
| 2 47 UU# 4 UU<br>2 400 400 | 2,070,000           |                             | 3,7420403          |                               | 1,709#*00    |
|                            | 2,000 8 10          | 7,14/10=02                  | 3,350 == []5       | 2,000g=00                     |              |
| 2 • 9 U U = + U U          | 2.745               |                             | 3,020#+05          |                               | 2.2/14000    |
| ÷000×+00                   | 2,930,00            | 0,/90,00                    | 2./30=+02          | 2,794,8700                    | 2.002==00    |
| 3.100x+00                  | 3, 32, 03           | 7,099a=05                   | 2.472=+05          | 3, 197,p=00                   | 2.968**08    |
| 3,200±+00                  | 3,340,03            | l•067∞=04                   | 2,250 <b>#</b> +05 | 3,406m=06                     | 3,37 ==08    |
| 3,300x+U0                  | 3,552∍-03           | 1.170.04                    | 2,051 <b>*+</b> 05 | <b>3,</b> 623 <b>,</b> ≈06    | 3.8 4∞≖08    |
| <b>3,</b> 400x+00          | 3,771 <u>.</u> =03  | 1,280,04                    | .876 <b>.+</b> 05  | 3,846∞-06                     | 4.299=08     |
| ა,> <u>ეე</u> ⊭+µე         | 3,996,-03           | 1 <b>.</b> 396¤=04          | 1,719 <b>*</b> +05 | 4,075==06                     | 4,829**08    |
| 3,600±+00                  | 4,228,              | 1,519=04                    | 1.580×+05          | 4.3110-06                     | 5.406=08     |
| 3.711n + 11 M              | 4.466               | 1.649.=04                   | 455.+15            | 4,554,=06                     | 6.134        |
| 3.800*+00                  | 4.711. n3           | 1.786. • 14                 | 1.343.+15          | 4,8,4,=,6                     | 6.715=18     |
| 3.900+00                   | 4.962.03            | 1.931==04                   | 1.243.+05          | 5.060-06                      | 7.453        |
| 4 . 000 = 00               | 5.219.03            | 2.084.=04                   | 1 152 + 05         | 5.32306                       | 8.2500+08    |
| 4.L00++u0                  | 5.48403             | 2.24404                     | 1.070.+05          | 5.59206                       | 9.158##18    |
| 4.200-+00                  | 5.75403             | 2.412-04                    | 0 951.+04          | 5.86806                       | 1            |
| 4 300                      | 6 032 -03           | 2 588 = 04                  | 0 272 + 04         |                               | 1.10307      |
|                            |                     |                             | 9.2728704          | 6 440 - 06                    |              |
|                            |                     | 2 967 -04                   |                    | 6 776 - p6                    |              |
| 4.500±+00                  | 0.000.000           | 2,70/                       |                    |                               | 1.323=0/     |
| 4.000#+00                  | 6.90×=03            | 3,109,-04                   | 7,574=+04          | / • [] 3 ¥ # = [] 0           | 1.445=0/     |
| 4./00=+00                  | 7,200 = 03          | 3,380 <b>=</b> 04           | 7.101.404          | 7,348 <sub>0</sub> •00        | 1.3/5=0/     |
| 4.800 + 00                 | 7,510,03            | 3,0 <sub>00</sub> =04       | 6,660=+04          | 7,064 <b></b> • 06            | 1./140-07    |
| 4.900 + + 00               | 7,832 <b></b>       | 3,83 <sub>00</sub> =04      | 6.260.+04          | 7,987 <u>⊪</u> ⇒∐6            | 1.0620-07    |
| 2.000×+00                  | 8.15503             | 4,069=-04                   | 5,898.+04          | 8,516,-16                     | 2.019==07    |
| 5.100×+80                  | 8,485,-03           | 4,318=04                    | 5,558,+04          | 8,652=06                      | 2.186 - 07   |
| 5.200++00                  | 8,820, 03           | 4,577=04                    | 5,243=+04          | 8,995p • 06                   | 2.363= 87    |
| 5.30nx+00                  | 9,163.03            | 4,847.04                    | 4,952+14           | 9,344 m = 16                  | 2.551=07     |
| 5.4nn+un                   | 9.512 13            | 5,126. 14                   | 4.682=+14          | 9,700.00                      | 2.749.07     |
| 5.5nn±+nn                  | 9.867. n3           | 5.416 14                    | 4.431.+14          | 1.006.05                      | 2.959 - 17   |
| - 40- 69                   | · - • •             | · · · · · ·                 |                    |                               |              |

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| DIAMETER  | VELOCITY   | RE  | DRAG COEF  | RELAX TIME  | • 78 PIST  |
|---|--|---|--|---|--|
| DIAMETER<br>5.600x+00<br>5.700x+00<br>5.800x+00<br>5.900x+00<br>6.000x+00<br>6.100x+00<br>6.200x+00<br>6.300x+00<br>6.400x+00<br>6.400x+00<br>6.500x+00<br>6.600x+00<br>6.700x+00<br>6.800x+00<br>6.800x+00<br>6.900x+00  | VELOCITY<br>1.023x=02<br>1.060x=02<br>1.097x=02<br>1.135x=02<br>1.174x=02<br>1.214x=02<br>1.254x=02<br>1.254x=02<br>1.254x=02<br>1.336x=02<br>1.378x=02<br>1.378x=02<br>1.464x=02<br>1.508x=02<br>1.553x=02              | RE<br>5,717   | DRAG COEF<br>4. $198 \pm 04$<br>3. $981 \pm 04$<br>3. $779 \pm 04$<br>3. $590 \pm 04$<br>3. $413 \pm 04$<br>3. $248 \pm 04$<br>3. $248 \pm 04$<br>3. $094 \pm 04$<br>3. $094 \pm 04$<br>2. $813 \pm 04$<br>2. $813 \pm 04$<br>2. $685 \pm 04$<br>2. $565 \pm 04$<br>2. $345 \pm 04$   | RELAX TIME<br>1.043±05<br>1.081±05<br>1.19±05<br>1.19±05<br>1.19±05<br>1.238±05<br>1.279±05<br>1.279±05<br>1.320±05<br>1.362±05<br>1.49±05<br>1.49±05<br>1.49±05<br>1.49±05<br>1.588±05<br>1.588±05<br>1.588±05 | . y8 DIST<br>3. 18 10 707<br>3. 4 15 0 7<br>3. 66 20 7<br>3. 92 20 07<br>4. 195 7<br>4. 195 7<br>4. 195 7<br>7<br>4. 195 7<br>7<br>5. 102 7<br>7<br>5. 103 7<br>7<br>6. 148 7<br>7<br>7<br>6. 148 7<br>7<br>7<br>7<br>6. 148 7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7 |
| 7 • 0 0 0 * + 0 0<br>7 • 1 0 0 * + 0 0<br>7 • 2 0 0 * + 0 0<br>7 • 3 0 0 * + 0 0<br>7 • 4 0 0 * + 0 0<br>7 • 5 0 0 * + 0 0<br>7 • 5 0 0 * + 0 0<br>7 • 6 0 0 * + 0 0<br>7 • 9 0 0 * + 0 0<br>8 • 0 0 0 * + 0 0  | 1.59802<br>1.64402<br>1.69102<br>1.73802<br>1.78602<br>1.83502<br>1.83502<br>1.88402<br>1.93402<br>1.98402<br>1.98402<br>2.03602<br>2.08702  | 7 = 03<br>      65 = 03<br>  2   5 = 03<br>  2 66 = 03<br>  3   9 = 03<br>  3   9 = 03<br>  3   9 = 03<br>  3   9 = 03<br>  4 2 9 = 03<br>  4 8 6 = 03<br>  5 4 5 = 03<br>  6   5 = 03<br>  6   6 - 03  | 2,150 = + 04<br>2,060 = + 04<br>1,976 = + 04<br>1,976 = + 04<br>1,976 = + 04<br>1,920 = + 04<br>1,748 = + 04<br>1,680 = + 04<br>1,654 = + 04<br>1,496 = + 04<br>1,496 = + 04<br>1,440 = + 04<br>1,540 = + 04<br>1,440 = + 04<br>1,540 = + 04 1,540 = + 04<br>1,540 = + 04<br>1,540 = + 04 1,540 = + 04 1,540 = + 04<br>1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1,540 = + 04 1, | 1,630, = 05<br>1,677, = 05<br>1,724, = 05<br>1,772, = 05<br>1,821, = 05<br>1,821, = 05<br>1,871, = 05<br>1,921, = 05<br>1,972, = 05<br>2,024, = 05<br>2,076, = 05<br>2,129, = 05                                | 7./85==07<br>8.24[==07<br>8./16==07<br>9.212==07<br>9./29==07<br>1.027==06<br>1.027==06<br>1.202==06<br>1.265==06<br>1.265==06<br>1.330==06  |
| 8 • 1 0 0 x + 0 0<br>8 • 2 0 0 x + 0 0<br>8 • 2 0 0 x + 0 0<br>8 • 4 0 0 x + 0 0<br>8 • 5 0 0 x + 0 0<br>8 • 9 0 0 x + 0 0<br>9 • 0 0 0 x + 0 0  | 2 • 1 4 0 ± 7 02<br>2 • 1 9 3 ± 02<br>2 • 2 4 7 ± 02<br>2 • 3 0 1 ± 02<br>2 • 3 5 6 ± 02<br>2 • 4 1 2 ± 02<br>2 • 4 6 8 ± 02<br>2 • 5 2 6 ± 02<br>2 • 5 8 3 ± 02<br>2 • 6 4 2 ± 02<br>2 • 6 4 2 ± 02<br>2 • 7 0 ± ± 7 02 | $1 \cdot 7 \cdot 3 \cdot 0 = 0 \cdot 0 \cdot 3$ $1 \cdot 7 \cdot 9 \cdot 5 \cdot 0 \cdot 0 \cdot 0 \cdot 3$ $1 \cdot 9 \cdot 29 \cdot 0 \cdot 0 \cdot 0 \cdot 3$ $1 \cdot 9 \cdot 99 \cdot 0 \cdot 0 \cdot 3$ $2 \cdot 0 \cdot 7 \cdot 0 = 0 \cdot 0 \cdot 3$ $2 \cdot 0 \cdot 7 \cdot 0 = 0 \cdot 3$ $2 \cdot 2 \cdot 1 \cdot 4 \cdot 3 \cdot 0 \cdot 0 \cdot 3$ $2 \cdot 2 \cdot 4 \cdot 5 \cdot 3 = 0 \cdot 3$ $2 \cdot 4 \cdot 5 \cdot 3 = 0 \cdot 3$ | $\begin{array}{c} 1,380 \pm 04 \\ 1,338 \pm 04 \\ 1,290 \pm 04 \\ 1,244 \pm 04 \\ 1,201 \pm 04 \\ 1,160 \pm 04 \\ 1,160 \pm 04 \\ 1,182 \pm 04 \\ 1,082 \pm 04 \\ 1,082 \pm 04 \\ 1,012 \pm 04 \\ 1,012 \pm 04 \\ 3,789 \pm 03 \end{array}$  | 2,102,00<br>2,236,00<br>2,291,00<br>2,347,00<br>2,347,00<br>2,403,00<br>2,460,00<br>2,460,00<br>2,460,00<br>2,517,00<br>2,517,00<br>2,575,00<br>2,575,00<br>2,634,00<br>2,694,00<br>2,694,00<br>2,754,00<br>5   | 1,398 p 0<br>1,468 p 0<br>1,942 p 0<br>1,018 p 0<br>1,096 p 0<br>1,096 p 0<br>1,78 p 0<br>1,78 p 0<br>1,949 p 0<br>2,04 0 p 0<br>2,133 p 0<br>2,23 0 p 0<br>0  |
| $9 \cdot 2 0 0 x + 0 0$ $9 \cdot 3 0 0 x + 0 0$ $9 \cdot 4 0 0 x + 0 0$ $9 \cdot 5 0 0 x + 0 0$ $9 \cdot 6 0 0 x + 0 0$ $9 \cdot 6 0 0 x + 0 0$ $9 \cdot 8 0 0 x + 0 0$ $9 \cdot 8 0 0 x + 0 0$ $9 \cdot 9 0 0 x + 0 0$ $1 \cdot 0 0 0 x + 0 1$ $1 \cdot 1 0 0 x + 0 1$ | 2,760 = 02 $2,820 = 02$ $2,881 = 02$ $2,943 = 02$ $3,005 = 02$ $3,068 = 02$ $3,132 = 02$ $3,196 = 02$ $3,261 = 02$ $3,945 = 02$  | 2 + 534 = 03<br>2 + 6 + 8 = 03<br>2 + 7 + 03 = 03<br>2 + 79 + 03<br>2 + 97 + 03<br>3 + 063 = 03<br>3 + 158 = 03<br>3 + 254 = 03<br>4 + 33 + 03  | 9,473±+03<br>9,171±+03<br>8,682±+03<br>8,604±+03<br>8,339±+03<br>8,083±+03<br>7,604±+03<br>7,604±+03<br>7,375±+03<br>5,545±+03   | 2.015 $\mu$ *05<br>2.876 $\mu$ =05<br>2.938 $\mu$ =05<br>3.001 $\mu$ *05<br>3.065 $\mu$ *05<br>3.129 $\mu$ *05<br>3.194 $\mu$ =05<br>3.259 $\mu$ *05<br>3.259 $\mu$ =05<br>3.325 $\mu$ *05<br>4.023 $\mu$ =05   | 2.330**06<br>2.433**06<br>2.540**06<br>2.650**06<br>2.763**06<br>2.763**06<br>3.002**06<br>3.126**06<br>3.255**06<br>4.771**06   |

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| DIAMETER   | VELOCITY                    | RE                 | DRAG COEF         | RELAX TIME         | . YB UIST  |
|------------|-----------------------------|--------------------|-------------------|--------------------|------------|
| 1.200=+01  | 4,69402                     | 5,622 <b>,</b> =03 | 4.272=+03         | 4,787,+05          | 6./63#*16  |
| 1.300=+01  | 5,508.02                    | 7.146 03           | 3.362 + 13        | 5.617 15           | 9.324=06   |
| 1.400 + 01 | 6.38602                     | 8,923,03           | 2.693.+03         | 6.512.=05          | 1.255**05  |
| 1.500 +01  | 7.329.=02                   | 1.097.02           | 2.191.+n3         | 7.474.+15          | 1.055=05   |
| 1,600*+01  | 8.33602                     | 1.331              | 1.000+03          | 8.501.05           | 2.144=05   |
| 1.700=+01  | 9.408.02                    | 1.596. 12          | 1.507+03          | 9.593              | 2 /35==05  |
| 1.800+11   | 1.054.01                    | 1.894.=02          | 1.270++03         | 1.075.04           | 3 430-05   |
| 1,900#+01  | 1.174.01                    | 2.226.02           | 1.081.+03         | 1.19704            | 4 2720-05  |
| 2.000++01  | 1.300.00                    | 2.595.02           | 9.279.+02         | 1.326.04           | 5.248      |
| 2.100++01  | 1.433 <u>.</u> =01          | 3.003.002          | 8.025.+02         | 1.461. = 1.4       | 6.482005   |
| 2,200++01  | 1.572 - ni                  | 3,451,02           | 6.988.+n2         | 1.603.=04          | 7.092.05   |
| 2.300++01  | 1.717.=01                   | 3.940              | 6.123=+02         | 1.751              | 9.193=05   |
| 2.400++01  | 1.868                       | 4.474.=02          | 5.397.+02         | 1.905-=04          | 1.0900004  |
| 2.500 +01  | 2.025.01                    | 5.053.02           | 4.782++02         | 2.065              |            |
| 2.600++01  | 2.188                       | 5.679.=02          | 4.259.+02         | 2,232 - 04         | 1,207-*04  |
| 2.700++01  | 2.358 11                    | 6.354.+02          | 3.818.402         | 2.405.04           | 1 749 - 04 |
| 2.800++01  | 2.533.+01                   | 7.079.02           | 3.423.+12         | 2.58304            |            |
| 2,900++01  | 2.715.01                    | 7.857.=02          | 3.087.+02         | 2.768.004          | 2. 129     |
| 3.000=+01  | 2.902.01                    | 8.688.=02          | 2.795.+02         | 2,959, 14          | 2 660 - 04 |
| 3.100++01  | 3,095,001                   | 9.575.02           | 2.539 + 02        | 3.15614            | 3.044==04  |
| 3,200++01  | 3.294                       | 1.052.01           | 2.314 + 12        | 3.359 - 14         | 3.457.04   |
| 3,300++01  | 3.498                       | 1.152.01           | 2.116=+02         | 3.567              | 3.9110004  |
| 3.400 + 01 | 3.708                       | 1.258.01           | 1.940.+02         | 3,781,04           | 4.409.004  |
| 3,500x+01  | 3,923,-01                   | 1.37001            | 1.784.+02         | 4.001.0704         | 4. 452     |
| 3,600=+01  | 4.144.01                    | 1,489, 91          | 1.645.+02         | 4.226.=04          | 5.545.04   |
| 3,700=+01  | 4,370=01                    | 1,614.=01          | 1.520++02         | 4 457 = n4         | 6.189=14   |
| 3.800=+01  | 4.602.01                    | 1,745.01           | 4.4.8.+.2         | 4.692 = n4         | 6.888##14  |
| 3,900=+01  | 4,838,-01                   | 1,883.01           | 1.307=+02         | 4,934,-04          | 7.040.00   |
| 4.000=+01  | 5.079.01                    | 2,028.01           | 1.210 .+ 12       | 5, 18 n . • 04     | 8.420**04  |
| 4,100=+01  | 5,32601                     | 2, 179, 01         | 1.134=+12         | 5,431p=14          | 9.237=714  |
| 4,200=+01  | 5,577 -01                   | 2,338.01           | 1.059 <b>+</b> 12 | 5,687 14           | Lealneen3  |
| 4.300++01  | 5,833 <u>s=0</u> 1          | 2.503.01           | 9,915,0+01        | 5,948,04           | 1.100*03   |
| 4.400=+01  | 6.093.001                   | 2,676,01           | 9,297 =+01        | 6,214,04           | 1.194      |
| 4.500++01  | 6,358,01                    | 2,855,01           | 8,733,+01         | 6.484p=04          | 1.293=03   |
| 4.000=+01  | 6,627,0701                  | 3,042,01           | 8,210±+01         | 6,758, - 04        | 1.397 = 13 |
| 4./00*+01  | 6.9 <u>0</u> 1 <u>.</u> =01 | 3,237,01           | 7,743.+01         | 7.037.04           | 1,206=03   |
| 4.800=+01  | 7,178,01                    | 3,439,01           | 7,308*+01         | 7,320,04           | 1.0190003  |
| 4.900=+01  | 7,460=01                    | 3,648,01           | 6,908=+01         | 7,607 = 04         | 1.738=03   |
| 2.000=+01  | /,/45.01                    | 3,865.01           | 6.539=+01         | 7,898, <b>-</b> 04 | 1.06[##03  |
| 2.100×+01  | 8:034:01                    | 4,089,01           | 6.198.+01         | 8,193 <b>.</b> •04 | 1,989∍=03  |
| 2.200++01  | 8.32/#*01                   | 4.321=01           | 5.883±+01         | 8,492,•04          | 2.123==03  |
| →•>00±+01  | 8,620,-01                   | 4,261=01           | 5.591=+01         | 8,794,04           | 2.262=03   |
| 2.400=+01  | 8.9230=01                   | 4.809.01           | 5.321=+01         | 9,099,04           | 2.406=03   |
|            | 9,220,01                    | ₽,064,001          | 5.069 m + 0       | 9,408,=04          | 2. 555= 03 |
| 2.000#+01  | 9.532.0-01                  | 2,327,5701         | 4,835m+01         | 9,720,=04          | 2.//0#=03  |
| 2./00#+01  | 9.841.000                   | >,>98∎*0           | 4,6 7 <u>m</u> +0 | l.004 <i>m</i> =03 | 2.870**03  |

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| DIAMETER               | VELOCITY               | RE                       | DRAG CUEF                                  | RELAX TIME                     | ,98 DIST              |
|------------------------|------------------------|--------------------------|--|--------------------------------|-----------------------|
| 5,800x+01              | 1.015=+00              | 5.877s=01                | 4.414=+01                                  | 1,035==03                      | 3, 135 == 03          |
| 2.900x+01              | 1.04/#+00              | 0,164,≠01                | 4,224=+01                                  | 1.06/=03                       | 3.206=03              |
| 6.000x+01              | 1+079±+00              | 0,458,000                | 4.04/.+01                                  | 1.100=-03                      | 3.383=#03             |
|                        | 1.11                   |                          | 3.880±+0                                   | 32m = [] 3                     | 3,365##803            |
|                        |                        | 7 300 -01                | 3,/29.070                                  |                                | 3./93##[3             |
|                        | 1+1/2+00               |                          |  | 1,190,000                      | 3,9470=[3             |
| 6 500 +01              |                        | 7 + 7   2 m U  <br>8 050 | 3,7710701<br>7 (12,40)                     | 1,252,000                      | 4.146##[]3            |
| 6.600-+01              | 1.274.+00              | 8.392                    | 3,0148+01                                  | 1,200,=03                      | 4                     |
| 6.7nn+n1               | 1.307.+00              | 8.742.*01                | 3.075+01                                   | 1.333 = 03                     | 4.78000003            |
| 6.8nn±+n1              | 1.341.+00              | 9. [nn=n]                | 2.967 <b>m</b> +01                         | 1.367.+03                      | 5.0020003             |
| 6.900#+01              | 1.375 + 11             | 9.467.01                 | 2.864.+01                                  | 1.402.003                      | 5.231=+13             |
| 7.000++01              | 1.409.+00              | 9,841,-01                | 2,767,+01                                  | 437                            | 5.466=+03             |
| 7.100.+01              | 1,443 m+00             | 1:022=+00                | 2,675+01                                   | 1.471.03                       | 5./07=03              |
| 7,200*+01              | .477 <u></u> +00       | 1.061=+00                | 2,588±+01                                  | 1.506m=03                      | 5.954==03             |
| 7,300*+01              | 1,512,+00              | • 0 #*00                 | 2,506.+01                                  | 1.542.03                       | 6,207++03             |
| 7,400++01              | 1,546,+00              | 1+142=+00                | 2,427,+01                                  | 1,577,=03                      | 6,466=03              |
| /.500=+01              | 1.581.+00              | 1,184,+00                | 2,353=+0                                   | <b> ,0 3</b> µ <b>=</b> 03     | 6,731=03              |
| /.000*+01              | 1.6 0.00+00            | 1,220,+00                | 2,282=+01                                  | •048 <b>₽</b> ●[]3             | 7.002**03             |
|                        |                        | 1 + 40¥#*UU              | 2,2170+01                                  | <u>+</u> 004⊯€00<br>  701 = 03 | 7.200==00             |
| 7.800.+01              | 1,007 m + 00           | 1.358.+00                | 2,1470701                                  |                                | 7,044=03              |
| 7+700±701<br>5-000-+01 | 1.759.+00              | 1.404.+00                | 2,000,000                                  | 1,794.=n3                      | 7.09407U3<br>8.500003 |
| 5.100x+01              | 1.795.+00              | 1.451.+00                | 1.972+01                                   | 1.831.en3                      | 8,453×=13             |
| b.200+01               | 1.831.+00              | 1.499+00                 | 1.918.+01                                  | 1.868                          | 8.762##03             |
| 8,300++01              | 1,868_+00              | 1,547,+00                | .066 <u>m</u> +0                           | 1.905=03                       | 9.177.0013            |
| 8,400x+UI              | 1.905,+00              | 1,597 +00                | 1,010,+01                                  | 1,943 - 03                     | 9.399**03             |
| 8.500x+01              | 1,942,+00              | 1.647.+00                | 1.768m+01                                  | 1,980 <u>,</u> =03             | 9,/27=03              |
| 8,600x+01              | 1,980+00               | 1,699±+00                | 1.722+01                                   | 2,019=03                       | 1.006**02             |
| 8.700x+01              | $2 \cdot 0   7 + 0 0$  | 1,751=+00                | ,677 <b>±+</b> 0                           | 2.057 <u>m</u> =03             | 1.040=02              |
| 8,800x+01              | 2.055.+00              | 1,805=+00                | 1,034 <b>±+</b> 01                         | 2.096.0=03                     | 1.175**02             |
| 0+Y00±+U1              | 2.094.00               | ,06 <b>0</b> ,#00        | ,293 <b>⊨+</b> []                          | 2, 135, = 03                   | 1.110**02             |
| 7+000×+01              | 2.132.+00              | (•∀ ⊃∞▼[]]<br>  972 +00  |  | 2 + 1/4 = 03                   | 1+146=702             |
| 7+100×+01<br>9.200+01  | Z+ /!»▼UU<br>2 210.±00 | 2.030.+00                |  | 2 254 03                       | 1.103#702             |
| 9.300.+01              | 2 250 +00              | 2.088.+00                | • <del>- / / ■ - </del> 0]<br>  44   • + • | 2 205 03                       | 1,220=02              |
| 9.400#+01              | 2,290,+00              | 2.148.+00                | 1.400m+01                                  | 2.33503                        | 1.2970-02             |
| 9.500x+01              | 2.331.+00              | 2.210+00                 | i.372∞+ni                                  | 2.37703                        | 1.336#=02             |
| 9.6nnx+01              | 2.371.+nn              | 2,272,+00                | 1.339±+n1                                  | 2.418.03                       | 1.376=02              |
| 9.700x+01              | 2.412.+00              | 2.335.+00                | 1.3n7.+n1                                  | 2.46 0 03                      | 1.417=12              |
| 9.800x+01              | 2,454,+00              | 2,400+00                 | 1,277,+01                                  | 2,503.03                       | 1,458=02              |
| 9,900x+01              | 2.490 .+00             | 2,466,+00                | 1.247 .+01                                 | 2,545,-03                      | 1.00=02               |
| 1.000±+(j2             | 2,538,+00              | 2,533,+00                | 1.518*+01                                  | 2,588 <sub>0</sub> -03         | 1.743=02              |
| 1+100=+02              | 2.974.+00              | 3,265=+00                | 9,756,+00                                  | 3.033.*03                      | 2,006=02              |
| 1.200*+02              | 3,35/#+00              | 4.020+00                 | 8.355=+00                                  | 3,423, 703                     | 2. 536 = 02           |
| •300×+02               | 3,753 <u></u> +00      | 4,869,+00                | 7.240 <b>*</b> +00                         | 3,827, = 03                    | 3,1330m02             |

| DIAMETER                       | VELOCITY                                   | RE                | DRAG COEF                 | RELAX TIME               | ,98 DIST            |
|--------------------------------|--|-------------------|---------------------------|--------------------------|---------------------|
| 1.400*+02                      | 4,155,+00                                  | 5,805+00          | 6,363=+00                 | 4.237=03                 | 3./99=02            |
| 1.200.+(2                      | 4,560,+00                                  | 6,827,+00         | 5,659×+00                 | 4,050#=03                | 4.532#*02           |
| 1.600++02                      | 4,969…+00                                  | 7,934=+00         | 5.084 <b>.+</b> 00        | 5,067 <b>,</b> *03       | 5.33 <u>*</u> #02   |
| 1.700++02                      | 5,380,+00                                  | 9,127=+00         | 4,00°×+00                 | 5,486,                   | 6.201=02            |
| 1.800+02                       | 5,792 <b>+</b> 00                          | 1+041=+01         | 4,20%=+00                 | 5, 707, = 03             | 7.136=02            |
| 1.900x+02                      | 6,200,+00                                  | 1,177=+01         | 3,069,+00                 | 6,329 <u>m</u> =03       | 8,136=02            |
| 2.000++02                      | 6,621,0+00                                 | 1.322#+01         | 3,579,+00                 | 6./52.03                 | 9,202=02            |
| 2.100*+02                      | 7,03/s+00                                  | 1,475=+01         | 3,32/#+00                 | 7, 176, = 03             | 1.0330=01           |
| $2 \cdot 200 \times + 02$      | 7.452.+00                                  | 1.036m+01         | 3.100 <b>×+</b> 00        | 7,599,=03                | 1.153#=01           |
| 2.300=+02                      | 7,86/#+00                                  | 1,000,00,1        | 2,912=+00                 | 8,023,=03                | 1+278+=01           |
| 2.400=+02                      | 8,284,00                                   | • ¥84 » + ()      | 2./42=+00                 | 8 • 440 p * [] 3         | 1.410**01           |
| 2.200++02                      | 8,69/+00                                   | 4+1/0+*01         | 2.593=+00                 | 0,009 <u>⊭</u> ≢03       | 1.548#=01           |
| 2.000++02                      | 9.110.+00                                  | 2,364.+0          | 2,450 =+ [] []            | 9,290=03                 | 1.693#*0            |
| <./00x+02                      | 9,525,00                                   | 2,200,*01         | 2,339,0+00                | 9,7   p*[]3              | 1.043##01           |
| 2,000x+02                      | 9.934.+00                                  | 2,7/0,+0          | 2.220.0+00                | [,∐]3ø≇[]∠<br>  055 - 00 | 1.999##01           |
| 2.900*+02                      | [ t 0 3 7 m + 0 ]                          | 2,994=*01         | 2,120,+00                 | 2∐ ≉ور ⊂ ⊂ ∐ و (         | 2.100mm01           |
| V,UUU±+U∠<br>3 10 <b>2</b> +#2 | • () / • • • • • • • • • • • • • • • • • • | 3 457 +01         | 2.052.400                 |                          | 2.320##[]]          |
|                                |  | 3 604 +01         | ,992 m ♥ [] []            |                          |                     |
|                                |  | 3 943 +01         |                           | 1110000000               | 2+0/9#*01           |
| 3.400.+02                      | 111710701                                  | 4,100+ni          | 742.+00                   | 1,262,0002               | 2,000000000         |
| 3 500 +02                      | 112078401                                  | 4 462.+01         |                           | 1,2020-02                | 3 347               |
| 5.600.+02                      | 1.317.401                                  | 4.733.+01         | 1.627.+00                 | 1,343-+02                | 3.447               |
| 3.700+02                       | 1.357.+01                                  | 5.011.+01         | 1 576 + nn                | 1.38402                  | 3.652.01            |
| 5.800++02                      | 1.397.+01                                  | 5.297.+01         | 1.528 <b>.</b> +00        | 1.42402                  | 3.86[##8]           |
| 3.900+02                       | 1.436.+11                                  | 5.590.+01         | 1.483 <b>.</b> +nn        | 1.464                    | 4. n76##01          |
| 4.000+02                       | 1.475.+01                                  | 5.889.+01         | 1.442+00                  | 1.50402                  | 4.296.01            |
| $4 \cdot 100 + 02$             | 1.514.+01                                  | 6.196.+11         | 1.4n3 <sub>2</sub> +nn    | 1.544.=02                | 4.520==01           |
| 4.200=+02                      | 1,553,+01                                  | 6,510+01          | 1.366 + 00                | 1.58402                  | 4./50**01           |
| 4.300+12                       | 1.592,+01                                  | 6,831,+01         | 331+00                    | 1,6230-02                | 4, 983              |
| 4.400 + 02                     | 1.630.+01                                  | 7,159,+01         | 1,299,+00                 | 1.66202                  | 5,222=01            |
| 4,500++02                      | 1.0690+01                                  | 7.493.+01         | 1.268.+00                 | 1.701=02                 | 5.465=01            |
| 4.600±+02                      | 1.707.0+01                                 | 7,835,±01         | 1,239±+00                 | 1.740,02                 | 5./120-01           |
| 4.700++02                      | 1+744=+01                                  | 8,182,+01         | 1.2120+00                 | 1,/79.02                 | 5.9640-01           |
| 4,800 = +02                    | ],782 <b>m+0</b>                           | 8,537,+01         | <b>,</b>  86 <b>,</b> +00 | 1.817.02                 | 6.220=01            |
| 4.900 + 12                     | 1,820,+01                                  | 8,898,+01         | . 6  <b>u+</b> 00         | 1.056.02                 | 6,480,000           |
| 2.000x+02                      | 1,857,0+01                                 | 9,266,0+01        | 1,138,+00                 | 1.094.02                 | 6./44==0            |
| $2 \cdot 100 + 02$             | 1+894 <b>+</b> 01                          | 9.040.+01         | 1.112+10                  | 1,931,0=02               | /• 13 - 01          |
| $2.200 \pm 02$                 | 1.9310+01                                  | 1.005++05         | 1.094.+00                 | 1,709,02                 | 7.285=01            |
| 2.300x+02                      | 1.960+01                                   | 1.041.02          | 1.0/4×+00                 | 2.000.02                 | 1,202=01            |
| 2:400*+02                      | 2+00++01                                   | 1.000#+02         | 1.022×+00                 | 2.044.702                | 7.842**0            |
| 2.200*+02                      | 2.040.+01                                  | 1.120-+02         | 1.030                     | 2.0010002                | 0,126=01            |
| 2.000++02                      | 2.01/#+01                                  |                   |                           |                          | 0.4 4               |
|                                |  | 1 • 2 ( 2 # 7 ) 2 | 1+U04#700<br>0 858.ec:    | 2 1 2 4 8 7 0 2          |                     |
|                                | 211400401                                  | 1 286 + 12        |                           | 2,207 - 12               | 7+UU2**U1           |
| ┙╻ <b>┚</b> ║║ҝ┽╟╱             | 2 · 10 7 0 7 U                             | 1+2000-12         | A*\ñ==.D1                 | C+ C ( b = U C           | 2 • 3 ()   % = () } |

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| DIAMETER           | VELOCITY   | RE                 | DRAG COEF             | RELAX TIME   | , y8 UIST    |
|--------------------|------------|--------------------|-----------------------|--------------|--------------|
| 6.nnn++n2          | 2.219+01   | 1.329.+12          | 9:556 <b>⊾</b> ≢ni    | 2.263.002    | 9.003##01    |
| 6.100+02           | 2.255.+01  | 1.373.+02          | 9.414.01              | 2.299.02     | 9.910##81    |
| 6.200++02          | 2.290.+01  | 1.417.+02          | 9.278                 | 2.335 02     | 1.022=+00    |
| 6.3nn+n2           | 2.325.+01  | 1.462.+02          | 9.147                 | 2.370.002    | 1.153=+00    |
| 6.4nn++02          | 2.359.+01  | 1.507.+02          | 9.021.00              | 2.40602      | 1. 185 * 1.1 |
| 6.5nn+n2           | 2.394.+01  | 1.553.+02          | A.899.m.ni            | 2.441.002    | 1.17.0+00    |
| 6.600+02           | 2.428.+01  | 1.599.+02          | 8.783 <b>.</b> •ni    | 2.476.012    | 1,149,00     |
| 6.700.+02          | 2.462.+01  | 1.646.+12          | 8.670                 | 2.511.=02    | 1.182+00     |
| 6.8nn+12           | 2.496.+11  | 1.694.+02          | 8.562                 | 2.545. 12    | 1.215=+00    |
| 6.900#+02          | 2.530.+01  | 1.742+ 02          | 8.457.•ni             | 2,580,02     | 1.248∞+00    |
| 7.000++02          | 2,564,+01  | 1,791,0+02         | 8.35601               | 2,614.02     | 1.282+00     |
| 7.100 + 12         | 2.597.+01  | 1.840.+02          | 8.258                 | 2,648,=02    | 1.316+00     |
| 7,200++02          | 2,630,+01  | 1,890,+02          | 8.164.=01             | 2,682.=02    | 1.350+00     |
| 7.300++02          | 2,664.+01  | 1,940,+02          | 8,072,01              | 2,716,=02    | 1:384=+00    |
| 7.400*+02          | 2,696,+01  | 1.991=+02          | 7,984=01              | 2,750,=02    | 1.419##00    |
| 7,500*+02          | 2.729.+01  | 2.043.+02          | 7,899 <b>.</b> -0     | 2,783,-02    | 1,454=+00    |
| 7.600*+02          | 2,762,+01  | 2,095 <b>,</b> +02 | 7,8 6 <sub>#</sub> #0 | 2,816,02     | ,490#+00     |
| 7,700×+02          | 2,794,+01  | 2,147.+02          | 7.736                 | 2,850=02     | 1.525=+00    |
| 7,800++02          | 2,827 +01  | 2,200+02           | 7.058.01              | 2,88302      | 1.561#+00    |
| /.900=+02          | 2.859.+01  | 2,254 + 02         | 7,583,=01             | 2,915,02     | 1.397#+00    |
| 8,000 <b>=</b> +02 | 2,891,+01  | 2,308,+02          | 7,510==01             | 2,948.02     | 1,034#+00    |
| 8,100=+02          | 2.923 + 01 | 2,363,+02          | 7,439=01              | 2,980,02     | 1.6700+00    |
| 8.200++02          | 2,954,+01  | 2.418.+02          | 7.370.001             | 3,013,02     | 1./07=+00    |
| 0,300x+02          | 5.980 * 01 | 2.473.+02          | 7,303m*01             | 3.045.02     | 1./450+00    |
| 8.400=+02          | 3.01/0+01  | 2,229,0+02         | 7.238 . 0             | 3.0//w=02    | 1./82=+00    |
| 0,200x+02          | 3.040,+01  | 2,280 + 02         | 7,172,01              | 3,109±=02    | 1.820*+00    |
| 0,000*+02          | 3,000+01   | 2,043#+02          | /,   <sup>4</sup> ×*0 | 3,140,8702   | 1.8280+00    |
|                    | 3.11.0+01  | 2 759 +02          | /.)?*»*[] <br>        | 3 3 3 7 - 02 | 1.896=+00    |
|                    |            | 2 817.+02          | 6 940 mm              | 3 235        | 1.9350+00    |
|                    | 3 3n2 +01  | 2 876 + 12         | 6 885                 | 3 266        |              |
| 7.100++02          | 3.235.+01  | 2,936,+02          |                       | 3.297.02     | 2            |
| 9,200++02          | 3.263.+01  | 2,996,+02          | 6 7 <b>79</b>         | 3.327.+02    | 2.091.00     |
| 9.300++02          | 3.293.+01  | 3.056.+02          | 6 728 mmn             | 3.358.+02    | 2.131+00     |
| 9.4nn+12           | 3.323.+01  | 3.117.+02          | 6.078                 | 3.389 n = 02 | 2.1710+00    |
| 5.5nn++02          | 3.353.+01  | 3.179.+12          | 6.630 <b>.</b>        | 3.419.02     | 2.2110+00    |
| 9.6nn++02          | 3.382.+n1  | 3.241.+12          | 6.583                 | 3.449.02     | 2.2510+00    |
| <b>9.7</b> 00±+02  | 3.412.+01  | 3.303.+02          | 6.537                 | 3.479.= 12   | 2.292*****   |
| 9,800x+02          | 3.441.+01  | 3,366.+02          | 6.492 <b>=</b> -N1    | 3.509.02     | 2.333+11     |
| 9,900x+112         | 3,470,+01  | 3.429.+02          | 6.44801               | 3.53902      | 2.374=+00    |
| 1.000++03          | 3.500+01   | 3,493,+02          | 6,400,001             | 3,569,02     | 2.415=+00    |
| 1.010=+03          | 3,529=+01  | 3,557,+02          | 6,36401               | 3,598, -02   | 2.456 + 00   |
| 1.020=+03          | 3.557.+01  | 3.621.0+02         | 6.323=01              | 3.628.02     | 2.498=+00    |
| 1.030=+03          | 3,586,+01  | 3,686 = 02         | 6,283,-01             | 3,657,-02    | 2,240**00    |
| 1.040*+03          | 3,615,+01  | 3,752.+02          | 6.244.01              | 3,686,-02    | 2.2820+00    |
| 1.050 + 03         | 3.643=+01  | 3,818,+02          | 6.206                 | 3.7 15 02    | 2.024 - 00   |

| DIAMETER               | VELOCITY                   | RE                                | DRAG COEF                         | RELAX TIME             | ,90 DIST               |
|------------------------|----------------------------|-----------------------------------|-----------------------------------|------------------------|------------------------|
| 1.000++00              | 3,806,+04                  | 3,798=-06                         | 6,319=+06                         | 3,881=07               | 4.321==10              |
| 1.100=+00              | 4,615,014                  | 5.056.06                          | 4.747.+06                         | 4,69607                | 6.334=10               |
| 1.200.+00              | 5.48104                    | 6.56316                           | 3.657.+16                         | 5.589 . • n7           | 8.979==10              |
| 1.300++00              | 6.432                      | 8.345.06                          | 2 876.+06                         | 6.559                  | 1.238.009              |
| 1.400-+00              | 7.46004                    | 1.042.005                         | 2.303-+06                         | 7.607.007              | 1.6660-09              |
| 1.500+00               | 8 563.004                  | 1.282                             | 1 872-+06                         | 8.733                  | 2.197.00               |
|                        | 0,743 -04                  | 1 556                             |                                   |                        | 2 - 1 / 7 00           |
|                        | 9,740 <u>8</u> #04         |                                   | 1,040,00                          |                        | 2.07/#707              |
| 1.700**00              |                            | 1 + 000 + UD<br>2 2 is - 05       | ],200p+00                         |                        | 3.03[10.09]            |
|                        | 1,200 m = U3               | 2,412,402                         |                                   |                        | 4,300,840,9            |
| 1.7()»+())             | 1+0/1×700                  |                                   | 9,216x+[])                        |                        | 2.0/2#*[]9             |
| <+UUU#+UU              | 1+224=00                   |                                   | /.090p+[]5                        |                        | 0.90/00/0              |
| <+100++00              | 1,0/0,013                  | 3,2 8±=05                         | 6,023,0+()2                       | 1,/12==00              | 0.4/3#*09              |
| 2.200*+00              | 1.842.00                   | 4,044,=05                         | 5,934+05                          | [,8/8 <b>"</b> ≈()0    | 1.021=+08              |
| <.300=+00              | 2,013,03                   | 4.021.05                          | 5,193,+05                         | 2,053,000              | 1.550 == 08            |
| 2.400=+00              | 2,192,03                   | 5,251,05                          | 4,571=+05                         | 2,236,00               | 1.448#=08              |
| 2,500#+00              | 2,379=03                   | 5,935=+05                         | 4,044,05                          | 2,42606                | 1.705##08              |
| 2.600*+00              | 2,573.03                   | 6,676,05                          | 3,595 <b>*</b> 05                 | 2,624,06               | 1.996=#88              |
| 2.700*+00              | 2,774.=03                  | 7,476=05                          | 3,240+05                          | 2,829 <b>p=</b> 06     | 2.322=08               |
| 2.800*+00              | 2,984 <u>m</u> =03         | 8,338,+05                         | 2,878 <u>*</u> +05                | 3.043₽●06              | 2.086==08              |
| 2.900*+00              | 3,201,03                   | 9,264,+05                         | 2,591#+05                         | 3,264,=06              | 3.092=08               |
| 3,000*+00              | 3,425,=03                  | 1.026.904                         | 2.340**05                         | 3,493∞-06              | 3, 543== 08            |
| 3.100++00              | 3.657 03                   | 1:132==04                         | 2.121.+05                         | 3,730,=06              | 4.1410*08              |
| 3.200 + 00             | 3,897 03                   | 1,245, -04                        | 1.928,+05                         | 3,974 <sub>0</sub> =06 | 4,59,00-08             |
| 3.300*+00              | 4.145 03                   | 1.365.=04                         | 1,758 <b>∞</b> +05                | 4.22606                | 5.193.0008             |
| 3.400*+00              | 4.40003                    | 1.493. = 14                       | j_on8∍+n5                         | 4,486,                 | 5.853##n8              |
| 3.500+00               | 4.66203                    | 1.628.04                          | 474=+05                           | 4,754,=06              | 6, 575=18              |
| 3.6nn++nn              | 4.932.= 13                 | 1.772. 04                         | 1.354±+n5                         | 5.n3n.=n6              | 7.3610+18              |
| 3.7nn++nn              | 5.210.03                   | 1.924.=04                         | 1.247.+n5                         | 5.313                  | 8.216=18               |
| 00 -00 -00<br>3.8nn+nn | 5.490.03                   | 2.084.004                         | 1.152=+05                         | 5.604.000              | 9.144.0018             |
| 3.900+00               | 5.789 m n 3                | 2.253.=04                         | 1,065.+05                         | 5.903.00               | 115==07                |
| 4.000+00               | 6.089.03                   | 2.431.704                         | 9 673 + 64                        | 6.210-+06              | 1.123 8 57             |
| 4.100.+00              | 6.398.#03                  | 2.018.704                         | 9,169,+04                         | 6.52406                | 1.240+07               |
| 4.200++00              | 6.713.003                  | 2.814. + 14                       | 8.529 + 14                        | 6.846 m n6             | 1. 166 = 07            |
| 4.300-+00              | 7.037.003                  | 3. 120                            | 7.948.+14                         | 7.176 16               | 1.50.0007              |
| 4.400++00              | 7.368 - 03                 | 3.235 04                          | 7 4 8 . + 04                      | 7.514.+06              | 1.046#=07              |
| 4.500++00              | 7.7.7                      | 3.461.=04                         | 6.935.+14                         | 7.859                  | 1.8020=07              |
| 4.600.+00              | 8.053.03                   | 3.697.=04                         | 6 492-+14                         | 8.212                  | 1.468=07               |
| 4.700++00              | 8 407.=03                  | 3.943 04                          | 6 087 + 04                        | 8.573                  | 2 45                   |
| 4.800.+00              | 8 768 503                  | 4.200-504                         |                                   | 8.942                  | 2.534                  |
|                        | 0,137 -03                  |                                   | 5 371 + 04                        | 9 3 18                 | 2,0042007              |
| 5.000#TUU              |                            | 4.748                             |                                   | 9.70206                | 2,2020-07              |
| <+UUU≠+UU<br>Ď 100 +∵= | ער פער ער אד<br>גייי פער ע | T + 7 TO B ⊂ U 4<br>5 A 7 9 = A 4 | 764 + **                          |                        | 2+/77#*U/<br>0 u74==~7 |
|                        | ¥,077,27∬3                 | 5 34 4                            | 4 · / 0 * p * []4                 |                        | 2.7/04=0/              |
|                        | 1+0270*02                  |                                   | 4,774 <b>8</b> ₹[4<br>4 4346 ± 64 | 1,000 -05              |                        |
|                        | 1.007.02                   | 5 004 mm4                         | 4.242#704                         |                        | 3.4/3##0/              |
| 2+7U0×100              | 1+1 0#02                   | J,70 ⊎"U4<br>6 3,0 -04            | 4,0106704                         |                        | 0./90##Q/              |
| 2.200×+U0              | + 2  <b>±</b> ≠02          | 0,019#*04                         | 3./90m+[]4                        | ⊂()≂م 1/4 ∎1           | 4.029**07              |

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| DIAMETER               | VELOCITY          | RE                          | DRAG COEF                 | RELAX TIME                      | ,98 DIST     |
|------------------------|-------------------|-----------------------------|---------------------------|---------------------------------|--------------|
| 5.600#+00              | 1,193.=02         | 6,67 <b>0</b> ,=04          | 3,599∞+04                 | 1,217,=05                       | 4.331        |
| 5.700≠+00              | 1,230,02          | 7 <b>,</b> 034,⊭≈04         | 3.413.+04                 | 1,261 05                        | 4.050.07     |
| 5.800=+00              | 1,280,-02         | 7,410,=04                   | 3,239,0+04                | 1,305,=05                       | 4.986 17     |
| 5.900=+00              | 1,325,-02         | 7,800p=04                   | 3.077.+04                 | 1.351.05                        | 5.34         |
| 6.000#+00              | 1.370.02          | 8,203=04                    | 2.926 + 14                | 1.397.=05                       | 5./120007    |
| 6,100=+00              | 1,416.02          | 8,620,=04                   | 2.784 + 04                | 1.444.05                        | 6.103==07    |
| 6,200+00               | 1,463 02          | 9,051,=04                   | 2.052.+04                 | 1.492 15                        | 6.515##17    |
| 6.300++00              | 1.510.02          | 9,496=04                    | 2.528,+14                 | 1.540.05                        | 6.947.0017   |
| 6.400 + 00             | 1,559.02          | 9,956=04                    | 2.411.+04                 | 1,589,=05                       | 7.400**07    |
| 6.500++00              | 1,608             | 1,043,=03                   | 2.301 + 14                | 1.640.05                        | 7.874.077    |
| 6.600*+00              | 1.658.02          | 1.092.03                    | 2.198+04                  | 1.690.05                        | 8.572=07     |
| 6.700*+00              | 1,708,-02         | 1,142,=03                   | 2.101.+04                 | 1,742.=05                       | 8.892==7     |
| 6,800*+00              | 1.76002           | 1,194=03                    | 2.010+04                  | 1,794.=05                       | 9.437 17     |
| 6,900#+80              | ,8 2 <b>=</b> 02  | 1.248.03                    | 1,924 <b>m+</b> 14        | 1,847, -05                      | 1.0010006    |
| 7.000±+00              | 1,865,.02         | 1 <b>.</b> 303 <b>.</b> =03 | 1.843.+04                 | 1,901-05                        | 1.060==06    |
| 7.100=+00              | 1,918.02          | 1,359.03                    | 1.760.+04                 | 1,956, 05                       | 1.122=06     |
| 7.200*+00              | 1,973m+02         | 1.417.03                    | 1.094.+04                 | 2,012,05                        | 1.187        |
| 7,300=+00              | 2,028.02          | 1.477.03                    | 1.625.+04                 | 2.068.05                        | 1.2540-06    |
| 7.400*+00              | 2,084,02          | 1,539∞≖03                   | <b>,</b> 560 <b>⊳</b> +04 | 2,125,=05                       | 1.325=06     |
| 7.500+00               | 2,1400=02         | 1.602.03                    | 1.498.+04                 | 2,18305                         | 1.398.0 = 06 |
| 7.600++00              | 2,198,-02         | 1.667. = 03                 | 1.440=+04                 | 2,241,05                        | 1.474 - 06   |
| / •/ 00×+00            | 2,25002           | 1,734 <u>=</u> 03           | ,385 <u>∞</u> ★04         | 2,3 <sub>0</sub>   <b>"</b> *05 | .554== 06    |
| /.800×+00              | 2.312002          | 1,802,=03                   | 1,332=+04                 | 2.36   05                       | 1.036        |
| /•900±+00              | 2,375.02          | 1,872=03                    | 1.282=+04                 | 2,42205                         | 1.1220-06    |
| °.000±+00              | 2,432,02          | 1,944 <u>,</u> =03          | 1.235 .+ 04               | 2.48305                         | 1.0110-00    |
| 8.100=+00              | 2,490 - 02        | 2.018.*03                   | 1.190=+04                 | 2.546.05                        | 1.904**06    |
| 0,200#+00              | 2,558.02          | 2.094.0=03                  | 1.14/*+04                 | 2,609,05                        | 2,∪00⊳⇒06    |
| 0,300x+00              | 2.621.02          | 2, 17   03                  | 1.100.+04                 | 2,673,05                        | 2.199        |
| <b>○</b> •400±+00      | 2.082             | 2,25   = " ()3              | 1.06/#+04                 | 2,/3805                         | 2.202**06    |
| 0,200#+00              | 2,749=02          | 2,332=03                    | 1.030=+04                 | 2,803,05                        | 2.310*=06    |
| 0.000#+00              | 2.8 4 . 702       | 2,4 5,0"[]3                 | 9.940++03                 | 2,870,05                        | 2.420=06     |
| $-100 \times +00$      | 2,000=02          | 2.200.03                    | 9,602#+03                 | 2.937.05                        | 2,535=+06    |
|                        | 2.940             | 2,288= 03                   | 9,278=+03                 | 3,004.05                        | 2,65406      |
| 0 ± 9 0 0 ± + 0 0      | 3.014.02          | 2.0//03                     | 8.969.+03                 | 3,073,-05                       | 2./77##06    |
| Y•000±+00              | 3, <u>08∠</u> ∍02 | 2.768=03                    | 8.674=+03                 | 3,143.0705                      | 2.702**06    |
| 7+100×+00              | 3.150=02          | 2;86]=03                    | 8,391=+03                 | 3.213.05                        | 3. 136 - 06  |
| 9.200±+00              | 3,220,0702        | 2,95/0=03                   | 8,121,+03                 | 3.28405                         | 3.172=06     |
| 9.300+00               | 3,29002           | S, U54∞=US                  | 7.0020+03                 | 3,355m=05                       | 3.313==06    |
| 7 • 7 UU# + 9 0<br>U 6 | 3,30 10 02        |                             | 7.014#+03                 | 3,428                           | 3,4580+06    |
|                        | 3,433.002         |                             | 1,310,+03                 | 3,70 »*02                       | 3.008==06    |
| 9 7:00 +00             | 3,500,002         |                             | /,  40 =+ []3             | 3,2/5,=05                       | 3,/63==06    |
| 7 • / UU×+00           | 3.277 = 02        |                             | 0.7300+03                 | 3,05 () # ()5<br>7 7 66 - F     | 3. 722 == 06 |
| 9,900x+00              | 3 7 98 m m        | 3 684                       |                           | 3,120,=05                       | 4,08/0006    |
|                        | 2 8 4 - 00        | 3.706 = n7                  | 6 305 1 T                 | 3,0 (2x • ())<br>7,870 F        | 4,27/0=00    |
|                        | J = 0 - 0 - 02    | 0,790±≡03<br>5 050 - 52     | 0.02~**05                 | 3,0/9p= ())                     | 4.432.00     |
| I.● I U D # ♥ O I      | 4,0060702         | ≁∙U⊃∠⊭≂US                   | 4,/74#+[]3                | 4,073                           | 0,4960-06    |

| DIAMETER  | VELOCITY                            | RE                 | DRAG COEF                       | RELAX TIME                     | ,98 DIST           |
|---|-------------------------------------|--------------------|---------------------------------|--------------------------------|--------------------|
| 1.200*+01   | 5,470.=02                           | 6,558.+03          | 3,063,+03                       | 5,584 <u>s=0</u> 5             | 9.209**06          |
| I.300±+01   | 6,425,02                            | 8,336,=03          | 2,882±+03                       | 6,552,-05                      | 1.270==05          |
| 1.400 = + 01  | 7.449.02                            | 1.041.02           | 2.309+03                        | 7,596 <b>.•</b> 05             | 1./09==05          |
| 1.500++01   | 8,549 - 02                          | 1,280,02           | 1.879.+03                       | 8,718==05                      | 2.254=05           |
| 1.600=+01   | 9.723 = 02                          | 1,553,02           | 1.549m+03                       | 9,915, -05                     | 2, 920 == 05       |
| 1.700++01   | 1.097.01                            | 1.861.=02          | 1.293 .+ 03                     | 1.119.04                       | 3./23=+05          |
| 1.800*+01   | 1.229                               | 2,209,02           | 1.090.+03                       | 1.254.=04                      | 4.683=-05          |
| 1.900=+01   | 1,369,001                           | 2,596.02           | 9,277,+02                       | 1,39604                        | 5.8174=05          |
| 2.000++01   | 1,510                               | 3,026,=02          | 7,963=+02                       | 1,546 04                       | 7,146=05           |
| 2.100++01   | ,67  <sub>0</sub> =0                | 3,501=02           | 6.887 .+ 02                     | 1,704 - 04                     | 8.690**05          |
| 2.200x+01   | 1,832,=01                           | 4,0230=02          | 5,999=+02                       | <b> ,868∍•04</b>               | 1.047.04           |
| 2.300++01   | 2.001.0701                          | 4,593=82           | 5,258+02                        | 2,040,=04                      | 1.252=04           |
| 2,400++01   | 2,177 <sub>m</sub> =01              | 5,214,02           | 4,635,+02                       | 2,220 • 04                     | 1.485.04           |
| 2 <b>.</b> 500×+01  | 2,360=01                            | 5,888,02           | 4,1 <del>0</del> 8 <b>,</b> +02 | 2.407 - 04                     | 1.749=04           |
| 2.600x+01   | 2.55001                             | 6.617.=02          | 3,660,+02                       | 2,600×*04                      | 2.047.0904         |
| 2.700*+01   | 2.747.01                            | 7,402#*02          | 3.275.+02                       | 2,801**04                      | 2.38   == 04       |
| 2,800±+01   | 2.951.001                           | 8,246,*02          | 2,943,+02                       | 3,009,=04                      | 2 <b>./55</b> **04 |
| 2,900x+01   | 3,162,-01                           | 9 <b>,150</b> ,02° | 2,055,+02                       | 3.224.04                       | 3. 72 . 04         |
| 3.000#+01   | 3.379. = 01                         | 1.012.01           | 2,405+02                        | 3,446,04                       | 3.634=04           |
| 3 <b>.</b> [00±+0]  | 3.003.001                           | ,  5#=0            | 2,180,+02                       | $3.674_{m} = 04$               | 4.145=04           |
| 3,200x+01   | 3,634,m=01                          | 1.224=01           | 1,993=+02                       | 4 0 = a 9 <u>0</u> 9 • 3       | 4./07=04           |
| 3,300++01   | 4.071                               | 1,341=01           | 1.025=+02                       | 4.151.0-04                     | 5.326 ** 04        |
| 3.400x+01   | 4.314.01                            | 1.464.*01          | 1.0/2.+02                       | 4.399 = 04                     | 6.003=04           |
| 3.200x+01   | 4,203,01                            | 1,294,01           | 1.538.+02                       | 4,054,094                      | 6,/43=04           |
| 3 + 6 = 0 = + 0 = - 0 | 4,819,01                            | 1.131.001          | 1.419=+02                       | 4,914 <sub>0</sub> =04         | 7,550mm04          |
| 3./00#+0  | 5.0410=01                           |                    | 1.312=+02                       | <b>⊃</b>   8   <u>m</u> = [] 4 | 8,424=04           |
| 3,000x+01   | 5.340 = 81                          | 2,028,01           | 1,210,002                       |                                | 9.333**04          |
| 3 <b>.</b> ∀[][⊭+[]]  | 5•021 <b>∺</b> ≢∏                   | ∠, [88 ± 7 []]     | 3 U#+02                         | 2 · / 32 · 14                  | 1,123,8403         |
|   |                                     |                    | 1.0740402                       |                                | 1.129##03          |
|   |                                     |                    | 9.0140401                       |                                | 1,200 == []0       |
| 4.300±+01   | 0,4/1 <sub>0</sub> =[] <br>6 769=01 | 2.965.401          | 9,1760*81                       | 6 902, =04                     | 1.340 ** []3       |
| 4.400.40  | 7.068. <b></b> 01                   | 3.104-201          | 8 060-+01                       |                                | 1. 786             |
| 4 500-401   | 7 373 ±ni                           | 3 31101            |                                 | 7:5:0 -04                      | 1,00000000         |
| A-600+01  | 7.682.=01                           | 3.527              |                                 | 7 8 34 4 14                    | 1.849m=03          |
| 4.700++01   | 7.996. + 11                         | 3.75/14-01         | 6.727.+01                       | 8,154,=04                      | 1.99 0             |
| 4.800-01  | 8.315.01                            | 3:983              | 6.354.+01                       | 8.479. • n4                    | 2.137.03           |
| 4.900+01  | 8.637.+01                           | 4.224.*01          | 6.011.+01                       | 8.81814                        | 2.29 n = 0.3       |
| 5.nnñ#+01   | 8.96401                             | 4.473 - 01         | 5.695.+11                       | 9.141. • n4                    | 2.449=03           |
| 5. Inn+ ol  | 9,295.4.01                          | 4.731.01           | 5-403+01                        | 9.479n4                        | 2.015##03          |
| 2.200±+01   | 9.630.+01                           | 4.997. 81          | 5.132.+ni                       | 9,82n, = n4                    | 2./880-03          |
| 513nnx+n1   | 9,968, ni                           | 5,273#•ni          | 4.682±+11                       | [.0 7 <sub>6</sub> − n3        | 2.967 13           |
| 5,400+01  | 1.031.+00                           | 5,556, 11          | 4.650=+11                       | 1.051                          | 3.152.03           |
| 5,500*+111  | j; n66 <b>.</b> ∔nn                 | 5,849,01           | 4,434 <b>±</b> +11              | 1.087.+03                      | 3.3440=03          |
| 5,608*+01   | 1,100,+00                           | 6.150.01           | 4,233=+01                       | 1,122.03                       | 3.544==03          |
| 5.700++01   | 1,136,+00                           | 6.4600-01          | 4.846 .+ 01                     | 1.15803                        | 3.149 = 03         |
|   |                                     | -                  |                                 |                                |                    |

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| DIAMETER            | VELOCITY             | RE  | DRAG COEF            | RELAX TIME         | .98 DIST      |
|---------------------|----------------------|---|----------------------|--------------------|---------------|
| 5.800.+01           | 1.171.+00            | 6.778.=n1                                   | 3.871.+01            | 1.194 <b>.</b> -n3 | 3.962         |
| 5.900±+01           | 1.207.+00            | 7.1n6.*n1                                   | 3.708.+01            | 1.231.=03          | 4.182==03     |
| 6.000++01           | 1.243.+00            | 7.442                                       | 3.555.+01            | 1.267.=03          | 4.409==03     |
|                     | 1.279.+00            | 7.78701                                     | 3.412.+11            | 1.314.+13          | 4.043.0003    |
| 6.200 + 01          | 1.310.+00            | 8.141                                       | 3.278 + 11           | 1.342.03           | 4.884==03     |
| 6. Xn0++01          | 1.352.+00            | 8.5.4.*01                                   | 3.152.+01            | 1.379.03           | 5.132 13      |
| 0.408.+01           | 1.390.+00            | 8.875                                       | 3.034.+01            | 1.417. = 03        | 5.3870-13     |
| 5.500++01           | 427 + 00             | 9.256.01                                    | 2.922.+01            | 455 - 03           | 5.0500-03     |
| 6.600++01           | 1.464.+00            | 9.645.01                                    | 2.817.+01            | 493,=03            | 5.920=03      |
| 6.7nn+81            | 1.502.+00            | 1.004.+00                                   | 2.718.+01            | 1,532,-03          | 6.198==03     |
| 6.800±+01           | 1.540.+00            | 1.045.+00                                   | 2.024.+01            | 1.57.1.003         | 6.483=03      |
| 6.900-+01           | 1.578.+00            | 1.087.+00                                   | 2.535.+01            | 1.609.=03          | 6,775==03     |
| 7.000+01            | 1.617.+00            | 1.129.+00                                   | 2.451.+01            | 1.649.03           | 7.075==03     |
| /.100x+01           | 1.055.+00            | 1,173,+00                                   | 2.372=+01            | 1,688,-03          | 7,382=03      |
| 7.200.+01           | 1.694.+00            | 1.217.+00                                   | 2.290 +01            | 1,728.=03          | 7.0970003     |
| 7.300++01           | 1.733.+00            | 1,263,*00                                   | 2.224 +01            | 1,768.03           | 8,019#=03     |
| 7.400±+01           | 1.773.+00            | 1,309++00                                   | 2.156.+01            | <b>,808,=03</b>    | 8.350#=03     |
| 7.500x+01           | 1.812.+00            | 1,356,+00                                   | 2,090=+01            | 1,84803            | 8,08803       |
| 7,600++01           | 1.852.+00            | 1,405=+00                                   | 2.028=+01            | 1,889,-03          | 9.1330=03     |
| 7.700-+01           | 1,892,+00            | 1.454.+00                                   | ,969 <b>⊭</b> +∐     | L,929 m= 03        | 9,386=03      |
| 7.800x+01           | 1,932,+00            | 1.504-+00                                   | 1.912-+01            | • 97   <u>*</u> 83 | 9,/47.0003    |
| 7.900=+01           | 1,973 <b>,+00</b>    | 1,556±+00                                   | ,857 <b>.+</b> 0     | 2,012,03           | 1.012=02      |
| 8.000x+01           | 2.014 -+ 00          | <b>,</b> 6 <u>0</u> 8 <b>,</b> + <b>0</b> 0 | 1.805=+01            | 2.054.03           | l• j49∞• 02   |
| 8.100x+01           | 2,055 <b>,+00</b>    | 1,661=+00                                   | 1,755.+01            | 2,096,=03          | 1,088==02     |
| 8.200=+01           | 2,097,+00            | 1,716=+00                                   | 1.707=+01            | 2,138, 03          | 1.127==02     |
| 8,300x+01           | 2,139=+00            | 1.71.00                                     | 1.061+01             | 2,181,05           | 1.107.02      |
| 8,400±+01           | 2,181,*00            | 1.858 +00                                   | 1.010=+01            | 2,224,00           | 1.208=02      |
| 0,500++01           | 2.223.+00            | 1,886,+00                                   | 1,574,+01            | 2,20/03            | 1.550++05     |
| 8,600=+01           | 2,260,+00            | 1,945=+00                                   | 1,532+11             | 2,311,0*03         | 1.545=405     |
| 8.700=+01           | 2.310+00             | 2.000=+00                                   | 1,492=+01            | 2,355,00           | 1.3350 02     |
| 6.600 <b>*</b> +01  | 2,354.+00            | 2,00/=+00                                   | 1,4 <b>54</b> ± []   |                    | 1.3/9#402     |
| 8,900±+01           | 2,390 + 00           |   | •4 /#T[]<br>• 6  • • | 2 49 03            | 1,424#702     |
| 9.000±+01           | 2,440.+00            | 2+194#TUO                                   | , 30   m + []        | 2,77,0700          | 1.4/04/02     |
| <b>9.100±+01</b>    | 2,480,+00            | 2.279.00                                    | 1.340 <u>m</u> +[]   |                    | 1. 5 63 5 6 7 |
| 9.200x+01           | 2.000**00            | 2.320.+00                                   |                      | 2.630              | 1.0000002     |
| <b>∀</b> ,300≠+01   | 2+2/7#+00            |   | ,200≞ <b>+</b> 01    | 2.678.=03          | 1.660**02     |
| <b>7,400±+01</b>    |                      | 2,403#*00                                   |                      | 2,72503            | 1,000,02      |
| 7.200x+01           | 2.0/20+00            |   | 1+21/#+01            | 2,77303            | 1.760##02     |
| 7.000x+01           | 2+/20+00             | 2,0000,00                                   | 1,159,+01            | 2.822              | 1.0120002     |
| 7•/00×+01           | 24/0/2400            | 2,754,+00                                   | 1.132                | 2.871.+03          | 1.064.002     |
| 9 0 0 0 ± 0 1       | 2,01/1/100           | 2,829-+00                                   | 1.105-#*01           | 2.920              | 1.917.0002    |
| 7 • 7 [] [ # 7 [] ] | 2,912,+00            | 2.9.6.+0.0                                  | 1.079w+01            | 2.970              | 1.9710=02     |
| 1 • 0 0 0 ≠ ₹ 0 4   | 217 160700           | 3.718.+00                                   | 8.775 + 10           | 3.45403            | 2.254.02      |
|                     | 3,797                | 4.547.+00                                   | 7.617.+10            | 3,872              | 3.220**02     |
|                     | 4.240.400            | 5,5n1++nn                                   | 6.617 <b>.</b> +nn   | 4.324 <u></u> n3   | 3.969##02     |
| 1.000**02           | <b>¬+&lt;</b> ¬U»~UU |   |                      |                    |               |

| DIAMETER           | VELOCITY           | RE                          | DRAG COEF          | RELAX TIME              | ,98-D1ST    |
|--------------------|--------------------|-----------------------------|--------------------|-------------------------|-------------|
| 1.400±+02          | 4,689,+00          | 6,51=+00                    | 5,029,+00          | 4,7810=03               | 4.002##02   |
| 1.500+02           | 5,141 <u>m</u> +00 | 7 <b>.</b> 695 <b>.+</b> 00 | 5.195.+00          | 5,242,=03               | 5./17×=02   |
| 1.600 + 02         | 5,596 <u></u> +00  | 8,935 <b>s+</b> 00          | 4,677.+00          | 5,7 <sub>0</sub> 6,*03  | 6./16**02   |
| 1.700++02          | 6, 153,+00         | 1.027.+01                   | 4,247,+00          | 6,172.=03               | 7.196=02    |
| 1.800.+02          | 6.512+00           | 1,170,+01                   | 3,885,+00          | 6,640 <b>p=</b> 03      | 8,957=02    |
| 1.900++02          | 6.971.+nn          | 1.322.+01                   | 3,578,+00          | 7,109,03                | 1.020001    |
| 2.000++02          | 7.432.+00          | 1.483.+01                   | 3.314+00           | 7,578,-03               | 1.152=01    |
| 2.100.+02          | 7.892.+00          | 1.654.+11                   | 3.086.+00          | 8.048.03                | 1.292=01    |
| 2.200+02           | 8.352.+00          | 1:834=+01                   | 2.880,+00          | 8,517.03                | 1.43901     |
| 2.300++02          | 8.812.+00          | 2.023.+01                   | 2.711=+00          | 8,986,-03               | 1,595==01   |
| 2.400.+02          | 9.271.+00          | 2.221+01                    | 2.550 .+00         | 9,454,=03               | 1./57=01    |
| 2.500++02          | 9.729.+00          | 2.427.+01                   | 2.417.+00          | 9,921,0=03              | 1.928##01   |
| 2.600++02          | 1.019-+01          | 2.643.+01                   | 2.294.+00          | 1.039.02                | 2.105=01    |
| 2.700+02           | 1.064.+01          | 2.867.+01                   | 2.182.+00          | 1.08502                 | 2.290+01    |
| 2.800.+02          | 1.109.+01          | 3.100.+01                   | 2.082.+00          | 1,131,02                | 2.48   = 01 |
| 2,900-+02          | 1,155,+01          | 3.342.+01                   | 1.991.+00          | 1,178,02                | 2.080++01   |
| 3. nnn. + n2       | 1.200.+01          | 3.592.+01                   | 1.9n7.+00          | 1.224. = 02             | 2,885=01    |
| -+000 <u>+</u> +02 | 1.245.+01          | 3.851.+01                   | 1,631,+00          | 1,269,=02               | 3,097∞●01   |
| 3.200+402          | 1.289.+01          | 4.118.+01                   | 1.762.+00          | 1,315,02                | 3,316=01    |
| 3.300+02           | 1.334 + 01         | 4.393.+01                   | 698.+00            | 1.36002                 | 3.541=01    |
| 3.4nn+02           | 1.378 + n i        | 4.676.+01                   | 1.038.+00          | 1.40502                 | 3,/73==01   |
| 3.500++02          | 1.422.+11          | 4,968=+01                   | 1.584.+00          | 1,450,02                | 4.010=01    |
| 3.6nn#+02          | 1,460,+11          | 5,268=+01                   | 1.533e+00          | 1,495p=02               | 4.255=-01   |
| 3.700++02          | 1.510.+01          | 5,575,+01                   | 480 + 10           | 1,540-02                | 4.205**01   |
| 3.800±+02          | 1.553.+11          | 5.891.+01                   | 1.442=+00          | 1,584,-02               | 4.76  01    |
| 3.900+02           | 1.596 + 11         | 6.214.+01                   | 1.400++00          | 1,628.+02               | 5, 1230001  |
| 4.000+42           | 1.640m+01          | 6.545+01                    | 1.362=+00          | 1.672.02                | 5,290**01   |
| 4.100++02          | 1.682.+01          | 6.884 <b>.</b> +ni          | 1.326.+00          | 1,716=02                | 5.2640+01   |
| 4.200*+02          | 1.725.+01          | 7.230.+01                   | 1.292+00           | 1,759.=02               | 5.0430+01   |
| 4.300++02          | 1.767.+11          | 7,584.+01                   | 1:260-+00          | 1,802002                | 6.128#=01   |
| 4.400+02           | 1.809+01           | 7.945.+01                   | 1.230±+0n          | 1, <sup>8</sup> 45, n02 | 6.417=01    |
| 4.500++02          | 1.851.+01          | 8,314,+01                   | 1,202++00          | 1.888.*02               | 6./13=01    |
| 4.600++02          | 1.893 + 01         | 8,690=+01                   | 1,175.+00          | 1,930,02                | 7.0130-01   |
| 4.700++02          | 1,934,+01          | 9.073.+01                   | 1.150=+00          | 1,973=02                | 7.319##01   |
| 4.800 +02          | 1.976 + 01         | 9,464.+01                   | 1,120 =+00         | 2,015,02                | 7.530**01   |
| 4.900++02          | 2.017+01           | 9.861.+01                   | 1.103+00           | 2,056,02                | 7.946וDI    |
| 5.000+02           | 2, 157, +01        | 1.027.+02                   | 1.081.+00          | 2,098,*02               | 8.266**81   |
| 5.100++02          | 2.098.+01          | 1,068.+02                   | 1.061 <b>±</b> +00 | 2,139.02                | 8.392==01   |
| 5,200+02           | 2,138,+01          | 1.10.+02                    | .i.,041∞+00        | 2,180,-02               | 8,455**01   |
| 5.300x+02          | 2.178.+01          | 1.152=+02                   | 1.0220+00          | 2,221,02                | 9.257=01    |
| 5,400x+02          | 2.218 +01          | 1,195=+02                   | 1.004=+00          | 2.262.02                | 9,597##01   |
| 5.500.+02          | 2,258,+01          | 1.239.+02                   | 9,874=01           | 2,303 <u>p</u> #02      | 9.9410701   |
| 5,600x+02          | 2.297 +01          | 1,284,+02                   | 9.711=01           | 2.343.02                | 1.029#+00   |
| 5,700=+02          | 2.337 +01          | 1.329.+02                   | 9,555×+01          | 2,383,02                | 1.064#+00   |
| 5.800x+02          | 2.370,+01          | 1.375.+02                   | 9,40601            | 2,423==02               | 1.100++00   |
| 5,900+02           | 2.414.+01          | 1.422#+02                   | 9,263=01           | 2,462=02                | 1.136=+00   |

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| DIAMETER  | VELOCITY                                     | RE  | DRAG COEF                           | RELAX TIME               | ,98 DIST                |
|---|--|---|-------------------------------------|--------------------------|-------------------------|
| 6.000±+02   | 2,453 <u>s+01</u>                            | 1,469n+02   | 9,126==01                           | 2,502=02                 | i.i73#+00               |
| 6.100±+02   | 2,491 <u>s</u> +01                           | 1,517n+02   | 8,994==01                           | 2,541=02                 | I.210#+00               |
| $6,200 \pm 02$  | 2,530,+01                                    | 1,265±+02   | 8,868,en                            | 2,280,p=02               | .247#+00                |
| $6,300 \pm 02$  | 2,568,+01                                    |   | 8,746,en                            | 2,618,p=02               | .285#+00                |
| 6,400=+02   | 2,602±+01                                    | 1.064 <u>m+02</u>                                 | 8,627 <b>**</b> 0                   | 2,65/m=02                | .323=+00                |
| 6,500=+02   | 2,643±+01                                    | 1.715m+02   | 8,5 6 <b>*</b> *0                   | 2,695m=02                | .362=+00                |
| 6,600±+02   | 2,680,0+01                                   | ,766±+02  | 8,408⊭≖0                            | 2,733, <b>=</b> 02       | +40 # <b>+</b> 00       |
| 6,700±+02   | 2,718,+01                                    | ,817±+02  | 8,303∞≖0                            | 2,77  <b>=</b> 02        | +440#+00                |
| 6,800#+02   | 2,755 <u>+0 </u>                             | 1,869,+02   | 8,202==0                            | 2,809,*02                | ,480#+00                |
| 6,900#+02   | 2,791++0                                     |   | 8,105==0                            | 2,847,*02                | ,520#+00                |
| 7.000=+02   | 2,828,+0)                                    | ,976#*02  | 8.0  ##0                            | 2,884,=02                | .560#+00                |
| 7.100=+02   | 2,864,+01                                    | 2,030#*02   | 7.920##0                            | 2,921=02                 | .60 #+00                |
| 7.200×+02   | 2,901±+01                                    | 2,084,+02   | 7,833µ=0                            | 2,958,=02                | 1.042#+00               |
| 7.300×+02   | 2,937±+01                                    | 2,139,+02   | 7,748µ=0                            | 2,995,=02                | 1.084#+00               |
| /.400×+02   | 2,972,+01                                    | 2+195++02   | 7,660±=0                            | 3,03 #=02                | ./26#+00                |
| 7.500×+02   | 3,008,+01                                    | 2+252++02   | 7,586±=0                            | 3,067#=02                | ./68#+00                |
| 7.000x+02<br>7.700x+02  | 3 • 0 4 4 ± 0  <br>3 • 0 7 9 ± 0             | 2,308=+02   | 7,435,01                            | 3,104,02<br>3,140,02     | 1.810=+00               |
| 7,900±+02   | 3 +   49 + 0  <br>3 +   49 + 0               | 2+724+702<br>2+483+702                            | 7.292.0                             | 3,211,p=02<br>3,211,p=02 | 1.940+00                |
| $b \cdot  00 + 02$  | 3,2[8,+0]                                    | 2,001,0*02  | 7.  58 m = 0                        | $3,282 \pm 02$           | 2.028=+00               |
| $b \cdot  00 + 02$  | 3,2[8,+0]                                    | 2,662 +02   | 7.  58 m = 0                        | $3,317 \pm 02$           |                         |
| 8.300x+02   | 3,287,+01<br>3,321,+01                       | 2,723,02  |                                     | 3,352.•02<br>3,386.•02   | 2.117**00               |
| $\delta_{1} = 0.0 \times + 0.2$<br>$\delta_{1} = 0.0 \times + 0.2$<br>$\delta_{2} = 0.0 \times + 0.2$ | $3,355_{n+0}$                                | $2,846 \pm 02$<br>$2,908 \pm 02$                  | 6,9 3m=0 <br>6,9 3m=0               | 3,421 = 02<br>3,455 = 02 | 2+208++00<br>2-253++00  |
| v.700±+02   | 3,422 + 0                                    | 2,971++02   | 6.000+*01                           | 3,490 = 02               | 2.299=+00               |
| v.8nn±+02   | 3,455 + 0                                    | 3.n35++n2   | 6.746+*01                           | 3,524 = 02               |                         |
| 8,900 + 02  | $3,488_{\mu}+01$                             | 3,099,+02   | 6.694×=01                           | 3,557 = 02               | 2.392×+00               |
| 9,000 + 02  | $3,522_{\nu}+01$                             | 3,163,+02   | 6.642×=01                           | 3,591 = 02               | 2.438×+00               |
| 9.100x+02   | 3,554±+01                                    | 3,228,+02   | 6,592=01                            | 3,625±+02                | 2,485++00               |
| 9.200x+02   | 3,587±+01                                    | 3,294,+02   | 6,544=01                            | 3,658±+02                | 2,933+nn                |
| 9.300±+02   | 3,620±+01                                    | 3,360±+02   | 6.49601                             | 3.691==02                | 2,580+00                |
| 9.400±+02   | 3,652±+01                                    | 3,426±+02   | 6.45001                             | 3,724==02                | 2,528+00                |
| 9,500x+02   | 3,684,0+01                                   | 3,493m+02   | 6,40 <sup>5</sup> =01               | 3,757⊅*02                | 2.676=+00               |
| 9,600x+02   | 3,716,+01                                    | 3,561m+02   | 6,361=01                            | 3,790⊅*02                | 2./24=+00               |
| 9.700x+02   | 3,748,+01                                    | 3,629 <b>±</b> +02                                | 6,3 8∍≖0                            | 3,823,=02                | 2./73=+00               |
| 9.800x+02   | 3,780,+01                                    | 3,697 <b>±</b> +02                                | 6,277∍≖0                            | 3,855,=02                | 2.022=+00               |
| 9,900x+02   | 3,8 2±+0                                     | 3,766±+02   | 6,236 - 01                          | $3,887_{p}=02$           | 2.871#+00               |
| 1.000x+03   | 3,843±+0                                     | 3,836±+02   | 6,196 - 01                          | $3,919_{p}=02$           | 2.920#+00               |
| 1.010±+03<br>1.020±+03  | 3+8/2±+0 <br>3+906±+0 <br>7-977              | 3,976,+02<br>3,976,+02                            | 6, 2/#"[]<br>6,  9="[]<br>6,  9="[] | 3,983p=02                | 2,9/0=+00<br>3,019=+00  |
| 1.040±+03<br>1.040±+03  | 3+73/#+01<br>3+968 <u>#+01</u><br>3 689 - 61 | 7 • U4/ #7 U2<br>4 • 1 18 # + 02<br>4 · 19 • + 02 | 0.0°≤≈°0 <br>6.046∞•0 <br>6.010 -0: | $4 \cdot 046 = 02$       | 3,120,000               |
| 「●U✓U≠+U♪   | 0+77/b₹UI                                    | <b>▼●↓▼U₩</b> ▼UZ                                 | 0+UFU##UI                           | <u>אַטיע יי</u> ע איי    | 3• [/ []# <b>♥</b> [][] |

| UIAMETER       | VELDCITY            | RE                                      | DRAG COEF                   | RELAX TIME                                  | .98 DIST                           |
|----------------|---------------------|---|-----------------------------|---|------------------------------------|
| 1.000=+00      | 4,35004             | 4,34   = 06                             | 5,529,+06                   | 4,436,=07                                   | 5,655==10                          |
| 1.100*+00      | 5,263, 04           | 5,778,00                                | 4.154=+06                   | 5,367.07                                    | 8,∠88∞≖10                          |
| 1,200*+00      | 6.26304             | 7,501#*06                               | 3,200++06                   | · 6,387. • 07                               | 1.175**09                          |
| 1.300*+00      | 7.351.004           | 9,537=06                                | 2.517=+06                   | 7,496,-07                                   | 1.620==09                          |
| 1.400.+00      | 8,525, = 04         | 1.191.005                               | 2.015+06                    | 8,694, -07                                  | 2.180==09                          |
| 1.500#+00      | 9,787,-04           | 1,465,=05                               | 1.638 <b>=+</b> 06          | 9,980 <b>,</b> *07                          | 2,076=09                           |
| 1.600++00      | 1,113,03            | 1,778.05                                | 1.350 <b>.</b> +06          | 1,136,06                                    | 3,725==09                          |
| 1.700++00      | 1,257,03            | 2,133,+05                               | 1.125=+06                   | 1,282,+06                                   | 4.75   = 09                        |
| 1.800#+00      | 1,40903             | 2,532=05                                | 9.480=+05                   | 1,437,006                                   | 5,y75**09                          |
| 1.900=+00      | 1,570               | 2,977 <b>.</b> =05                      | 8.061.+05                   | <b>,</b> 6 <u> </u>   <b>,</b> 9 <u>0</u> 6 | 7.422≥=09                          |
| 2.000*+00      | 1,740,=03           | 3,473,∞05                               | 6,911++05                   | <b>,</b> 774 <b>,⊎</b> 06                   | 9.117##09                          |
| 2.100=+00      | 1.918=-03           | 4.020==05                               | 5,970 <b>**</b> 05          | 1,956,-06                                   | 1.109**08                          |
| 2,200++00      | 2,105.03            | 4,622.05                                | 5.192.+05                   | 2,147,06                                    | 1.336==08                          |
| 2.500++00      | 2.301.=03           | 5,282=05                                | 4,544=+05                   | 2,346,-06                                   | 1.597=08                           |
| 2,400=+00      | 2,50503             | 6,0010-05                               | 3,999±+85                   | 2,555,•06                                   | 1,894=08                           |
| 2.500++00      | 2,7 8,=03           | 6,783,=05                               | 3,538+05                    | 2,772.00                                    | 2.231==08                          |
| 2.600++00      | 2.94003             | 7,630,=05                               | 3, 146 =+ 05                | 2,998,-06                                   | 2.011++08                          |
| 2,700++00      | 3.171.=03           | 8,544,=05                               | 2.809.+05                   | 3,233,=06                                   | 3, 138==08                         |
| 2,800++00      | 3,410,=03           | 9,529.05                                | 2.5 9.+05                   | 3,477,00                                    | 3.515==08                          |
| 2,900++00      | 3,658,,03           | 1,059.=04                               | 2,267.+05                   | 3,730,=06                                   | 4.047=08                           |
| 3.000++00      | 3,915==03           | 1.172.04                                | 2,048,+05                   | 3,99206                                     | 4,636##08                          |
| 3.100x+00      | 4,180=03            | 1,293.04                                | 1,050 <u>∞</u> + <u>1</u> 5 | 4,263,=06                                   | 5.288≖⊤ე8                          |
| 3,200++00      | 4,454 <u>m</u> 03   | 1.422.04                                | <b>,687</b> ∎+ <u>0</u> 5   | 4,542,=06                                   | 6.006**08                          |
| 3,300±+00      | 4,737,03            | 1,560µ=04                               | 1.539=+05                   | 4,830 <b>*</b> *06                          | 6,795##08                          |
| 3,400++00      | 5,028,=03           | ,7₀6∍≈₀4                                | 1.40 <sup>7</sup> m+05      | 06=ھ127,5                                   | 7,659==08                          |
| 3.500=+00      | 5,328.03            | 1,861p=04                               | 1.290 <b>s</b> +05          | 5,433 <b>,*</b> 06                          | 8,003#•08                          |
| 3,600x+00      | 5,637 <u>0</u> +03  | 2,025=04                                | 1,185,+05                   | 5,748, <b>~</b> 06                          | 9,0330008                          |
| 5.700+00       | 5,954,-03           | 2,199:=04                               | 1.092#+05                   | 6,072.=06                                   | 1.075**07                          |
| 3,800±+00      | 6,281,=03           | 2,382=04                                | I,00 <sup>8</sup> ∍+05      | 6,405,-06                                   | 1.197**07                          |
| 3,900*+00      | 6,616,03            | 2,575 <u></u> *04                       | 9,321=+04                   | 6./46 <sub>p</sub> =06                      | .s28#+07                           |
| 4.000#+00      | 6,95903             | 2.778 = 04                              | 8,639=+04                   | 7,097,06                                    | 1.470-07                           |
| 4 + 100 × + 00 | 7.311               | 2,992=04                                | 8,023,+04                   | 7,456 <sub>m</sub> =06                      | 1.023=07                           |
| 4.200×+00      | 7.672=03            | 5,216=04                                | 7,463,+04                   | /,024                                       | 1./88**0/                          |
| 4.300 + 00     | 8.042.03            | 3,451±=04                               | 6.954=+04                   | 8.201 × 00                                  | 1.965 - 07                         |
| 4,400x+00      | 8,420,=03           | 3,098 m= 04                             | 6,491,04                    | 8,78/ <sub>#</sub> =00                      | 2.124==0/                          |
| 4.500=+00      | 8,808,,703          | 3,955=04                                | 6.068.+04                   | 8.982.00                                    | 2.357.07                           |
| 4.600±+00      | 9.203               | 4,225=04                                | 5,001,+04                   | 9,385,90                                    | 2.3/5**0/                          |
| 4./00++00      | 9,00°°°03           | 4, 2,0 / <b>b</b> = 0,4                 | 5.320 = + 04                | 9,798,#90                                   | 2.8070#07                          |
| 7,000++00      | 1.004=02            | <b>7</b> • <b>0</b> 00 <b>•0</b> 4      | <b>D</b> .000#*04           |   | 3,024#*0/                          |
| 4.700#+00      | 1+044=02            | 2.10/m <sup>2</sup> 04                  | 4 • / 00 • • 04             |   | 3.31/##0/                          |
| 2.000#+00      | 1+00/02             | 2,720p7()4<br>5 759 554                 | 4,424#*04                   |   | <b>ひ・フソノ ## [] /</b><br>フロロロロー = ア |
| 2+100×+00      | 1:131:02            | 2 • / 20m = ()4                         | 4 07.0704                   |   | 3.875==0/                          |
| 2+200*+00      | - 1+1/0×+02         | 0.103m*04                               | 5,750m+04                   |   | 4.210**0/                          |
| 2.300×+00      | 1.224.02            | 0,4020704<br>4 H7E                      | 3.//***04                   | [+ <u>4</u> 40 <u>p</u> #]]2                | 4.544.**[]/                        |
| 2+400=+00      | 1+200=02            |   | 3,214=704                   |   | 9,878₩=0/<br>5 :.70==7             |
| ~+~00×+00      | 1 • 2   2 • • • 0 2 | / • < 2 < » <sup>-</sup> U <sup>4</sup> | J,JZ7#₹[4                   | כ[] ≂מ⊅דיין                                 | 5+5/5##B/                          |

| DIAMETER                     | VELOCITY            | RE                 | DRAG COEF                  | RELAX TIME                 | 98 DIST          |
|------------------------------|---------------------|--------------------|----------------------------|----------------------------|------------------|
| 5.600*+00                    | ,364 <u></u> =02    | 7,623.=04          | 3.149.+04                  | 1,39 (±= 05                | 5,068==07        |
| >,700x+00                    | 1.413,=02           | 8, <b>038</b> ,04  | 2°,986 <b>∞</b> +04        | 1,441,=05                  | 6, j85, e 07     |
| 5,800x+00                    | ,463 <u>∎</u> ∎02   | 8,469.04           | $2.834 \pm 04$             | 1,492.=05                  | 6.524#*07        |
| 5.,900++00                   | 1.514.=02           | 8,914,=04          | 2,693=+04                  | 1,544 <sub>#*0</sub> 5     | 6.987.07         |
| 6.000×+00                    | 1,566 02            | 9,375.04           | 2,560+04                   | 1,597.05                   | 7.474.007        |
| 6.100±+00                    | 1,618,-02           | 9,852.04           | 2,430 m+04                 | 1,65005                    | 7, y87 # 77      |
| 6.200*+00                    | 1,672,02            | I,034∍≖03          | 2,320 m+04                 | 1,705,05                   | 8,525,8707       |
| 6,300=+00                    | 1,726,=02           | 1.08503            | 2.212++04                  | 1,760,05                   | 9,190,#*07       |
| 6.400=+00                    | 1,781.02            | 1,38,=03           | 2.110=+04                  | 5 <del>-</del> م 7   8 , 1 | 9.683++07        |
| 6,500=+00                    | 1,837.02            | 1.192=03           | 2.014.+04                  | 1,874, = 05                | ,ij30∞⇒06        |
| 0,600x+00                    | 1,894m=02           | 1,248=03           | 1,924,+04                  | 1,932,-05                  | <b>.</b> 195##06 |
| 6./00#+00                    | 1,952.02            | 1,5050=03          | 1,839,+04                  | 1,991,05                   | 1.164##06        |
| 0,800x+00                    | 2,011,02            | 1,065=03           | 1,759±+04                  | 2,051,05                   | 1.235==06        |
| 0,900#+00                    | 2.0/0.02            | 1,426. 103         | 1.084.+04                  | 2.111.m=05                 | 1.309#=06        |
| /.000×+00                    | 2,131,0=02          | 1,489µ=03          | 1.613=+04                  | 2,173,=05                  | 1.387==06        |
| /+100x+00                    | 2,192,02            | 253 = 03           | 1,545,+04                  | 2,23605                    | 1.468#=06        |
| 7.700×+00                    | 2,27                | 1,020 <b>,</b> *03 | 482=+04                    | 2,299,00                   | 1,253##06        |
|                              |                     | 1 750 - 03         | 4220+04                    | 2,303,00                   | 1.0410-00        |
| 7 + 7 U U # 7 U U            | 2,001,000           | 1 83               | ,302 <b>#</b> +∏4          |                            | 1.733##[0        |
| 7 600 +00                    | 2:4798702           |                    | <b>.</b> 3   <b>⊭</b> ≢ ]4 | 2.794.02                   | 1.029#=00        |
| 7.700++00                    | 2,578 -02           | 1,98,00            | 1,212,404                  | 2,201,0010                 | 1,929##00        |
| 7.800**00                    | 2,646               | 2.059.03           | 1,212#+04                  | 2.698 - 05                 | 2.0000000        |
| /.908**00                    | 2,714               | 2.140.703          | i 122+n4                   | 2 767                      | 2 14 10 10       |
| 8.00×00                      | 2.783               | 2,222              | 1.1242417                  | 2 838 -05                  | 2,293##00        |
| δ. [ η η # + η η             | 2.853               | 2.3.6              | 1.041s+04                  | 2,909,05                   | 2,49,000         |
| 8.200x+00                    | 2.924               | 2.393.+03          | 1.nn3%+n4                  | 2,982                      | 2.017.000        |
| 6.300x+00                    | 2.995 .= 02         | 2.481              | 9.676 <b>.</b> +n3         | 3.055.=05                  | 2./47.000        |
| 6.400x+00                    | 3. 168 12           | 2.572.03           | 9.334 <b>±</b> +n3         | 3.12905                    | 2.882##.06       |
| 8,500x+00                    | 3.141.=02           | 2,665. 13          | 9.019.+13                  | 3.204.=05                  | 3                |
| 8,600#+00                    | 3,210,02            | 2,760==03          | 8.699.+13                  | 3,279, • 05                | 3.167#####       |
| 8,700x+00                    | 3.291.0-02          | 2,857, -03         | 8,402=+03                  | 3.356 05                   | 3.3180-06        |
| 6,800x+00                    | 3,367 - 02          | 2,957=03           | 8,119=+03                  | 3.434 <b></b> + 05         | 3.473==06        |
| 8,900±+00                    | 3.444.02            | 3,059=03           | 7.849 <b>±+</b> 03         | 3.5120+05                  | 3,034=06         |
| 9.000++00                    | 3.52202             | 3,163∍≡03          | 7,590±+03                  | 3,591=05                   | 3.0010-06        |
| 9+100×+00                    | 3,600.*02           | 3 <b>,270±</b> =03 | 7,343,403                  | 3,671=05                   | 3. 473= 06       |
| 9,200++00                    | 3,680,=02           | 3,37903            | 7.107 <b>.+</b> 03         | 3,753 <b>=</b> 05          | 4.151=06         |
| 9,300x+00                    | 3,76002             | 3.490×=03          | 6,880,+03                  | 3,835 <b>∞</b> •05         | 4.335==06        |
| 9.400x+0.0                   | 3,841.02            | 3,604,-03          | 6.063.+03                  | 3.917.=05                  | 4.9250+06        |
| 2+200×+00                    | 3,924,02            | 3,/20m=03          | 6,455=+03                  | 4°•001=a105                | 4.7210006        |
| 7.000x+00                    | 4.00/==02           | 5,839,=03          | 6.250 + 03                 | 4.086.+05                  | 4.924==06        |
| 7+700=+00                    | 4,090.02            | 5,960=03           | 6,064=+03                  | 4,1710=05                  | 5.133##06        |
| <b>λ<sup>4</sup>ρ00κ</b> +00 | 4.172.02            | 4.083=03           | 5,081.0+03                 | 4.25805                    | 5,348×=06-       |
| ו×00×+00                     | 4,201=02            | 4.210.03           | 5./04.+03                  | 4.345.05                   | 5.5710=06        |
| 1+000++01                    | 4,34/2=02           | 4,338 <b>n*()3</b> | 5.532=+03                  | 4,433, - 05                | 5.8000006        |
| + 00×+0                      | 5,257 <b>, = 02</b> | ⊃,/73⊭#Q3          | 4,1600+03                  | 5,363,-05                  | 8.700==06        |



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| U]AMETER  | VELOCITY                  | RE .               | DRAG COEF                   | RELAX TIME             | .90 DIST      |
|-----------|---------------------------|--------------------|-----------------------------|------------------------|---------------|
| 1.200x+01 | 6,25702                   | 7,494 <b>s=03</b>  | 3,206++03                   | 6,381p=05              | 1.205#*05     |
| 1.300+01  | 7.341.02                  | 9.525.03           | 2,523.+03                   | 7,48705                | 1.061##05     |
| 1.400+11  | 8,512,-02                 | 1.189.=02          | 2.021=+03                   | 8,680,=05              | 2.236 05      |
| 1.500=+01 | 9,767.02                  | 1,462#*02          | 1,645.+03                   | 9,960 <u>m</u> =05     | 2.949==05     |
| 1.600=+01 | 1.11                      | 1.774.=02          | j,350 <u>∎</u> + <u>1</u> 3 | 1.133p=04              | 3.02   == 05  |
| 1.700x+01 | 1.253 01                  | 2.127.02           | 1.132=+03                   | 1.278=04               | 4,872,95      |
| 1,800+01  | 1.405.01                  | 2,52302            | 9 545,+02                   | 1,432=-04              | 6,128==05     |
| 1,900++01 | 1,564,=01                 | 2,966.=02          | 8.125+02                    | 1,595=-04              | 7.0120005     |
| 5.000*+01 | <b>,</b> 732 <b>∞</b> •01 | 3,457,-02          | 6,976=+02                   | 1,766,+04              | 9.351==05     |
| 2.100++01 | 1,908.01                  | 3,999:=02          | 6,035 <u></u> +02           | 1.94604                | 1.1370004     |
| 2.200*+01 | 2.092.01                  | 4.594.02           | 5,257×+02                   | 2.134.04               | 1.370=04      |
| 2.300=+01 | 2,285,01                  | 5,244 <u>=</u> 02  | 4.609#+02                   | 2,330,-04              | 1.038=04      |
| 2.400=+01 | 2,485.01                  | 5,9530=02          | 4,064=+02                   | 2,535,=04              | 1,y43¤=04     |
| 2.500*+01 | 2,694=01                  | 6,722=02           | 3,603,+02                   | 2,747.04               | 2.289**04     |
| 2.600*+01 | 2.911.01                  | 7,553 <b>±</b> 02  | 3.210=+02                   | 2,968,=04              | 2.678==04     |
| 2,700++01 | 3,135,01                  | 8,448 <b>,</b> =02 | 2,873=+02                   | 3,197, <b>-</b> 04     | 3.116=04      |
| 2,800±+01 | 3,367.=01                 | 9,409 <b>"</b> °02 | 2,583*+02                   | 3,434,=04              | 3.005==04     |
| 2.900x+01 | 3,607,01                  | I•044 <b>=</b> 01  | 2.331.+02                   | 3,678,=04              | 4.150=04      |
| 3,000=+01 | 3,854,01                  | <b> , 54⊭</b> 0    | 2.112+02                    | 3,931,000              | 4./55==04     |
| 3.100×+01 | 4,109,01                  | 1.271.001          | 1,920=+02                   | 4,190=04               | 5.423=04      |
| 3,200=+01 | 4.371.01                  | 1,396=01           | 1./52.+02                   | 4,458,04               | 6.1600-04     |
| 3,300x+01 | 4,640=01                  | 1,528,*01          | 1.603.+02                   | 4,/32=04               | 0,909×+04     |
| 3,400=+01 | 4.9   /                   | 0 68 m # ()        | 1.4/1=+02                   | 5.014=04               | /.056=-04     |
| 3+200x+01 | 5,200,01                  | 1,016,01           | 1.354=+02                   | 5.000=04               | 8,024=04      |
| 3.600x+01 | 5,490,01                  | 1.972.01           | 1.249=+02                   | 5,598,=04              | 9,0510004     |
| 3,/00x+01 | 5,780,01                  | 2,137,01           | 1.150=+02                   | <b>5.7</b> 01=04       | 1.092=03      |
| 3.800=+01 | 0+08×=+01                 | 2.309=*01          | 1.0/2#+02                   | 0,210#=04              | 1,206**03     |
| 3.900#+01 | 6,398,000                 | 2.490.01           | 9,964=+01                   |                        | 1.325=03      |
| 4+000#+01 | 01/140*01                 |                    | 9,202040                    |                        | 1.42   ## []3 |
| 4 100×+01 | 7 7 6 2 5 7 5 1           | 2.0/9.*0           | 8,002±+0;                   | 7 5 - 8 - 04           | 1.204         |
|           |                           | 3 302 801          |                             |                        | 1,7240003     |
| 4.400-+01 | 8 033 00                  | 3.527.001          | 7,3900+01                   | 8,192,404              | 225           |
| 4.500++01 | 8 376                     | 3.762              | 6 709-+01                   | 8.54204                | 2.186         |
| A.600++01 | 8.725                     | 4.005.001          | 6.321.401                   | 8.897                  | 2.354 ## 13   |
| 4.700++01 | 9.078.=01                 | 4.258.*01          | 5.966.+01                   | 9.257.=04              | 2, 230, 2003  |
| 4.800++01 | 9.436 <b>.</b> ni         | 4.520.001          | 5.639.+ni                   | 9.622.=04              | 2./14=03      |
| 4.900+01  | 9.798                     | 4.792.=01          | 5.338 + 11                  | 9,992, 04              | 2.915+=13     |
| 5.000+61  | 1.017.+00                 | 5.n72.ni           | 5.061.+01                   | 1.037.03               | 3.104-03      |
| 2.100±+01 | 1.054.+00                 | 5.363. 01          | 4.815.+11                   | 1.07403                | 3.311##13     |
| 5,200++11 | 1.091.+00                 | 5,663.01           | 4.569.+01                   | 1.113.0-03             | 3. 26=-03     |
| 5,300++01 | 1,129,+00                 | 5,972.01           | 4.349 + 01                  | 1.151.=03              | 3./49==03     |
| 5.400++01 | 1.167.+00                 | 6,291.01           | 4. 40.+01                   | 1.190.=03              | 3.48   = 13   |
| 5.500 +01 | 1,200-+00                 | 6.619.01           | 3.950 + 01                  | 1.23003                | 4.220=03      |
| >.600.+01 | 1,245,+00                 | 6,957=01           | 3,780,+01                   | 1.269.03               | 4.468==03     |
| 5.700*+01 | 1.284.+00                 | 7,305=01           | 3.010.+01                   | 1,3 <sub>0</sub> 9,#03 | 4./24=03      |



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| DIAMETER                     | VELOCITY                   | RE                                 | DRAG COEF                       | RELAX TIME                       | ,98 DIST                                      |
|------------------------------|----------------------------|------------------------------------|---------------------------------|----------------------------------|---|
| ¢,800≖+01                    | 1.324.+00                  | 7,662.01                           | 3,463 × 0                       | 1,350 <b>x</b> =03               | 4,988==03                                     |
| 5.900±+01                    | 1,364_+00                  | 8,029.01                           | 3,319,+01                       | 1.390.=03                        | 5.261 == 03                                   |
| 6.000×+01                    | 1,404,+00                  | 8.405.001                          | 3.185.+01                       | 1,431.03                         | 5.543**03                                     |
| 6.100 + 01                   | 1.444.+00                  | 8,792##01                          | 3.060.+01                       | 1.473.=03                        | 5.833##03                                     |
| 6,200x+01                    | 1,485,+00                  | 9,188,=D1                          | 2,942-+01                       | 1.514.03                         | 6.132=03                                      |
| 6,300x+01                    | 1,520 +00                  | 9,593=01                           | 2,831.+01                       | 1,556m=03                        | 6.44  |
| 6,400x+01                    | 1,567,+00                  | 1.001.+00                          | 2,726,+01                       | 1,598 = 03                       | 6./56   |
| 6.500++01                    | 1.609.+00                  | 1,043,+00                          | 2.628.+01                       | 1.640.=03                        | 7.182.003                                     |
| 6,600+01                     | 1,650+00                   | 1,087,+00                          | 2,535++01                       | 1,683±=03                        | 7.416==03                                     |
| 6,700x+01                    | 1,692,+00                  | 1.132.+00                          | 2.447 m+01                      | 1.726.=03                        | 7.159=03                                      |
| 6.800x+01                    | 1,735,+00                  | 1.177.+00                          | 2,364,+01                       | 1,769.=03                        | 8.112=13                                      |
| 6.900x+01                    | 1,777,+00                  | 1,224,+00                          | 2.286.+01                       | 1,812.=03                        | 8.473#=03                                     |
| 7.000=+01                    | 1,820,+00                  | 1,271++00                          | 2.211.+01                       | 1,856,=03                        | 8.0430=03                                     |
| 7.100++01                    | 1,863 <u>+00</u>           | 1,320+00                           | 2.140=+01                       | 1,900.03                         | 9,223×*03                                     |
| 7.200=+01                    | 1,906,+00                  | 1.370+00                           | 2.073.+01                       | 1.944 - 03                       | 9.012**03                                     |
| /,300x+01                    | 1,950x+00                  | 1.420=+00                          | 2.009.01                        | <b>,</b> 988 <sub>m</sub> ≓03    | 1.0010=02                                     |
| 7.400×+01                    | 1,994,+00                  | 1.472.+00                          | 1,947,+01                       | 2.033.=03                        | 1.0420=02                                     |
| 1.500++01                    | 2.038.+00                  | 1,525,+00                          | 1,089m+01                       | 2 <b>.</b> 078 <b>.</b> •03      | 1.0830=02                                     |
| 7.600#+01                    | 2,0 <sup>8</sup> 2,+00     | 1,579,+00                          | ,833 <b>∞+</b> 0                | 2.124.03                         | 1:126=02                                      |
| 7.700++01                    | 2,127+00                   | 1.635±+00                          | 1.,780 <b>.</b> +01             | $2, 169_{\mu} = 0.3$             | 1.170=02                                      |
| 7,8 <sub>00±+0</sub>         | 2,173,±00                  | 1,691,+00                          | 1,729=+01                       | $2,2 5_{\mu}=03$                 | 1.214=02                                      |
| 7.900*+01                    | 2,218,+00                  | 1,749,+00                          | ,679 <b>#</b>                   | 2,262.03                         | 1.259=02                                      |
| 8.000±+01                    | 2,264,+00                  | 1,808=+00                          | 1,632=+01                       | 2, 309 = 03                      | 1.306==02                                     |
| b.100x+01                    | 2.311+00                   | 1,868,+00                          | .58/∞+0                         | 2.356 = 03                       | 1.3530+02                                     |
| 8.200x+01                    | 2,358,+00                  | 1.929=+00                          | 1.543=+01                       | 2.404p=D3                        | 1.401=02                                      |
| 8.300#+01                    | 2,402+00                   | 1.9920+00                          | 1,5010+01                       | 2,452.=03                        | 1.45   = 0.2                                  |
| 6 400x+01                    | 2,453,+00                  | 2,056,+00                          | 1,461,0+01                      | 2.201=03                         | 1.2010-05                                     |
| 0.200++01                    | 2.501.+00                  | 2,122+00                           | 1.421+01                        | 2,250=03                         | 1.352**02                                     |
| <b>○</b> •○[]] <b>±</b> +[]] | 2,220=+00                  | 2,188,+00                          | •384 <u>⇒</u> +0                | 2,000,00000                      | 1.004.02                                      |
| P+/00×+01                    | 2,599,+00                  | 2,25/=+00                          | 1.34/#+01                       | 2,050 - 03                       | 1.657##02                                     |
| 0.000x+01                    | 2.047.+00                  | 2,326,+00                          | 1.512++01                       | 2./01.0-03                       | 1./11##02                                     |
| 0, Y 0 0 x + 0 1             | 2,097#+00                  | 2.39/0+00                          | 1,270=+01                       | 2,1520=03                        | 1./66==02                                     |
| 7 • 0 0 0 = + 0 1            | 2,/20,0+00                 | 2,4/0=T00                          | .242p+0                         | 2,0(4, = 0.3                     | 1.9550-05                                     |
| 7+100=+01                    | 2,001+00                   | 2,244,00                           | .2  <b>&gt;</b> =+0             | 2,070,000                        | 1.0/90-05                                     |
| 7.200x+01                    |                            |                                    |                                 | 2,709,00                         | 1.937=02                                      |
| 7,000x+01                    | 2+707±+00                  |                                    |                                 | 2.7020403                        | 1.996==02                                     |
| 7+4()(x+())                  | 2,950,0+00                 |                                    | [+ 2 <b>*•*</b> []              | 3.010 m = 03                     | 2.020=02                                      |
|                              |                            | 2,054,410                          |                                 |                                  | 2.117##02                                     |
|                              | 3.00 <sup>-</sup> m+00     | 2,735m700                          |                                 | 3   24 b ♥ []3<br>2   79 = o 2   | 2.1/90=02                                     |
| <pre>/ +/ UU=*()]</pre>      | 3 170 100                  |                                    | <b> </b> ]♥♥♥₽  <br>  0.000 + 0 | 3 977 - 27                       | 2.24 1.02                                     |
| 7#200#401<br>9 9nn +01       | J 1/ Um + UU<br>Z 223 + 00 | U + FU   m + U []<br>.5   85 + 0.5 |                                 | ତ,≰ତତ∌♥()ତ<br>ସ ଅଛ7 – n2         | 2.307##02                                     |
| < + < UU = ▼UI               | 3,22007UU<br>3,077 ±00     | 3 27 6 40 6                        | 7,700 m ₹ [[]                   | <b>ت ن 23 €</b><br>7 − 2 − 2 − 2 | 2.3/0=*02                                     |
| I • UUU⊭ • U∠                | 3 741 +00                  | U, ∉/ Uµ + UD<br>4. Lo7+ o.o       | 9,/90x400<br>8,/902-400         |                                  | 2,400 ## 02                                   |
| I.200=±02                    | 4,222,4nn                  | 5,057,+00                          | 7 041-+00                       | 4.3060-03                        | 3 46002                                       |
|                              | 7+22507UU                  | 6.111.+n0                          | / • UT FRETUU<br>6 199          | 4 8 6 7 - 6 7                    | 4 #70 == 02                                   |
| 1 • V U U # T U &            |                            | ~•!!! <b>»</b> ~UU                 | V•1≤×₩▼U[]                      | ∼∙ငပျပ⊅≖ပျပ                      | <b>, , , , , , , , , , , , , , , , , , , </b> |

| DIAMETER          | VELOCITY         | RE                       | DRAG COEF              | RELAX TIME             | ,98 DIST   |
|-------------------|------------------|--------------------------|------------------------|------------------------|------------|
| 1.400 + 02        | 5,203,+00        | 7,269,*00                | 5.410**00              | 5,305,=03              | 5,083++02  |
| 1.500++12         | 5.699.+00        | 8,531,+00                | 4.831.+00              | 5,812,=03              | 6, 93==02  |
| 1,600+02          | 6, 198,+00       | 9,897.+00                | 4,356,+00              | 6,321,0-03             | 8.201=02   |
| 1.700++02         | 6,699,+00        | 1;137=+01                | 3,962=+00              | 6,832=03               | 9.007=02   |
| 1,800=+02         | 7.202.+00        | 1.294.+01                | 3,630,+00              | 7,344 <u>,</u> •03     | 1.0910-01  |
| 1.900x+02         | 7.705.+00        | 1,461 <b>n</b> +01       | 3.348 +00              | 7,857 <b>"</b> •03     | 1.24   = 0 |
| 2.000++02         | 8,208,+00        | <b>,</b> 638 <b>,</b> +0 | 3,105,+00              | 8,370,-03              | 1.400#=01  |
| 2.100++02         | 8.711=+00        | 1,826p+01                | 2,895.+00              | 8,883,-03              | .568×=0    |
| 2.200=+02         | 9,214=+00        | 2.023=+01                | 2,711=+00              | 9,396±=N3              | 1./45##01  |
| 2.300 + 02        | 9,715m+00        | 2,230=+01                | 2,549,+00              | 9,907,03               | 1.932=01   |
| 2.400+02          | 1+022=+01        | 2,447,*0                 | 2,402+00               | 1.042=02               | 2.12/#=01  |
| 2.200++02         | 1+071+01         | 2,073,+0                 | 2,278,+00              | 1.093.02               | 2.33[##0]  |
| 2.000+02          | + 2  <b>+</b> +D | 2,709=+01<br>3 155 +01   | 2,163=+00              |                        | 2,543#*[]] |
|                   |                  |                          | 2.000=00               | 11740702               |            |
|                   | 1.220.0+01       |                          | ]] <b>•</b> ∉\n₹,[]    | 1+479#702              | 2,993##01  |
|                   | 1,207 m+01       | 3 947 +01                | ,00∠⇒+00               | 1 + 490 = 02           | 3 474      |
| 3 100+02          | 1 367 401        |                          | 1,000∎+00<br>1.735∝+00 | 1,099,02               | 3 /20 0 !  |
| 3 200 + 02        |                  | 4 521.+01                | [,/32≝+00<br>[.670,+00 |                        | 3 40nmáni  |
| 3.300++12         | 1.464.+01        | 4.822.+01                | 1.010                  | 1.493.=02              | 4.258.001  |
| 5.400+02          | 1.512.+01        | 5,131,+01                | 1.555                  | 1.542-02               | 4.234##01  |
| 5.5nnx+n2         | 1.560.+01        | 5.449.+01                | 1.204+00               | 1.591.02               | 4.817==01  |
| 3.600#+02         | 1.608.+01        | 5,776,+01                | 1,457.+00              | 1.639. = 02            | 5.107**01  |
| 5.700 =+ 112      | 1.655.+01        | 6.111.+01                | 1.413.+00              | 1,688,+02              | 5.405      |
| 3.800 + 02        | 1.702.+01        | 6.455.+01                | 1.572+00               | 1,736,-02              | 5,/09=01   |
| 3,900x+02         | 1.749.+01        | 6,8 <sub>0</sub> 7,+0    | 1,334=+00              | ,783 <b>p</b> ≠02      | 6.021==01  |
| 4.000*+02         | 1.795 +01        | 7,167,+01                | 1,298,+00              | 1,831,02               | 6.339==01  |
| 4.100*+02         | 1.842.+01        | 7,536,+01                | 1.264.+00              | 1,878 <sub>2</sub> =02 | 6.063=01   |
| 4.200=+02         | 1.888 .+01       | 7,913=+01                | 1.233=+00              | 1,925.02               | 6.994##01  |
| 4.300++02         | 1,934=+01        | 8,298=+01                | 1,203,+00              | 1,972=02               | 7,332=01   |
| 4.400 + 02        | 1.979.01         | 8,691,+01                | 1.175=+00              | 2.018.02               | 7,0/5#*01  |
| 4,200+02          | 2+024#+01        | 7,0720+01<br>9 501 +01   |                        | $2 \cdot 10 + 02$      | 8,029=701  |
| 4 700 ±02         |                  | 9 917 401                | 1.120.00               | 2 156 -02              | 8 (47-0)   |
|                   | 2+1170701        | 1.034.+02                |                        | 2,201,402              | 9.111mm(1) |
| 4.900+02          | 2.2n3.+n1        | 1.077.+02                | 1.050.000              | 2,247. • 02            | 9.484==01  |
| 2.000+02          | 2.247.+01        | 1.121.+02                | 1.030.+00              | 2.29202                | 9.863.0001 |
| <b>5.100±</b> +02 | 2.291.+01        | 1.166.+02                | 1.010.+00              | 2.336 02               | 1          |
| 2.200++02         | 2.334 + 11       | 1.211.+02                | 9.981.01               | 2,381,+02              | 1.164=+00  |
| 5.300++12         | 2,378_+01        | 1,258.+02                | 9.806                  | 2,425,-02              | 1.103=+0(  |
| 2:400=+02         | 2.421.+01        | 1.305+02                 | 9.039                  | 2,469,02               | 1.144+00   |
| 5,500x+02         | 2,464,+01        | 1,352+02                 | 9,479.=01              | 2.512.02               | 1.184+00   |
| 5,600+02          | 2,500,+01        | 1.401.+02                | 9,327=01               | 2.556.02               | 1,225=+00  |
| 5.700++02         | 2,548,+01        | 1,450++02                | 9,181,01               | 2,59902                | 1.267#+00  |
| 5,800±+62         | 2,590.+01        | 1,499=+02                | 9.0410=01              | 2,642=02               | 1.309=+00  |
| 5,980x+02         | 2,632=+01        | 1,550+02                 | 8;90 <b>7</b> ==0      | 2,684,=02              | 1.352=+00  |

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| DIAMETER   | VELOCITY   | RE  | DRAG COEF  | RELAX TIME  | • ¥8- 41ST  |
|--|--|---|--|---|---|
| DIAMETER<br>0.000#+02<br>6.100#+02<br>6.200#+02<br>6.300#+02<br>6.400#+02<br>6.500#+02<br>6.500#+02<br>6.600#+02<br>6.700#+02<br>6.800#+02<br>6.800#+02<br>7.000*+02<br>7.100*+02<br>7.200#+02 | VELOCITY<br>2,674 ± 01<br>2,715 ± 01<br>2,756 ± 01<br>2,797 ± 01<br>2,838 ± 01<br>2,878 ± 01<br>2,919 ± 01<br>2,959 ± 01<br>2,959 ± 01<br>2,998 ± 01<br>3,038 ± 01<br>3,077 ± 01<br>3,116 ± 01<br>3,155 ± 01   | RE<br>1,601=+02<br>1,653=+02<br>1,706=+02<br>1,759=+02<br>1,813=+02<br>1,867=+02<br>1,922=+02<br>1,978=+02<br>2,035=+02<br>2,092=+02<br>2,150=+02<br>2,267=+02<br>2,267=+02 | DRAG COEF<br>8.778 = 01<br>8.055 = 01<br>8.536 = 01<br>8.422 = 01<br>8.312 = 01<br>8.207 = 01<br>8.105 = 01<br>8.007 = 01<br>7.912 = 01<br>7.912 = 01<br>7.52 = 01<br>7.65 = 01<br>7.565 = 01                    | RELAX IIME<br>2,727 = 02<br>2,769 = 02<br>2,894 = 02<br>2,894 = 02<br>2,935 = 02<br>2,935 = 02<br>2,976 = 02<br>3,017 = 02<br>3,058 = 02<br>3,058 = 02<br>3,138 = 02<br>3,18 = 02<br>3,218 = 02 | ,98 0151<br>1,395±+00<br>1,438±+00<br>1,483±+00<br>1,527±+00<br>1,517±+00<br>1,617±+00<br>1,617±+00<br>1,756±+00<br>1,756±+00<br>1,351±+00<br>1,351±+00<br>1,399±+00<br>1,947±+00 |
| 7.300x+02<br>7.400x+02<br>7.500x+02<br>7.500x+02<br>7.600x+02<br>7.700x+02<br>7.800x+02<br>7.800x+02<br>7.900x+02<br>8.000x+02<br>8.000x+02  | 3 + 194 + 01 $3 + 232 + 01$ $3 + 271 + 01$ $3 + 309 + 01$ $3 + 347 + 01$ $3 + 347 + 01$ $3 + 384 + 01$ $3 + 422 + 01$ $3 + 459 + 01$ $3 + 496 + 01$  | 2, 327 + 02 $2, 387 + 02$ $2, 448 + 02$ $2, 510 + 02$ $2, 572 + 02$ $2, 635 + 02$ $2, 698 + 02$ $2, 762 + 02$ $2, 826 + 02$   | 7.485 = 01<br>7.408 = 01<br>7.335 = 01<br>7.261 = 01<br>7.191 = 01<br>7.125 = 01<br>7.125 = 01<br>6.995 = 01<br>6.995 = 01   | 3,257 = 02 $3,296 = 02$ $3,335 = 02$ $3,374 = 02$ $3,413 = 02$ $3,451 = 02$ $3,451 = 02$ $3,451 = 02$ $3,58 = 02$ $3,565 = 02$  | ,996=+00<br>2,95=+00<br>2,145=+00<br>2,145=+00<br>2,145=+00<br>2,246=+00<br>2,246=+00<br>2,297=+00<br>2,348=+00<br>2,348=+00<br>2,400=+00   |
| 8.200x+02<br>8.300x+02<br>8.400x+02<br>8.500x+02<br>8.500x+02<br>8.500x+02<br>8.700x+02<br>8.700x+02<br>8.800x+02<br>8.800x+02<br>8.800x+02  | 3,533 + 0    3,570 + 0    3,60 + 0    3,643 + 0    3,643 + 0    3,679 + 0    3,715 + 0    3,751 + 0    3,780 + 0    3 | 2,89] = + 62<br>2,957 = + 62<br>3,023 = + 62<br>3,09 0 = + 62<br>3,158 = + 62<br>3,25 = + 62<br>3,294 = + 62<br>3,363 = + 62  | $\begin{array}{c} 6,87  = 0 \\ 1,94 = 0 \\ 6,756 = 0 \\ 6,756 = 0 \\ 6,756 = 0 \\ 6,756 = 0 \\ 6,756 = 0 \\ 6,047 = 0 \\ 6,594 = 0 \\ 6,544 = 0 \\ 6,544 = 0 \\ 6,494 = 0 \\ 1 \\ 6,494 = 0 \\ 1 \\ \end{array}$ | 3,00302<br>3,04002<br>3,67802<br>3,71502<br>3,75202<br>3,75202<br>3,78802<br>3,78802<br>3,82502<br>3,86102  | 2.452×+00<br>2.504×+00<br>2.557×+00<br>2.610×+00<br>2.664×+00<br>2.772×+00<br>2.772×+00<br>2.72×+00<br>2.72×+00   |
| 9:000+02<br>9:100+02<br>9:200+02<br>9:200+02<br>9:300+02<br>9:400+02<br>9:500+02<br>9:500+02<br>9:600+02   | $3 \cdot 822 + 01$<br>$3 \cdot 857 + 01$<br>$3 \cdot 892 + 01$<br>$3 \cdot 927 + 01$<br>$3 \cdot 962 + 01$<br>$3 \cdot 996 + 01$<br>$4 \cdot 030 + 01$<br>$4 \cdot 065 + 01$<br>$4 \cdot 099 + 01$   | $3, 433 \pm 02$ $3, 5_0 3 \pm 02$ $3, 573 \pm 02$ $3, 645 \pm 02$ $3, 716 \pm 02$ $3, 789 \pm 02$ $3, 862 \pm 02$ $3, 935 \pm 02$ $4, 009 \pm 02$                           | 6,440 = 0  <br>6,399 = 0  <br>6,353 = 0  <br>6,265 = 0  <br>6,265 = 0  <br>6,223 = 0  <br>6,182 = 0  <br>6,14 = 0  <br>6,12 = 0  | $3.697 \times 102$ $3.969 \times 102$ $3.969 \times 102$ $4.040 \times 102$ $4.040 \times 102$ $4.075 \times 102$ $4.145 \times 102$ $4.145 \times 102$   | 2.881 + 00 $2.936 + 00$ $2.991 + 00$ $3.047 + 00$ $3.102 + 00$ $3.159 + 00$ $3.215 + 00$ $3.272 + 00$ $3.29 + 00$   |
| 9,900x+02<br>1,000x+03<br>1,010x+03<br>1,020x+03<br>1,030x+03<br>1,030x+03<br>1,040x+03<br>1,050x+03   | $4 \cdot   33 + 0 $ $4 \cdot   66 + 0 $ $4 \cdot 200 + 0 $ $4 \cdot 233 + 0 $ $4 \cdot 266 + 0 $ $4 \cdot 300 + 0 $ $4 \cdot 332 + 0 $   | 4,083±+02<br>4,158±+02<br>4.233±+02<br>4.309±+02<br>4.386±+02<br>4.463±+02<br>4.463±+02<br>4.540±+02  | 6, 064 = 01 6, 026 = 01 5, 989 = 01 5, 954 = 01 5, 919 = 01 5, 855 = 01 5, 851 = 01  | $4.214\mu = 02 4.249\mu = 02 4.283\mu = 02 4.317\mu = 02 4.351\mu = 02 4.385\mu = 02 4.385\mu = 02 4.418\mu = 02$   | 3.386 + 0<br>3.444 + 0<br>3.902 + 0<br>3.902 + 0<br>3.960 + 0<br>3.618 + 0<br>3.677 + 0<br>3.736 + 0<br>3.736 + 0   |



| DIAMETER               | VELOCITA                   | RE                          | DRAG CUEF                    | RELAX TIME                         | ,98 DIST  |
|------------------------|----------------------------|-----------------------------|------------------------------|------------------------------------|---|
| I.000×+00              | 4,893 <sub>0</sub> =04     | 4,884.=06                   | 4,914==06                    | 4,990==07                          | 7,159==10   |
| 1.100=+00              | 5,921,=04                  | 6,5 <u>00</u> =06           | 3,692.+06                    | 6,038 <u>,</u> +07                 | l•û49∞≖09   |
| 1.200=+00              | 7,046,-04                  | 8,439.=06                   | 2.0440+06                    | 7,186p=07                          | 1.487==09   |
| 1.300=+00              | 8,270==04                  | 1.073.05                    | 2,237=+06                    | 8,433,-07                          | 2•u5 <b>g</b> ∞≂09  |
| 1.400#+00              | 9+591±#04                  | 1,340,*05                   | ,791 <b>±+</b> 06            | 9,780,07                           | 2./60=709   |
| 1.500=+00              | 1,101=03                   | 1,648∍₹05                   | 1.450m+06                    | 1.123==06                          | 3.640==09   |
| 1.600#+00              | 1.25303                    | 2,000.05                    | 1,200=+06                    | 1,2//p=00                          | 4,/16#=09   |
| 1./00=+00              | • 4   4 ± ≢ [3             |                             |                              | +442x=00                           | 0.014==09   |
| 1.000=+00              |                            | 2+040p=UD<br>3 350 -05      | 8,42/ m+02                   |                                    | 7,304##09   |
| 1+700±+00              | 1.700p+[]3                 | 3,050,05                    | / 102m+05                    | 1.996                              | 7,373##{}7  |
| 2 100++00              | 0 158 -03                  | 4 537                       | 5 407 405                    | 2.201.00                           | ],],,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |
| 2.200++00              | 2 368 -03                  | 5,200-705                   | 2.507m+05                    | 2.415.=06                          | 1.592m=nA   |
| 2.300-+00              | 2 589 - 03                 | 5.942                       |                              | 2.640                              | 2 1220-08   |
| 2.400.+00              | 2,819,*03                  | 6.751.405                   | 3 555-+05                    | 2.87406                            | 2.398=08  |
| 2.500++00              | 3.05803                    | 7.630.05                    | 3.145.+05                    | 3.11906                            | 2.825.00  |
| 2.600.+00              | 3.308.00                   | 8.583.05                    | 2./96.+05                    | 3.373.006                          | 3.306=08  |
| 2.700++00              | 3.567.03                   | 9.612.=05                   | 2.497.+05                    | 3.63806                            | 3.046=-18   |
| 2.800+00               | 3.83603                    | 1.072.04                    | 2.239+15                     | 3.912.00                           | 4.45n=18  |
| 2.900=+00              | 4.115 - 03                 | 1.191.=04                   | 2.015.+05                    | 4,197,=06                          | 5, 1230 - 08  |
| 5.000++00              | 4,404.+03                  | 1.3190=04                   | 1.020.+05                    | 4,491,#106                         | 5,869×=08   |
| 3,100=+00              | 4,7020=03                  | 1,455,704                   | 1,050+05                     | 4,795 <sub>#</sub> =06             | 6.094=88  |
| 3,200=+00              | 5,011 <u>m</u> =03         | 1.600.=04                   | 1,000+05                     | 5,110 <b>#</b> #06                 | 7.003∍≖08   |
| 3,300*+00              | 5,329 03                   | I <b>,</b> 755 <b>,</b> =04 | .368 <b>±</b> +05            | 5,434 <u>s</u> =06                 | 8,6020=08   |
| 5.400=+00              | 5,657,03                   | 1,919, <u>=</u> 04          | ,250≠05                      | 5,768, <del>,</del> •06            | 9.696=08  |
| 3,500++00              | $5,994_{m}=03$             | 2,094==04                   | 1.140 + 15                   | 6.113.=06                          | , <u></u> <u></u> <u></u>  ,189∞≖07   |
| 3,600±+00              | 6,342 <b>03</b>            | 2,278,04                    | 1.053.+05                    | 6,467 <sub>p</sub> =06             | 1.219=07  |
| 3./00x+00              | 6.699.=03                  | 2,474,=04                   | 9./03.+04                    | 6,83  <sub>₽</sub> ≢06<br>7 0-5 -4 | 1.30   ## 0/  |
| 3.000x+00              | / (no m = 0)               |                             | 8,77/b+[]4                   | 7,200000                           |   |
| 3.900+00               | 7 800 - 03                 | 2,09/m=[]4<br>3 105 =04     | $8,202 \pm 04$<br>7,679 ± 04 | 7 984 - 06                         |   |
| ™•000±+00<br>4 100±+00 | 1,027 p () )<br>8 225 - 03 | 3.366                       |                              | 7,704,p=00<br>8,388,≖06            | 1,001#*()/<br>255m*07   |
| 4.200++00              | 8.63103                    | 3.618.*04                   | 6 634 m + n4                 | 8,8n2mmn6                          | $2 \cdot 1 - 2 \cdot 1 - 2 \cdot 1 - 2 \cdot 1 - 2 \cdot 2$ |
| 4.300+00               | 9.047 Jen3                 | 3.883.=04                   | 6.182+14                     | 9.226                              | 2.487#=07   |
| 4.400±+00              | 9.473.•n3                  | 4.16114                     | 5.770+n4                     | 9,660,-06                          | 2./27== 07  |
| 4.500#+00              | 9.9n8.=n3                  | 4.450                       | 5.394.+04                    | 1.010                              | 2.984=07  |
| 4.600±+00              | 1.035.02                   | 4.753.0-04                  | 5.050.+04                    | 1.05605                            | 3.260=07  |
| 4.700++00              | 1.081.=02                  | 5,070, 04                   | 4,734=+04                    | 1.10205                            | 3. 2530 + 07  |
| 4,800=+00              | 1.127 02                   | 5,400=04                    | 4,444,+04                    | l, 15 0 <b>m</b> 7 0 5             | 3,866==07   |
| 4,900*+00              | 1.17502                    | 5,745,=04                   | 4.178.+04                    | • 98 <b>=</b> =05                  | 4.20000707  |
| 2,000x+00              | 1.223.02                   | 6,104 <u>m</u> #04          | 3.932.+04                    | 1.247 05                           | 4.554=07  |
| 5.100*+00              | 1.273.02                   | 6,478 <b>.</b> =04          | 3.705=+04                    | 1,298, 05                          | 4. 43   07  |
| 5,200++00              | 1.323.=02                  | 6,866=04                    | 3.496.+04                    | 1,349=+05                          | 5.330==07   |
| >, 300×+00             | .374.02                    | /.270=04                    | 3.3020+04                    | 1.402×*05                          | 5.153**07   |
| 2.400*+00              | 1.42/0-02                  | /•089#*04                   | 3,122,0+04                   | +425m=03                           | 0.201000/   |
| 2·200*+00              | 1,480m=02                  | 0 +   24 ⊭ = () 4           | 2,724=+04                    | (,7()y#=())                        | 0.0/5**0/   |

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| DIAMETER                        | VELOCITY          | RE   | DRAG CØEF         | RELAX TIME                                | .98 DIST               |
|---------------------------------|-------------------|--|-------------------|---|------------------------|
| 5.600=+00                       | 1.534 02          | 8,575=04   | 2.799 + 04        | 1.56505                                   | 7.175==07              |
| Þ,/00≠+U0                       | 1,590pm02         | 9,043p=04  | 2.054 <u></u> +04 | 1.621.=05                                 | 7./03.+07              |
| 5.800x+00                       | 1,646,=02         | 9,527 <u>+</u> 04                                    | 2,519=+04         | 1,678 <sub>p</sub> =05                    | 8,259##07              |
| 5,900x+00                       | 1.703.02          | 1.003.=03  | 2.394.+04         | 1,737,=05                                 | 8,0450007              |
| °•000=+00                       | 1.761.02          | 1,055#=03  | 2,276,+04         | 1,796 <sub>x</sub> =05                    | 9,462==07              |
| 9.100 <b>=</b> +00              | .821 <u>.</u> #02 | 1+108=03   | 2,160,+04         | .857 <u>.</u> 05                          | 1.011##06              |
| °•200⊭+00                       | .881.mm02         | 1.164  | 2,063,0+04        |   | 1.079==06              |
|                                 | 1,946,00          | 1+22 #*[]3   | <b>900</b> µ+04   |   | 1.12   ## [0           |
|                                 |                   | 1,400,00°03  |                   | 2,044µ=02                                 | 1.226##00              |
| °,200#+00<br>6.600 <u></u> ,+00 | 2,131,02          |  | 1.710             | 2 173 = 05                                | 1,004×*00              |
| 6.7nn++0n                       | 2,196,            | 1.469.=03  | 1.635.+04         | 2,240,+05                                 | 1.3070-06              |
| 6.8 <u>00</u> +00               | 2.26202           | 1.535 .= 13  | 1.564 + 04        | 2.307.05                                  | 1.563##06              |
| 6.900±+00                       | 2.329.=02         | 1.6n4.=n3  | 1,497±+14         | 2.375 15                                  | 1.058##86              |
| 7.000++00                       | 2.397.02          | 1.675.=03  | 1.433.+04         | 2.445 05                                  | 1./56##06              |
| 7.100=+00                       | 2,460,02          | 1,747,=03  | 374 <b>.</b> +04  | 2,515, = 05                               | 1.059.0006             |
| 7,200++00                       | 2,536, = 02       | 1,8220-03  | 1.317.+04         | 2,586,-05                                 | 1.966==06              |
| 7,300++00                       | 2.607.=02         | I,899 <b>≞</b> ∎03                                   | 1.264.+04         | 2.659 = 05                                | 2.078==06              |
| 7.400++00                       | 2,679,02          | 1 <b>,978,</b> ∍D3                                   | 1.213.+04         | 2.732.05                                  | 2.194=06               |
| 7.200x+00                       | 2,7520-02         | 2.060.03   | 1.166.+04         | 2,806,-05                                 | 2.3 6 # # 06           |
| 7,600±+00                       | 2.820.02          | $2 \cdot 143_{\mu} = 03$                             | 1.120+04          | 2,881,05                                  | 2,442=06               |
| / •/00×+00                      | 2,900,076         | 2,229,03   | 1,0//+04          | 2,958,=05                                 | 2.274=06               |
| / +000x+00                      |                   | ∠ <sub>1</sub> ,3 / <sub>20</sub> ≣[]3<br>2,407 = 07 |                   | ა.[]ა9 <sub>∞</sub> = []9<br>7     7 = 05 | 2./ ]p=_00             |
|                                 | 3,020,02          | 2,70/m=03  | 9,9/70+03         | 3,1 3µ¤[]7<br>7 107 - 05                  | 5.055×=00              |
| 0,000x+00                       | 3 209 <b>■</b> 02 | 2,594  | 9,0020+03         | 3,1900=10<br>3,273,=05                    | 3. <u>10</u> 0×*00     |
| 5,200++00                       | 3.289             | 2.692.403  | 8 920 m + n 3     | 3.354                                     | 3 120-06               |
| 5.3nn+nn                        | 3.378.02          | 2.791.003  | 8 601 + 03        | 3.436.=05                                 | 3.477.0-06             |
| 8.400=+00                       | 3.451.=02         | 2,893=83   | 8.290.+13         | 3.52n.=05                                 | 3.049.00               |
| 8,500*+00                       | 3,534 = 02        | 2,998.003  | 8.009+13          | 3,604,=05                                 | 3.026 16               |
| 8.600.+00                       | 3.618.02          | 3,105=03   | 7,733=+03         | 3.68905                                   | 4.110#+06              |
| 8.700×+00                       | 3,702,02          | 3,214.03   | 7,470=+03         | 3,77505                                   | 4.200=06               |
| 8.800.+00                       | 3.788.02          | <b>3,327</b> ∎ <b>=</b> 03                           | 7.218++03         | 3,863.=05                                 | 4.3970-06              |
| 8,900×+00                       | 3.874 02          | 3,4410-03  | 6,978,+03         | 3,9510=05                                 | 4.0010006              |
| Y:000=+00                       | 3,962,02          | 3,258,=03  | 6./48.+03         | 4.040=*05                                 | 4.012000               |
| 9.100=+00                       | 4.0500-02         | 3,078, ₹03   | 6,528=+03         | 4.130.05                                  | 5.030=06               |
| Ø•∠00≠+00                       | 4   40 = 02       | 3,001,003  | 6,310 = 03        | 4.42 8702                                 | 5.255×10               |
|                                 | 4,2000-02         | 0,720p≈US<br>4 n54 = n7                              |                   |   | 5,488##05<br>5,488##05 |
| 7+700#400<br>9.5nn⊶+nn          | 7,02107UZ         |  | 5 738 4n2         | 7 • 7 () / ∞ 7 () 2<br>4 - 5 ∩ 1 - = 0 5  | 2+/29#8[0<br>5 977556  |
| 9.6nn+00                        | 4.507             | 4.318.=03  | 5 561 + 03        | 4.596-+05                                 | 6 330-06               |
| 9.7nnx+nn                       | 4.6∩l⊮=⊓2         | 4.454  | 5.391m+03         | 4.692.+05                                 | 6.498 mm 10            |
| 9.810x+00                       | 4.697             | 4.594.= 03   | 5,228.+03         | 4.789                                     | 6,/7im=06              |
| 9,900x+00                       | 4.79512           | 4,735=13   | 5.071×+03         | 4.888 - n5                                | 7. 1152 <b>n</b> 16    |
| 1.000**01                       | 4,89002           | 4,880.00-03  | 4.921=+13         | 4.987. * 05                               | 7.542= 16              |
| 1.100=+01                       | 5,916 - 82        | 6,494,=03  | 3.699 .+03        | 6,0330-05                                 | 1.076-05               |

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| DIAMETER           | AFTACILA                         | RE             | DRAG COEF              | RELAX TIME                    | ,98 DIST                              |
|--------------------|----------------------------------|----------------|------------------------|-------------------------------|---------------------------------------|
| 1,200=+01          | 7,038 <sub>m</sub> +02           | 8,429,=03      | 2,850 <b>+</b> 03      | 7 <b>,</b>   77 <b>,</b> = 05 | 1.526==05                             |
| 1,300 <b>+</b> +01 | 8,258,+02                        | 1.071.02       | 2,243,+03              | 8,421,05                      | 2.103##05                             |
| 1.400=+01          | 9,574,02                         | I,338⊭≡02      | ,797 <b>⊭</b> +03      | 9,763, +05                    | 2.03 =+05                             |
| 1.500++01          | 1,099 <b>,=</b> 01               | 1,645=02       | 1,463 <b>.+</b> 03     | 1.120.=04                     | 3,/34==05                             |
| 1.600*+01          | 1.249.01                         | 1,995,+02      | 1.206.+03              | ,274 <sub>p</sub> =04         | 4,837==05                             |
| 1.700*+01          | 1.410.=01                        | 2,392=02       | 1.007.+03              | 1,437 <sub>2</sub> =04        | 6.168==05                             |
| 1,800*+01          | 1.579.01                         | 2,037=02       | 8,491,+02              | 1,611 <u>p</u> =04            | 7,/58=+05                             |
| 1.900*+01          | ,759∞≖0                          | 3,335,"02      | 7,230m+02              | 1,793 <u>m</u> =04            | 9.0360#05                             |
| 2.000=+01          | <sub>+</sub> 947 <sub>∞</sub> ×0 | 3,886p=02      | 6,208∞+02              | 1,986m=04                     | 1.184=04                              |
| 2.100*+01          | 2,145,001                        | 4,495,=02      | 5.371 <b>±+</b> 02     | 2,187,-04                     | 1.440=04                              |
| 2.200++01          | 2,352.001                        | 5,164,-02      | 4,080.+02              | 2,398±=04                     | 1.135.04                              |
| 2.300++01          | 2,568 = 01                       | 5,895m=02      | 4,104=+02              | $2,6 9_{n}=04$                | 2.074==04                             |
| 2.400=+01          | 2,793,01                         | 6,691=02       | 3,620 <b>*</b> *02     | 2,849=04                      | 2.460=04                              |
| 2.200 + 01         | 3,02/0=01                        | / 553 = 02     | 3,210=+02              | 3,087,04                      | 2.897++04                             |
| 2.600++01          | 3,270==01                        | 8,486          | 2,861=+02              | 3,335,*04                     | 3,39   ##04                           |
| 2./00++01          | 3,522.01                         | 9,490,02       | 2,561+02               | 3.592.04                      | 3.945 = 04                            |
| 2,800++01          | 3,/82,01                         | ,057⊭≡0        | 2,303+02               | 3,85/1=04                     | 4.264#=04                             |
| 2,900++01          | 4,051,0701                       | , 72µ≡0        | 2.080+02               | 4,15,0=04                     | 5.254=04                              |
| 3,000x+01          | 4.320.0                          | ]= a 296 ¢ و ا | 1,882.+02              | $4, 4   3_{10} = 0.4$         | 6.020*=04                             |
| S.]00±+01          | 4,0 0 <sub>2</sub> =[]           | 1.72/100       | 1./1***02              | 4,/()4m#()4<br>5 p.7 - 04     |                                       |
| 3.200x+01          | 4,900 m = []                     | 1,20/m=0       | 470 + 02               |                               | /./98₽₽04                             |
| 3 400 +01          | 2,20/ p▼0)<br>5 5 5 5 - 5 -      | 1.870.mol      | 1.432#+02              | 5 625 e04                     | 0,0220004                             |
|                    |                                  | 2 037 = 01     | 1.012#+02              |                               | , , , , , , , , , , , , , , , , , , , |
|                    | 5,030 <u>m</u> =[]               | 2,00/0/01      | 1.211=102              |                               |                                       |
| 3 700 +01          | 6 487 - DI                       | 2 395          | 1.119#+U2              | 6 6 5 - 04                    | 1,200=00                              |
| 3.800-+01          |                                  | 2 588.*01      |                        | 6 960=04                      | 1.309##03                             |
| 3.900 ±01          |                                  | 2.791          | 9,0000+01<br>8,925,401 |                               | 1.550==03                             |
| 4.000++01          | 7.521                            | 3. Dn2.*n1     | 8 322 + 11             | 7.669 - n4                    | 1.8030003                             |
| 4.105.+01          | 7.878                            | 3.224_=nl      | 7 /73 + 1              | 8.034.04                      | 1.965#=03                             |
| 4.200++01          | 8,242,01                         | 3.455 - 11     | 7.275.+01              | 8.4.15.7.14                   | 2.136==03                             |
| 4.300=+01          | 8.612.01                         | 3,696, 01      | 6.025.+11              | 8,782, -04                    | 2.315+=03                             |
| 4.400++01          | 8,987,-11                        | 3,946.01       | 6.410.+01              | 9.165 14                      | 2.002003                              |
| 4,500++01          | 9,368                            | 4,207=01       | 6. <u>1</u> 34=+01     | 9,553n-04                     | 2.098=03                              |
| 4,600+01           | 9,75501                          | 4,478,01       | 5,089,+01              | 9,947 04                      | 2.403=03                              |
| 4.700 + 01         | 1.015+00                         | 4,759.=01      | 5. 373 - 01            | 1.0350-03                     | 3.117=03                              |
| 4,800=+01          | 1.054.+00                        | 5,050##01      | 5,0 <sup>8</sup> 2,+01 | 1.075=03                      | 3.340#=03                             |
| 4,900++01          | 1.094.+00                        | 5.352=01       | 4,015=+01              | 1.116=03                      | 3. 273 = 03                           |
| 5.000*+01          | 1.135 .+00                       | 5,663,-01      | 4,568,+01              | 1,157, <b>p=</b> 03           | 3.0140-03                             |
| 5.100*+01          | 1.170 -+ 00                      | 5,985=01       | 4.3400+01              | 1,199,=03                     | 4.0650-03                             |
| 2.200=+01          | 1+217#+00                        | 6,3 7¤*0       | 4.130=+01              | 1,24   = 03                   | 4,326=03                              |
| 5.300×+01          | 1.259.+00                        | 6,660, 01      | 3.934 = 01             | 1,284,=03                     | 4, 996 - 03                           |
| 2.400=+01          | 1.301.+00                        | /.013#*01      | 3.753.+01              | 1,327,03                      | 4.876#03                              |
| 2.500x+01          | 1.344.+00                        | /,376="0       | 3,584=+01              | 1.370n=03                     | 5.166##03                             |
| 5,600±+U1          | 1.38/=+00                        | /+/50.0=01     | 3,42/#+01              | 1,414,=03                     | 5,466=03                              |
| 2./00=+01          | 1,430 <b>»+</b> 00               | ö, 34⊯≂0       | 3,281#+01              | +4>8 <b>»=</b> 03             | 5.775×=03                             |

| DIAMETER                                  | VELOCITY               | RE                                    | DRAG COEF                       | RELAX TIME                  | ,98 DIST                    |
|---|------------------------|---------------------------------------|---------------------------------|-----------------------------|-----------------------------|
| 5.800*+01                                 | 1.473 +00              | 8,529=01                              | 3, 44,∞+0.                      | 1, <b>2</b> 03, <b>*</b> 03 | 6, <sub>U</sub> 95¤=03      |
| 5.900x+01                                 | 1+517m+00              | 8,934.=01                             | 3,010m+01                       | 1,547,p=03                  | 6,425,03                    |
| 6.000x+01                                 | 1,561_+00              | 9,350×*01                             | 2.090.+01                       | 1,592,03                    | 6./650003                   |
| 6.100x+01                                 | 1,606 <b>x+00</b>      | 9,776 <b>.</b> =01                    | 2.784.+01                       | <b>,</b> 638 <b>,</b> ∞03   | 7.150003                    |
| 6,200±+01                                 | 1,651 <b>±+</b> 00     | 1.021#+00                             | 2.078.+01                       | ,683 <b>∍</b> =03           | 7 <b>.476</b> # <b>.</b> 03 |
| 6.300±+01                                 | 1.696 <sub>0</sub> +00 | l,()66±+()()                          | 2,5790+01                       | 1,729,03                    | 7.847##03                   |
| 6.400x+01                                 | <b> ,</b> 74 ∞+00      | 1:112=+00                             | 2.485.+01                       | 1,775 <u>n=0</u> 3          | 8,228+=03                   |
| 6,500±+01                                 | 1.780.+00              | 1,159=+00                             | 2.397 <b>±+</b> 01              | 1,82203                     | 8,620⊭•03                   |
| 6.600 + 01                                | 1,832,+00              | 1,207,+00                             | 2,3130+01                       | • 869 <del>»</del> = 03     | 9.u23*=03                   |
| 0.700x+01                                 | 1.879.+00              | 1,256.+00                             | 2,234=+01                       | 1,91603                     | 9 <b>,</b> 436≖≠03          |
| 6.600x+01                                 | 1.922.0+00             | 1.306.+00                             | 2.159.+01                       | • 963 <u>n</u> = 03         | 9,86 <b>0#</b> #83          |
| 6.900+01                                  | 1.972.0+00             | 1,358+00                              | 2.088.+01                       | 2.011.03                    | l•u <u>3</u> 0⊭≂02          |
| /•000 <b>±</b> +01                        | 2.017#+00              | 1.410.+00                             | 2.021.0+01                      | 2.059.03                    | 1.074##02                   |
| /• 00x+0                                  | 2:000+00               | 1,464+00                              | 1.95/=+01                       | 2.107.=03                   | 1.120=02                    |
| /.200=+01                                 | 2.114.+00              | 1,219=+00                             | <b>0 9 0 p + 0</b>              | 2.156.03                    | I.  66 <u>₽</u> ≖02         |
| /•300#+01                                 | 2,162,+00              | 1,275,00                              | 1,03/p+01                       | 2,205,=03                   | 1.214=02                    |
| /•400 <b>⊭</b> +01                        | 2,211,+00              | 1.033.0+00                            | [,/82±+0]                       | 2,254 = 0.5                 | 1.263=02                    |
|   |                        | 1.091.0700                            | , / 20 ± []                     | 2,304,5403                  | 1.3 30=02                   |
| 7 + 0 = 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 |                        | + / ⊃   m T ∐ []<br>  H   X + n n     |                                 |                             | 1,304##82                   |
| / +/ UU#+() <br>/ hon +0                  | 2.0978400              |                                       | [ <b>1</b> 020 <b>∞♥</b> []]    |                             | 1.410.00                    |
| 7.900 × 01                                | 2,7079700              | 1,939,+00                             |                                 | 2,70/2,00                   | 1.4/0.4=02                  |
| 7 • 7 U U # 7 U I                         |                        | 1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | [,930 <u>∎</u> +[]              | 2,2090=03                   | 1.524.02                    |
| 8 100±+01                                 | 2 563 +00              |                                       | 451.401                         |                             | 1,200,000                   |
| 0.200++01                                 | 2,200,00               | 2.140.+00                             |                                 | 2,0170=03                   | 1.03/00/02                  |
| 5.300+01                                  | 2.668.+00              | 2.210.+00                             | •*!(##*0 <br>  372→#n           | 2.721 = 0.3                 | 1,0740-02                   |
| 0.400++01                                 | 2.722.+00              | 2.282.+00                             | •072∎+0 <br>  334 ++n           | 2,776                       | 1,723=02                    |
| 8,500++01                                 | 2.776.+00              | 2.355.+00                             | 1 298 + 01                      | 2.83103                     | 1.015#02                    |
| 8.6nn++11                                 | 2.830.+00              | 2.429.+00                             | 1,263,±ni                       | 2.88603                     | 1.437 = 02                  |
| 8.700+01                                  | 2.886.+00              | 2.506.+00                             | 1.229.+01                       | 2.943. 03                   | 2.000002                    |
| 8.800*+01                                 | 2.941.+00              | 2.583.+00                             | 1,197,+11                       | 3.000-03                    | 2.065##02                   |
| 8.9//n=+n1                                | 2.998.+00              | 2.663.+00                             | 1,160,+11                       | 3. n57 n3                   | 2.131##02                   |
| 9.008x+01                                 | 3,054,+00              | 2,743,+00                             | 1.135.+01                       | 3.115.03                    | 2.198.+02                   |
| 9.100x+01                                 | 3,111,+00              | 2.826.+00                             | [.] <u>n</u> ó <sub>n</sub> +n] | 3.17303                     | 2.266 12                    |
| 9.200 + 01                                | 3,169,+00              | 2,909+00                              | 1.078.+01                       | 3.231=03                    | 2.335=12                    |
| 9.300x+01                                 | 3,220,+00              | 2,994,+00                             | 1.05 u+n1                       | 3.290. = 03                 | 2.405**02                   |
| 9.400*+01                                 | 3,284,+00              | 3,0810+00                             | 1.020.+01                       | 3.34903                     | 2.477.002                   |
| 9.500±+01                                 | 3,342,+00              | 3,168,+00                             | 1.001+01                        | 3,408,-03                   | 2.0500002                   |
| 9.600x+01                                 | 3,399,+00              | 5,257.+00                             | 9,/77,+00                       | 3,46603                     | 2.023=02                    |
| 7,700x+01                                 | 3,450 + 00             | 3.346 ± 00                            | 9,550.+00                       | 3,524. 03                   | 2.098==02                   |
| 9,800x+01                                 | 3.5 3 + 00             | 3.435=+00                             | 9,347 <u>m*00</u>               | 3,58,2, 03                  | 2.175=02                    |
| 7.900×+01                                 | 3,568 <u>,+00</u>      | 3,525=+00                             | 9,151,00                        | 3,039,=03                   | 2,0520=02                   |
| 1.000*+02                                 | -3•622 <b>∞+</b> .0,0  | 3,015=+00                             | 8,969.+00                       | $3.694_{p} = 03$            | 2, 730= 02                  |
| 1+100++02                                 | 4.110.+00              | 4,512+00                              | 7.661.+00                       | 4,192=-03                   | 3.179=02                    |
| 1.200**02                                 | 4,634.+00              | 5,550×+00                             | 6.575.+00                       | 4,72603                     | 4.144=02                    |
| 1.300*+02                                 | 5,165,+00              | 6,7 <sub>01#</sub> +00                | 5.735.+00                       | 5,267 <u>,</u> •03          | 5,025=02                    |

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| DIAMETER          | VELOCITY                 | RE  | DRAG COEF         | RELAX TIME             | ,98 DIST               |
|-------------------|--------------------------|---|-------------------|------------------------|------------------------|
| 1.400.+02         | 5,700+00                 | 7,964 <b>,+</b> UQ                        | 5.071=+00         | 5,813=03               | 7. <sub>0</sub> 23¤=02 |
| 1.500++02         | 6,239=+00                | 9,339±+00                                 | 4.535*+00         | 6,362,-03              | 8.336¤#02              |
| 1.600*+02         | 6.780 s+00               | 1,083.+01                                 | 4.096=+00         | 6.914=03               | 9.163=02               |
| 1.700+02          | 7,323,+00                | 1.242+01                                  | 3,730=+00         | 7,468 <b>.</b> -03     | 1.130**01              |
| 1.800*+02         | 7.867 <b>.</b> +nn       | 1.413=+01                                 | 3,422=+00         | 8.02303                | 1.295=01               |
| 1.900++02         | 8.411.+00                | 1,595,+01                                 | 3,160,+00         | 8,578 <sub>#</sub> +03 | .472¤=0                |
| 2.000++02         | 8.956.+00                | 1,788,+01                                 | 2,934,+00         | 9,133 <u>,</u> +03     | .059=0                 |
| 2.100++02         | 9,499,+00                | 1,991=+01                                 | 2./38.+00         | 9,687 <u>,</u> *03     | 1.857.00               |
| 2.200++02         | $1 + 00^{4} + 01$        | 2,205+01                                  | 2,567,+00         | 1.024.02               | 2.u65==0l              |
| 2,300++02         | 1.058.+01                | 2,429,+01                                 | 2,410,+00         | 1,079,02               | 2.2830=01              |
| 2,400=+02         | 1+112++01                | 2.664.*0                                  | 2,282.+00         | ₁ 34∍⇔02               | 2.212**01              |
| 2,500++02         | 1.166 .+01               | 2,910+01                                  | 2,163,+00         | 1.189.02               | 2.15   = 0             |
| 2,600++02         | 1.220.+01                | 3,165,+01                                 | 2.056.+00         | 1.244 - 02             | 3.u <u>0</u> 0∞≖01     |
| 2.700 + 02        | 1,273,+01                | 3,43 #+01                                 | <b>.</b> 960#+00  | 1,298 <b>s=</b> 02     | 3,258==01              |
| 2,800++02         | ,320 <b>_</b> +0         | 3,7 <sub>0</sub> 7,+01                    | .873 <b>±</b> 400 | ,353 <u>m</u> =02      | 3.260001               |
| 2.900++02         | 1,379,+01                | 3,992=+01                                 | ,793 <b>∍</b> +00 | 1,407.02               | 3.803**01              |
| 3.000++02         | 1,432 <b>,</b> +01       | 4,288,+01                                 | 1,721#+00         | 1,460p=02              | 4.189.01               |
| 3,100=+02         | <b>,</b> 485∞+0          | 4,593#+01                                 | 1.655 <b>=+00</b> | 1.514.02               | 4.385=701              |
| 3,200++02         | 1,537,+01                | 4,908.+01                                 | 1,594=+00         | 1,567.02               | 4,689=01               |
| 3.300*+02         | <b>.</b> 589 <b>∞</b> +0 | 5.232.+01                                 | 1,539=+00         | 1,020,02               | 5.001**01              |
| 3.400++02         | 1.640.+01                | 5,566m+Q                                  | 1,487,+00         | 1.073.02               | 5,323=01               |
| 3,500*+02         | <b>,</b> 692 <b>∞</b> +∏ | 5,909+01                                  | 1.439=+00         | 1./25.02               | 5,0530001              |
| 3.600*+02         | 1,743+01                 | 6,262,+01                                 | 1.3950+00         | 1.///#*02              | 5.990**01              |
| <b>3.7</b> 00≠+02 | 1,794,+01                | 6,623=+01                                 | ,353 <b>=+</b> 00 | 1.029.02               | 0.3300701              |
| 3.800x+02         | 1.844,+01                | 6.994=+01                                 | 1.312=+00         | 1.081.02               | 0.070**01              |
| 5,900++02         | ,894±+0                  | 7,373×+01                                 | 1.279#+00         | 1.732="02              | 7•u>2**01              |
| 4.000=+02         | 1.944 <u>m</u> +01       | /,/62=+01                                 | 1.242=+00         | 1.783.02               | 7,421000               |
| 4.100++02         | 1,994,+01                | 8,159,+01                                 | 1,2130+00         |                        | /./90#*0               |
| 4.200=+02         | 2.043,+01                | 0,265±+0                                  | 1.184±+00         | 2.004.02               | 0.103**[]              |
| 4.300++02         | 2.092.+01                | 0,780+01                                  | 20 # 0 0          | 2. 34 . 02             | 8 977 990              |
| 4.400*+02         | 2.141.+01                | <b>∀</b> • 4 () 3 ∞ * ()  <br>9 ₩ 7 4 + 0 |                   | 2 233 -02              | 0.9/3##UI<br>9.478mmnl |
| 4,200x+02         | 2,190,0+01               | 7,007,400                                 |                   | 2,280,00               | 9.7910001              |
|                   | 2,230,0+01               | 1 9 9 2 7 8 7 9 2                         |                   | 2.331.02               | 1.421.0+00             |
| 4 500 102         | 0 774 +01                |   |                   | 2.380                  | 1. 164 . + 0.0         |
|                   | 2,00,0+01                | 1.164.+02                                 |                   | 2.428                  | 1.107**00              |
| 5 000×+02         | 2,0010+01                | 1.212.+02                                 | 9.981             | 2.476 12               | 1.151.00               |
|                   | 2 475 + 11               | 1.260-+02                                 | 9.799             | 2.524.=02              | 1.195.+00              |
| 2.200+402         | 2,521.401                | 1.308.+02                                 | 9.62001           | 2,57 - 02              | 1.240+00               |
| 5 300-+02         | 2.568.+01                | 1.358 + 12                                | 9.460m=01         | 2.618 12               | 1.286+00               |
| 5.4nn+u2          | 2.614.+01                | 1.419.+12                                 | 9.303.*01         | 2.665 02               | 1.533**00              |
| 5,500±+02         | 2.659.+01                | 1.460.+02                                 | 9,152,=01         | 2.712.02               | 1.380+00               |
| 5.600±+02         | 2.7n5_+01                | 1.512-+02                                 | 9.008±=01         | 2,758.02               | 1.427 .+ 00            |
| 5,7nn+4n2         | 2.750.+01                | 1.564.+02                                 | 8.870.01          | 2,80402                | 1.475=+00              |
| 5.800-+02         | 2.795.+01                | 1.618.+02                                 | 8.736=11          | 2.85002                | 1.524#+00              |
| 5.900±+02         | 2.839.+01                | 1.672.+02                                 | 8,6110-01         | 2,896=-02              | 1.5730+00              |
|                   | - $+$ $+$ $+$ $+$ $+$    |   |                   |                        |                        |

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| PIAMETER                    | AEFQUILA                      | RE              | DRAG COEF             | RELAX TIME | ,9a DIST                         |
|-----------------------------|-------------------------------|-----------------|-----------------------|------------|----------------------------------|
| 6.000++02                   | 2,884,+01                     | 1,727,+02       | 8.490 <b>.</b> =01    | 2,941,02   | I.023≠+nn                        |
| 6,100x+02                   | 2,928,+01                     | 1,782=+02       | 8.373                 | 2,986,02   | 1.073=+00                        |
| 6.200*+02                   | 2,972,+01                     | 1,839=+02       | 8,261=01              | 3,031,02   | 1./24=+00                        |
| 6,300++02                   | 3.015.+01                     | 1.896.+02       | 8,153,01              | 3,075,02   | 1./75=+00                        |
| 6 <b>.4</b> 00 <b>±</b> +02 | 3,059,+01                     | 1,954,+02       | 8,049,001             | 3.119=02   | 1.027=+nn                        |
| 6,500±+02                   | 3,102,+01                     | 2.012+02        | 7,949.001             | 3,163.=02  | 1.880-+00                        |
| 6.600±+02                   | 3,145,+01                     | 2.071+02        | 7,853n=01             | 3.207.02   | 1.932 .+ 00                      |
| 6.700++02                   | 3,187,+01                     | 2,131,+02       | 7,760.00              | 3.250.02   | 1.986+10                         |
| 6,800*+02                   | 3,230=+01                     | 2.192.+02       | 7,670.01              | 3.294.=02  | 2.40.+00                         |
| 6,900x+02                   | 3,272,+01                     | 2,253,+02       | 7,584=01              | 3,337,02   | 2.094-+00                        |
| 7,000=+02                   | 3,314,+01                     | 2,315+02        | 7.501×*01             | 3,379,02   | 2.149=+00                        |
| 7,100=+02                   | 3,356,+01                     | 2,378,+02       | 7.420.001             | 3,422,=02  | 2.204=+00                        |
| /.200++02                   | 3.397 .+01                    | 2,44   =+02     | 7.3420-01             | 3,464,=02  | 2.260**00                        |
| 1.300++112                  | 3,438,+01                     | 2,505+02        | 7.26601               | 3,506.02   | 2,316+00                         |
| 1.400++02                   | 3,479,+01                     | 2,270+02        | 7,193,-01             | 3,548,02   | 2.372++00                        |
| /.>00++02                   | 3,520,+01                     | 2,035+02        | 7,123,01              | 3,290,02   | 2.429=+00                        |
| /,000++02                   | 3,501,+01                     | 2.101=+02       | 7.054×=01             | 3.031.02   | 2.487+00                         |
| /./00=+02                   | 3,001,+01                     | 2,16/#+02       | 6,988                 | 3,072=02   | 2,544+00                         |
| 7.000±+02                   | 3,04   + 0                    | 2,034,+02       | 6,924,01              | 3./13.=02  | 2.003+00                         |
| 7+700±+02                   | 3,00 +[]                      | 2,702=02        | 6,001,001             | 3./54p=02  | 2.0010+00                        |
| 0.000±+02                   | 3 740 101                     | 217/04702       | 6,801 <b>0</b> =01    | 3,794,02   | 2./20++00                        |
| 0 <b>↓   U U ± + 0 ∠</b>    | 3,700,00                      | 3 1 4 0 # 7 0 2 | 0,/42,0701            | 3,034,0=02 | 2./80=+00                        |
| 0,200±+02                   | 3 4 7 7 10 1                  |                 | 0,002×*[]             | 3.0/4.*02  | 2,840=+00                        |
| 5 400 +02                   | 3,030,0+01                    | 5 1/9 × UZ      |                       | 3,714p=02  | 2.900=+00                        |
| 0.500++02                   | 3.910.+01                     | 3. 322 + 12     | 6 523 mm              | 3,704.02   | 2.900#+00                        |
| 6.6no.+u2                   | 3.954.+01                     | 3.394.+02       | 6 A73=01              | 4 032 02   | $3, 02  0 \neq 00$<br>3, 87 + 00 |
| b.700x+02                   | 3.992.+01                     | 3.466.+02       | 6.423 meni            | 4.071.202  | 3, 10, 3 * 4 10                  |
| ε.ο <sub>00#+02</sub>       | 4.130.+01                     | 3.54n+12        | 6.375m=n1             | 4.110.02   | 3.207.+00                        |
| 6,900x+02                   | 4,068,+01                     | 3.613.+02       | 6.320.***             | 4.149      | 3.269#+0n                        |
| 9.000s+02                   | 4.106.+01                     | 3,688,+02       | 6.282×=n1             | 4,187,02   | 3.332=+00                        |
| 7.100x+02                   | 4, 143.+01                    | 3,763=+02       | 6.238 m - []          | 4.225 02   | 3.395+10                         |
| 9,200x+02                   | 4,181,+01                     | 3,838=+02       | 6.194 m= []]          | 4.263.0=02 | 3.458 ** 00                      |
| 9.300x+02                   | 4,218,+01                     | 3,915=+02       | 6.152                 | 4.301.02   | 3. >22 + 00                      |
| 9,400*+02                   | 4,254,+01                     | 3.9910+02       | 6,111.0-01            | 4,339,02   | 3. 38.6 -+ 00                    |
| 9.500=+02                   | 4,291,+01                     | 4,068±+02       | 6.971.0-01            | 4.376=02   | 3.05 n=+00                       |
| 9.600±+02                   | 4,328,+01                     | 4,146=+02       | 6.032.001             | 4.413=02   | 3./15-+00                        |
| 9.700 + 02                  | 4,364 <i><sub>0</sub></i> +01 | 4,225=+02       | 5,494.01              | 4,450,02   | 3./80*+00                        |
| A*000*+05                   | 4,400=+01                     | 4,304±+02       | 5,95001               | 4,487.02   | 3.046=+00                        |
| Y.Y00x+02                   | 4,430 -+ 01                   | 4,383=+02       | 5,920=01              | 4,524,02   | 3.911=+00                        |
| 1.000x+03                   | 4.4/20+01                     | 4.463.+02       | 5,084 01              | 4.560=02   | 3.4770+00                        |
| 1.010±+03                   | 4.20/+01                      | 4.243.+02       | 5.0500-01             | 4,597,-02  | 4. 43 -+ 50                      |
| 1.020+40                    | 4,2430+01                     | 4,020+02        | 5,010                 | 4,03302    | 4.110=+00                        |
| I • [] 0 [] # + [] 0        | 4,5/0,+01                     | 4.700±+02       | 5,/83m=01             | 4.069.02   | 4.177.+00                        |
| 1 0 4 0 ± + 0 3             | 4.0100+01                     | 4./50#*02       | 5./50.00              | 4,/04=02   | 4.244.+00                        |
| 1.070±+03                   | 4,040,0+01                    | 4,0/1=+02       | ן <b>0 = מעו/ *</b> נ | 4,/40,*02  | 4.311#+00                        |

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| DIAMETER                                  | VELOCITY                  | RE                           | DRAG COEF                             | RELAX TIME                       | ,95 DIST                                  |
|---|---------------------------|------------------------------|---------------------------------------|----------------------------------|---|
|   | <b>5 4 7</b> 7 <b>.</b> 4 | <b>5 404</b>                 | · · · · · · · · · · · · · · · · · · · | 5 644                            | 0   |
| 1.000×+00                                 | <b>り,43/」。=</b> 04        | 2,420*()0                    | 4.423##06                             | <b>5,244</b> , <b>∞</b> ≂0/      | 8.0320+10                                 |
| l.l00±+00                                 | 6.579 <b>.</b> =04        | 7,222=06                     | <b>3.</b> 323 <b>⊭</b> +06            | 6,7 <u>0</u> 9, <sub>#</sub> #07 | 1,2950=09                                 |
| 1.200=+00                                 | 7.829.04                  | 9 <b>.</b> 376 <b>.</b> -06  | 2.560+06                              | 7,984 <u></u> #07                | 1,036#=09                                 |
| 1.3nn*+nn                                 | 9.189.014                 | 1.192 05                     | 2.013.+06                             | 9.370. = 07                      | 2.5310009                                 |
| 1.400++00                                 | 1.066.=0.3                | 1.48905                      | 1 612-+06                             | 1.087.+06                        | 3.4070+09                                 |
|   |                           |                              | 1.611.406                             | 1,248 - 06                       | 4 497 - 09                                |
|   |                           |                              | 1.011m+00                             |                                  | F   |
|   | 1,392 m= US               | 2.223.8=05                   | 1.000=+00                             | 1,4 Ym=00                        | 2.7200-09                                 |
| I./00×+00                                 | 1,571,000                 | 2,066=05                     | 9.000=+05                             | 1,0020=00                        | 1.422**09                                 |
| 1.800*+00                                 | <b>,</b> 762 <b>≞</b> ≠03 | <b>3.165</b> ₽₹05            | 7,584,+05                             | ,/96∍≂06                         | 9,3350+09                                 |
| 1.900*+00                                 | 1,963,03                  | 3,722.05                     | 6,449=+05                             | 2.002=06                         | , 60⊭≠08                                  |
| 2.000=+00                                 | 2,175,-03                 | 4,341 05                     | 5.529++15                             | 2,218,=06                        | 1.424                                     |
| 2.100++00                                 | 2.398                     | 5.025.05                     | 4.776.+15                             | 2.445                            | 1./32==08                                 |
| 2.200.400                                 | 2 631 - 03                | 5.778                        | A 154                                 | 2.684                            | 288                                       |
| 2 300 +00                                 | 2 876 - 03                | 6 6 n 2 m n h                | 7 635 405                             | 2 977 -06                        | 2.00000                                   |
|   |                           |                              |                                       |                                  | 2,479##00                                 |
| 2.4U0x+00                                 | 3,132,03                  | 7,201,0702                   | 3,200=+02                             | 3.194 <u>#</u> ≢∐D               | 2,900=00                                  |
| 2.500x+00                                 | 3,398 = 03                | 8,478 <sub>a</sub> =05       | 2,831,0+05                            | 3,465,=06                        | 3,486⊭≖∏8                                 |
| 2.600*+00                                 | 3,675∞≖03                 | 9,537==05                    | 2,5170+05                             | 3.748₌=06                        | <b>4,</b> <u>1</u> 8 <u>0</u> <u>≖</u> ,8 |
| 2,700#+00                                 | 3,964_=03                 | l;068±=04                    | 2,247 <b>±+</b> 85                    | 4.042,-06                        | 4./47.008                                 |
| 2,800++00                                 | 4.26303                   | 1:191=04                     | 2.015+05                              | 4,347, - 86                      | 5.492=18                                  |
| 2.900+00                                  | 4.572 = 03                | 1.32304                      | 1.014+15                              | 4,663,=06                        | 6.3220=18                                 |
| 5.000.+00                                 | 4.893 13                  | 1.465 04                     | 1.038.+05                             | 4,99n.+16                        | 7.243==08                                 |
| 3.100+00                                  | 5.225. 03                 | 1.616                        | 485-+05                               | 5.32806                          | 8 2614-08                                 |
| 5 200 + 00                                | 5 567 -03                 | 778 - 04                     | 1.50-405                              | 5 677 - 06                       | 9 .83                                     |
|   |                           | 1 950 -04                    |                                       |                                  | 1 6007                                    |
|   |                           | 2 177 - 44                   | 1,2010400                             |                                  |   |
| <b>○•</b> ♥00 <b>±</b> +00                | 0,202,000                 | 2,1000-04                    | 1.1520+02                             | 0,4()y <sub>b</sub> +(0          | 1.19/##0/                                 |
| <b>♀</b> • <b>&gt;</b> ()( <b>±</b> +()() | 0,000,0000                | 2.320 = 04                   | . [34×+ ]5                            | 0,192,00                         | 1.344==0/                                 |
| 3,600±+00                                 | 7,040 <sub>0</sub> =03    | 2,532,=04                    | 9,481 <u>+</u> 14                     | /,185 <u>0</u> #06               | 1.2050-07                                 |
| 3,700x+00                                 | 7,443 <sub>0</sub> +03    | 2 <b>,</b> 748 <b>,</b> ≁í)4 | 8./33∞+04                             | 7,590∍≖06                        | <b>.</b> 58 <u>0</u> ⊭≖07                 |
| 3.800x+00                                 | 7,851∍=03                 | 2 <b>,977</b> ,¶=( 4         | 8,061.+04                             | 8,0 <u>0</u> 6,*06               | 1.069##07                                 |
| 3.9nn_+nn                                 | 8.26903                   | 3.219.*04                    | 7.457.+14                             | 8.433.=06                        | 2. 175 m n7                               |
| 4.000=+00                                 | 8.699                     | 3.47314                      | 6.912+14                              | 8.871.+16                        | 2.296##07                                 |
| 4.100++00                                 | 9.139.=03                 | 3.740.=04                    | 6 418 -+ 14                           | 9.320. 106                       | 2. 536 m = 17                             |
| 4.200-+00                                 | 0 590 - 03                | 4.020.004                    | 5 471.404                             | 9 780 - 06                       | 2 10 1                                    |
|   |                           |                              |                                       |                                  | 3 60                                      |
| 4.0UUx+UU                                 |                           |                              | 5,04,04                               |                                  | 3.009#407                                 |
| 4.400++00                                 | 1.022*05                  | 4,022                        | 5,193=+04                             | 1.0/3.00                         | 3.300#*[]/                                |
| 4.200*+00                                 | 1.101.05                  | 4,744, *04                   | 4,0746+04                             | 1,123=702                        | 3.683=0/                                  |
| 4.600±+00                                 | l.150m=02                 | 5.2810-04                    | 4,545,+04                             | 1.173.0005                       | 4.023**07                                 |
| 4,700++00                                 | 1,201=02                  | 5,633##04                    | 4,261,+04                             | 50 • <b>م</b> 225 <b>،</b> 1     | 4,3850-07                                 |
| 4.800=+00                                 | 1.253. n2                 | 6, <u>000</u> ,=04           | 4.000+04                              | 1,277 <sub>0</sub> =05           | 4./72.007                                 |
| 4.900.+00                                 | 1,315 -12                 | 6,383"• <u>n</u> 4           | 3,760.+04                             | 1,3310=05                        | 5, 183 × n7                               |
| 5.nnn++nn                                 | 1.359                     | 6,782m•n4                    | 3.539.+04                             | 1.386 • n5                       | 5.02n×+07                                 |
| >.inn±+nn                                 | 1.414m+n2                 | 7,197,14                     | 3,332=+n4                             | 1.442m=n5                        | 6, 185ו17                                 |
| 5.200-+00                                 | 1.470                     | 7.629.=04                    | 3.146 m + n4                          | 1.499.=05                        | 6.578.07                                  |
| 5.300.400                                 | 1.527.402                 | 8.077.0904                   | 0 972 4 n 4                           | 1.557                            | 7.1000007                                 |
|   | 1.585 = 02                | 8.543.404                    | 2010-00                               |                                  | 7 6525-07                                 |
|   |                           | 9. n 27. = n4                |                                       | 1101/07000                       | 1) ##C/D##<br>8 /374=A7                   |
| ~ • ~ !!!!!! !!!!                         | ᆝᆥᅛᄛᄛᇔᄛᆙᄰ                 | **********                   | ノー・シューション                             |                                  | U,/J/##[]/                                |

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| DIAMETER           | VELOCITY                   | RE                         | DRAG COEF              | RELAX TIME                      | ,98 DIST                        |
|--------------------|----------------------------|----------------------------|------------------------|---------------------------------|---------------------------------|
| 5,600=+00          | 1,70 <sup>5</sup> .=02     | 9,528.=04                  | 2,519,+14              | 1,739 <b>,-05</b>               | 8.0550007                       |
| 5.700 <b>=</b> +00 | 1,760,02                   | 1.005==03                  | 2.389.+04              | 1,801,05                        | 9.506=77                        |
| 5,800x+00          | 20=«22+1                   | i.059.mm03                 | 2.268.+04              | 1.86505                         | 1.119==06                       |
| 5,900+00           | 1.892.02                   | 1.114 <b>.</b> =03         | 2.154.+04              | 1,930,-05                       | 1.192##06                       |
| c.000*+00          | 1,957 <u>.0</u> 2          | 1,172=03                   | 2.048.+04              | 1,996p=05                       | 1.168                           |
| 6.100×+00          | 2.023 = 02                 | 1.231.03                   | 1,949.04               | 2.063.05                        | 1.248.00                        |
| 6,200=+00          | 2.090 <b>.</b> .02         | 1,293,03                   | 1,850 p+04             | 2.131.05                        | 1.332=06                        |
| 0.300=+00          | 2,158.02                   | <b>,</b> 357 <b>,</b> ∎03  | 1,770+04               | 2,200=05                        | 1.42n=n6                        |
| $6.400 \pm +00$    | 2,227.02                   | 1.422.03                   | <sub>0</sub> 688∞+04   | 2.27   = 05                     | 1.0130006                       |
| $6.500 \pm +00$    | 2,297.02                   | 1,490=03                   | 1.011.0+04             | 2,342,-05                       | i.olg∞∞g6                       |
| 6.600±+U0          | 2,368 - 02                 | I,56 <u>D</u> ∎≣Q3         | 1,539+04               | 2,415p=05                       | 1./120=06                       |
| $0,100 \pm 100$    | 2.440.02                   | 1.632.03                   | 1,471=+04              | 2.488, -05                      | 1.018=06                        |
| 0.800x+00          | 2,514,02                   | 1,/06.03                   | 1.407.+04              | 2,56305                         | 1.929=06                        |
| 0.900#+00          | 2,588,02                   | 1,782.03                   | 1.347=+04              | 2,639,-05                       | 2. 146 = 06                     |
| •000=+00           | 2.000 02                   | •86  <b>#</b> *[]3         | 1,290*+04              | 2,/1605                         | 2.167.00                        |
| /•100×+00          | 2,/40,.02                  | 1,942 <u>n</u> =03         | 1.230.+04              | 2,794. 05                       | 2.294==06                       |
| 7 • 200=+00        |                            | 2.022=*03                  | 1,180,+14              | 2,0/3,005                       | 2.426=-06                       |
|                    | 2,09/2002                  | <b>4</b> +1  <u>0</u> ==03 | 1,130,+04              | 2,754,-05                       | 2. 264 # 06                     |
|                    | 2, 57 = 02                 |                            | 1.0920+04              | ა, <b>ე</b> ა⊃"≖ე⊃<br>7 სამ – ნ | 2./08.+06                       |
|                    | 3 1 3 9 - 0 2              |                            | 1.047.04               | 3.100=02                        | 2.0580-00                       |
| 7.700**00          | 3.22302                    | 2,0010-00                  |                        | J, ∠[]µ=[]2<br>J 286 - 55       | 5.014=00                        |
| 7.8an+4a           | 3.30702                    | 2,574.503                  | 9,0726403              | 3 370 - 05                      | 3.1/00000                       |
| /.900++00          | 3.39202                    | 2.674                      | 9.0278+03<br>8.977.+03 | 3 469 - 05                      | 3.3420400                       |
| 6.000*+00          | 3.478                      | 2.777.=03                  | 8 645 + 63             | 3 547                           | 3.520**00                       |
| 5.100x+00          | 3.566 02                   | 2.883.+13                  | 8.329.+03              | 3.63605                         | 3 492 - 06                      |
| 8.200++00          | 3.654 02                   | 2.991.=03                  | 8.020.+03              | 3,727,05                        | 488                             |
| 8.300 + 10         | 3.744 = 12                 | 3. In La = 0.3             | 7.742+03               | 3,818,*05                       | 4.92                            |
| 8,400x+00          | 3,835 - 02                 | 3.215.=13                  | 7.469 .+ n3            | 3.910-05                        | 4.2030-00                       |
| 8.500 + 10         | 3,920,=02                  | 3,3310003                  | 7.209+03               | 4.004                           | 4./22#=06                       |
| 8,600x+00          | 4.019=02                   | 3,450.003                  | 6.960×+03              | 4.099.05                        | 4.948.00                        |
| 8.700x+00          | 4.113.002                  | 3,571=03                   | 6.723.+03              | 4.195 05                        | 5.183== 16                      |
| 8,800x+00          | 4,208.02                   | 3,696,=03                  | 6,497,+03              | 4,292,-05                       | 5.426                           |
| 8,900=+00          | 4.504=*02                  | 3,823=03                   | 6,281,+D3              | 4,390                           | 5.078==06                       |
| 9.000x+00          | 4,402.02                   | 3,954 <b>=</b> 03          | 6,074 <b>m</b> *03     | 4,48905                         | 5.938=06                        |
| ¥•100=+00          | 4,500,02                   | 4,087.03                   | 5,870×+03              | 4.589 <sub>n</sub> =05          | 6,207=06                        |
| 9.200 + 00         | 4,599,02                   | 4,223=03                   | 5,687×+03              | 4,690,05                        | 6.486=06                        |
| 9.300*+00          | 4.700-02                   | 4.362.03                   | 5,505=+03              | 4,79305                         | 6./73#=06                       |
| 9.400x+U0          | 4,801=02                   | 4.504=03                   | 5.332.+03              | 4,896 <sub>x</sub> =05          | 7. <sub>U</sub> 7 <u>0</u> ##06 |
| 7,500×+00          | 4.904.02                   | 4,649 * 03                 | 5,165,+13              | 5.001=05                        | 7.576==06                       |
| 7.000 + 100        | 5,00°¤*02                  | 4,/98,=03                  | 5,000+03               | 5.106.05                        | 7.0930-06                       |
| 7 • / 0 0 × + 0 0  | 2.1140-02                  | 4,747±=03                  | 4.0550+03              | 5,213.05                        | 8.019 .06                       |
| 2,000x+00          | 2,210,002                  | 2.104 ± € 03               | 4./00.+03              | 5.321=05                        | 8, <u>3</u> 56,mm06             |
| ······             | 2,327 b • 02<br>5 473 - 60 |                            | 4,202,+03              | <b>2,430, -05</b>               | 8./03=06                        |
|                    |                            | 7 115 - 7                  | 4.427.0+03             | <b>7.</b> 740×=05               | 9,06 =06                        |
| I • I 0 0 # + 0 I  | 0,0/20*02                  | 1 • ∠  ⊃ ⊨ ♥ () ऽ          | 3,350 <b>n+03</b>      | 0,/02=05                        | •328⊭⊽05                        |

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| DIAMEETER       | VELOCITY                                | RÉ                     | DRAG COEF                            | RELAX TIME                      | .y8 DIST    |
|-----------------|---|------------------------|--------------------------------------|---------------------------------|-------------|
| 1.200=+01       | 7.819. +02                              | 9.36503                | 2,566,+13                            | 7,974,=05                       | 1.0830=05   |
| 1,300,+01       | 9,174,02                                | 1.190.02               | 2.020+03                             | 9,355.05                        | 2.396=05    |
| 1.400 + 01      | 1.064.01                                | 1,486=02               | 1.618.+03                            | 1.085#=04                       | 3,494=05    |
| 1,500+01        | 1.220.00                                | 1.827.02               | 1.317.+03                            | 1.24404                         | 4.0080-05   |
| 1.600*+01       | 1.388.=01                               | 2,216. 02              | 1.086.+03                            | 1.415.004                       | 5, 969 - 85 |
| 1.700++01       | 1.566                                   | 2,65602                | 9.067.+02                            | 1,59704                         | 7.013=05    |
| 1.800++01       | 1.754.01                                | 3.151.02               | 7.649.+02                            | 1.789.=04                       | 9, 574 = 15 |
| 1.900++01       | 1,953,001                               | 3.703.02               | 6,513+02                             | 1,992,=04                       | 1,189=04    |
| 2+000++01       | 2,16201                                 | 4,316.*02              | 5,593 <b>s+02</b>                    | 2.20504                         | 1.461==04   |
| 2.100.+01       | 2,382.001                               | 4,992=02               | 4,841,+02                            | 2,429.04                        | 1.1770=04   |
| 2.200++01       | 2,611,-01                               | 5,733,02               | 4,218,+02                            | 2,663 <u>*</u> •04              | 2.141=04    |
| 2,300.+01       | 2,851m=01                               | 6,544,=02              | 3,700=+02                            | 2,9 <sub>0</sub> 7 <b>.</b> -04 | 2,559==04   |
| 2.400=+01       | 3.101.001                               | 7,427=02               | 3,264,+02                            | 3.162.=04                       | 3.y35≠≈04   |
| 2,500*+01       | 3,360∍≖01                               | 8,38302                | 2,895=+02                            | 3,426,=04                       | 3,975**04   |
| 2,600*+01       | 3,629,01                                | 9,417.02               | 2.581**02                            | 3,7010=04                       | 4.185==04   |
| 2.700*+01       | 3,908,01                                | 1,053,01               | 2.312+02                             | 3,985 <u>m=04</u>               | 4.869.00    |
| 2.800*+01       | 4,196.01                                | 1,173.01               | 2,079=+02                            | 4,279=04                        | 5.033==04   |
| 2.900=+01       | 4,493,01                                | 1,300==01              | 1.878=+02                            | 4,582,=04                       | 6.485##04   |
| <b>3.000∞+0</b> | 4,800.=01                               | 1,437.01               | 1.703=+02                            | 4,895                           | 7,429==04   |
| 3.100=+01       | 5.115.001                               | 1,583=01               | 1.549=+02                            | 5.216=84                        | 8.473=04    |
| 3,200*+01       | 5,439,=01                               | ,/37 <b>∍</b> ≡01      | 1,414=+02                            | 5,74/m=04                       | 9,024=04    |
| 3.300=+01       | 5,772,01                                | 1.901.001              | 1.295.402                            | 5.886p=04                       | 1.088003    |
| 3.400x+01       | 0,110,0701                              | 2,074=01               | 1.190.+02                            | 0,233m=04                       | 1.219=03    |
| S.200≠+01       | 0,40≤,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 2.27/0701              | 1.040*+05                            | 0,209,p*()4                     | 1.3284=03   |
| 3,000±+01       | 0,017,001                               |                        | 1.014=+02                            |                                 | 1.707##03   |
| 3,7()()#+()     | 7, 0, 0, 0, 0, 0, 1                     | 2,055,0401             | 9,370,00                             | 7 7 6 - 04                      | 1.0020003   |
| 3.000114101     |   | 2,000mmUl              | 0,/040401                            |                                 | 1.02/0=03   |
|                 | /,∀32 <u>9</u> 9[]<br>9 301 - 01        | 3,0000,00              |                                      | 0.U720"U4<br>8 486 - 04         | 2+001#=03   |
|                 | 8 7 4 - 01                              | 3 566                  | 7,059,401                            | 8 686                           | 2 100 - 103 |
|                 | 0,14,00                                 | 3 820-801              | 7 + U 2 - M + U 1<br>6 0 1 1 m + D 1 | 9,294                           | 2,3/000000  |
| 4.300#+01       | 9,520m=01                               | 4.n85∍≂ni              | 6.204±+01                            | 9.76804                         | 2./94=13    |
| 4.400+01        | 9.932                                   | 4.361mmni              | 5.832#+11                            | 1.013.003                       | 3.017##03   |
| 4.5nn+11        | 1.035_+00                               | 4.648 <sub>m</sub> +ni | 5,493 <b>s</b> +ni                   | 1.055m=03                       | 3.2510=13   |
| 4.600++01       | 1.077.+00                               | 4.945.01               | 5,183,+01                            | 1.099.=03                       | 3,495=03    |
| 4.700 + 11      | 1.120.+00                               | 5.254. 01              | 4.698.+01                            | 1.142.003                       | 3.15 n= n3  |
| 4,800=+01       | 1,163,+00                               | 5,574,=01              | 4,030,+01                            | 1,186 <sub>10</sub> =03         | 4.1150003   |
| 4.900#+01       | 1,207,+00                               | 5,904.01               | 4,395=+01                            | 1.231 03                        | 4.291=03    |
| >.000±+01       | 1.252.+00                               | 6,246=01               | 4.173=+01                            | ″ ,276 <u></u> ∎•03             | 4.5780=03   |
| 5.100++01       | 1,296 + 00                              | 6,598,01               | 3,968±+01                            | 1,322m=03                       | 4.876=03    |
| 5.•200×+01      | 1.342.+00                               | 6,962=*01              | 3,778,+01                            | .368 <u>.</u> +03               | 5.1850+03   |
| Þ•300≠+01       | 1,387,+00                               | 7,337∞≈0:              | 3.001.0+01                           | 1.415=03                        | 5,-06=-03   |
| 5.400×+01       | 1.433.+00                               | 7,723=01               | 3,438,+01                            | 1.461.03                        | 5.037==03   |
| 5,500x+01       | 1.479.+00                               | 8.121.01               | 3.285=+01                            | 1,5090=03                       | 6.181##03   |
| Þ.600≠+01       | 1.526 .+ 00                             | 8,529#*01              | 3,144=+01                            | 1.556 = 03                      | 6.536**03   |
| 5,700++01       | ,573 <u>∞</u> +00                       | 8,949 <b>s</b> =01     | 3,011=+01                            | 1.604.+03                       | 6.902##03   |



| DIAMETER                               | VELOCITY                | RE                          | DRAG COEF             | RELAX TIME               | ,90 DIST      |
|--|-------------------------|-----------------------------|-----------------------|--------------------------|---------------|
| 5,800=+01                              | 1,621,+00               | 9,381==01                   | 2.888.+01             | 1.653.0-03               | 7.280=03      |
| 5.900=+01                              | 1,668,+00               | 9,823.401                   | 2,772=+01             | 1./01=03                 | 7.070==03     |
| 6.000±+01                              | 1.716 +00               | 1,028,+00                   | 2,663=+01             | ,/50 <u>»</u> #03        | 8.072=03      |
| 6,100=+01                              | 1;765 <b>"</b> +00      | 1.074.+00                   | 2,561,+01             | 1,800=03                 | 8,486==03     |
| 6,200++01                              | 1,813,+00               | 1.155*+00                   | 2.465.+01             | .849 m = 13              | 8.912==03     |
| 6,300=+01                              | 1.862.+00               | 1.171.+00                   | 2.375.+01             | 1,899 <u>p</u> =03       | 9.350==03     |
| 6.400.+01                              | 1.912.+00               | 1 <b>*</b> 551 <b>*</b> +00 | 2,290=+01             | ,949 <b>p=</b> 03        | 9,8010003     |
| 6,500=+01                              | 1,961 +00               | 1,272,+00                   | 2,210 + 01            | 2,000==03                | 1.026=#02     |
| 6,600=+01                              | 2,011 + 0.0             | 1,325 <b>+</b> 00           | 2,134,+01             | 2.051.000                | 1.074##02     |
| 6 <b>.</b> 700≠+01                     | 2,061 + 00              | 1.378.+00                   | 2,061,0+01            | 2.102. 03                | 1.123##02     |
| 6,800±+01                              | 2.112.+00               | 1,433m+00                   | 1,993 <b>x</b> +01    | 2.124.0 - 13             | 1, 1/3##02    |
| 6.900±+01                              | 2.163.+00               | 1.490=+00                   | 1,928,01              | 2,200,=03                | 1.224 # 02    |
| 7.000≖+01                              | 2,212,+00               | 1, <b>24/</b> =+00          | 1.000+01              |                          | 1.2/0=02      |
| 7.100±+01                              | 2,260,+00               | • 0 () 0 <b>•</b> + () ()   |                       | 2,365 -03                | 1.000002      |
| /,200±+01                              | 2,319,+00               | []]+@000+[]]                |                       |                          | 1,3030702     |
| 7.300=+01                              | 2,372,+00               | 1,728,00                    | 1,09/m#01             | 2,473.=03                | 1.499         |
| /.400=+01                              | 2,422+00                |                             |                       | 2.528 13                 | 1. 58 02      |
| /.500±+01                              | 2,4/7,0+00              |                             | 1,549,+01             | 2,583.=03                | 1.018##02     |
| /.000=+01                              | 2,233,+00               |                             | 1,272,20201           | 2,639,03                 | 1.079##02     |
| / / / 00 = + 01                        |                         | 2.058.+00                   | 1.460+01              | 2.695.=13                | 1./42=02      |
|  | 2,040,040               |                             | 1,418, <b>,</b> 401   | 2.753.=03                | 1.006=-02     |
|  |                         | 2,200++00                   | 1 377 + 11            | 2.010.03                 | 1.0710#02     |
| 0,∐00,±+01                             | 2,813,+00               | 2.274.+00                   | 1.338 .+ A            | 2,069,=03                | 1.938 02      |
| ບ•ເຫມະ+ຫຼາ<br>8.200-+01                | 2.871.+00               | 2.350.+00                   | 1.3n1_+01             | 2,928,-03                | 2.005 02      |
| b.300++01                              | 2,930,+00               | 2.427.00                    | 1.264.+01             | 2,988,03                 | 2.075 02      |
| 5.400x+01                              | 2.989 +00               | 2,506.+00                   | 1.229 == 01           | 3,048,=03                | 2.145 02      |
| 5.500x+01                              | 3.049.+00               | 2,586=+00                   | 1.190.+01             | 3,109,0-03               | 2.217=02      |
| 6,600±+01                              | 3.109.+00               | 2,668,+00                   | , 63 <b>±</b> +0      | 3,171m=03                | 2.290-02      |
| 8,700±+01                              | 3,170=+00               | 2,752,+00                   | 1,132,+01             | 3.233=03                 | 2.365==02     |
| 8.800++01                              | 3,231,+00               | 2,838=+00                   | 1.102+01              | 3,295,-03                | 2,440=02      |
| 8.900±+01                              | 3,293,+00               | 2,925,+00                   | 1.073m+01             | 3,358,03                 | 2.5 7 # = 02  |
| 9.000×+01                              | 3,355,+00               | 3.013m+00                   | ,040,0+0              | 3,42                     | 2.596==02     |
| 9.100±+01                              | 3,417,+00               | 3.103.+00                   | 1.019=+01             | 3,484,00                 | 2.075=02      |
| 2.500×+01                              | 3.478.+00               | 3,194,00                    | 9,942×+00             | 3,947,p€[3               | 2.750         |
| 9.300±+01                              | 3,540,+00               | 3,286=+00                   | 9,/04**00             | 3,0¦[]a≂[]3<br>7,670:=u3 | 2.034002      |
| $9.400 \pm 101$                        | 3.601.+00               | 3.378.+00                   | 9.4/9±+00             | 3 733 = 03               | 2+7230702     |
| 9.500±+01                              | 3,661+00                | 00 Tal / P                  | 9,200,+00             | 3 703 - 03               | 394           |
| 7.0U0=+01                              | 3,/20++00               | 5,004=+00                   | 9,070×10<br>8 889-+00 | 3.852.+03                | 3.1820=02     |
| ·/00=+01                               |                         | 5.749.+00                   | 8 722.+00             | 3.909.03                 | 3.2710=02     |
| ·••00±+01                              | 3,030,0700              | J,839,,+00                  | 8 573.+00             | 3.962. = 03              | 3.36   # = n2 |
| 1.000+00                               | 2.935.400               | 3.928=+00                   | 8.442.+00             | 4.013.=03                | 3.453== 02    |
|  |                         | 4.9n7.+00                   | 7.199.+00             | 4.55803                  | 4.444.02      |
|  | ₩₩₩7/₩₩₩₩₩<br>5.035~+00 | 6.03n=+00                   | 6. j89_+nn            | 5.134. n3                | 5. 269 02     |
| 1.500-+02                              | 5.6n6.+nn               | 7,274 <b>,</b> +nn          | 5.40°×+00             | 5,717. 03                | 6.027=02      |
| •••••••••••••••••••••••••••••••••••••• |                         |                             |                       |                          | -             |

| DIAMETER     | AEFQCILA.                     | RE          | DRAG COEF                   | RELAX TIME                | ,98 DIST     |
|--------------|-------------------------------|-------------|-----------------------------|---------------------------|--------------|
| 1.400x+02    | 6,183 <u>+</u> 00             | 8,638,+00   | 4,789±+00                   | 6,305,+03                 | 8,219==02    |
| 1.500±+02    | 6,762,+00                     | 1:012=+01   | 4,2890+00                   | 6,896,=03                 | 9,/44==02    |
| 1.600*+02    | 7.344=+00                     | 1.173.+01   | 3,879,+00                   | 7,489 <b>.</b> =03        | 1.140.01     |
| 1.700×+02    | 7,927,+00                     | 1.345.+01   | 3,537,+00                   | 8,084,=03                 | 1.318##01    |
| 1.800±+02    | 8,511,+00                     | 1,529=+01   | 3,249∍+00                   | 8.679.03                  | 1.209**01    |
| 1,900±+02    | 9,095_+00                     | 1,725.+01   | 3.003.+00                   | 9,275,-03                 | 1./13##01    |
| 2.000++02    | 9,679,+00                     | 1,932,+01   | 2,792=+00                   | 9,870,03                  | 1.929==01    |
| 2,100++02    | 1,020,+01                     | 2,151=+01   | 2,008_+00                   | <b>,</b> 046 <b>,</b> =02 | 2.157.001    |
| 2,200++02    | 1:084=01                      | 2,381,+01   | 2.447 +00                   | 1,106,02                  | 2.398==01    |
| 2.300++02    | 11142#+01                     | 2,622+01    | 2,3 <u>0</u> 5 <b>*</b> +00 | 1,165,=02                 | 2.050.00     |
| 2.400=+02    | 1.200.0+01                    | 2.874 +01   | 2,179=+00                   | 1.224.02                  | 2.9130=01    |
| 2.500++02    | 1+258+01                      | 3,138=+01   | 2.06/=+00                   | 1,282.=02                 | 3.188=01     |
| 2.600++02    | 1,312,+01                     | 3,412=+01   | 1.960 .+00                  | 1.34   02                 | 3,4/4=01     |
| 2.700+02     | 1,372=+01                     | 3,697=+01   | .b70m+00                    | 1,399,02                  | 3.///##01    |
| 2.800+02     | 1,429=+01                     | 3,993,+01   | 1.793##00                   | 1,457p=02                 | 4.078==01    |
| 2,900++02    | +485m+0                       | 4.299.01    | 1./19.0+00                  | 1,215,02                  | 4.397#=01    |
| 3.000=+02    | 1:542:+01                     | 4,015,01    | 1.071#400                   | 1.2/2.02                  | 4,/25==01    |
| 3,100++02    | 1.598.+01                     | 4,942=+01   | 1.280 .+00                  | 1,029,02                  | 5,004##01    |
| 3.200++02    | 1,050,+01                     |             | 1,231=+00                   | 1,000 = 02                |              |
| 3,300,+02    | 1,70%=+01                     |             | ( 470 × 0 0                 | 1.708 - 02                | 2,//]≡•U     |
| 3,400=+02    | [+/0 <sup>4</sup> <b>+</b> ]] | 2,704±+()   | 1,427=400                   |                           | 0,1390001    |
|              | 1,010,0+01                    |             | []]+ <u>a</u> +oc.]         |                           | 6 403meni    |
|              |                               | 7 115.+01   | 1.392.00                    | 1.965.02                  | 7 299        |
|              | 1+72/8701                     | 7 5 2 + 0   | 1.365.+00                   |                           | 7 / . 4      |
| 5 400 +02    |                               | 7.9.7.+01   | 1,232,+00                   | 2 074 = 02                | 8 / 7 mm 0 l |
| 4 000 ± + 02 |                               | 8.332-+01   | 1,202,00                    | 2,129,02                  | 8 539        |
|              |                               | 8.757.+01   | 1.170+00                    | 2.182                     | 8. 969==01   |
| 4.200++02    | 2.193.+01                     | 9.191. + DI | 1.142.+00                   | 2.236 02                  | 9.408.01     |
| 4.300+02     | 2,245,+01                     | 9.633.+01   | 1.110.+00                   | 2.289 02                  | 9.855.001    |
| 4.400.+02    | 2,297,+01                     | 1.009.+02   | 1.091+00                    | 2.342.*02                 | 1.0310+00    |
| 4.500=+02    | 2.348.+11                     | 1.055.+02   | 1.067.+00                   | 2.395 12                  | 1.077=+00    |
| 4,600=+02    | 2.399.+01                     | 1.102.+02   | .0.45 <b>+</b> 00           | 2,447 = 02                | 1.124=+00    |
| 4,700++02    | 2,450,+01                     | 1,149,+02   | 1.023.+00                   | 2,499=02                  | 1.172=+00    |
| 4,600++02    | 2,501,+01                     | 1,198,+02   | 1.003+00                    | 2,550,02                  | 1.221=+00    |
| 4,900++12    | 2,551 +01                     | 1,248.+02   | 9.043=01                    | .2.0.02=0.2               | 1.270=+00    |
| 5.000x+02    | 2.601+01                      | 1,298=+02   | 9.062==01                   | 2,653,02                  | 1.320=+00    |
| 5,100++02    | 2,651,+01                     | 1,349=+02   | 9,489=01                    | 2.703=02                  | 1.371=+00    |
| 5,200++02    | 2.700+01                      | 1.401.+02   | 9.325=01                    | 2,754,02                  | 1,4220+00    |
| 5.300=+12    | 2.749.+01                     | 1.454=+02   | 9,160 <u>,</u> -01          | 2,004=02                  | 1.474.+00    |
| 5,400+12     | 2,798+01                      | 1,508=+02   | 9,018=01                    | 2,853,02                  | 1.527##00    |
| 5.500x+02    | 2,847,+01                     | 1.563=+02   | 8,075,-DI                   | 2,903=02                  | 1.580**00    |
| 5,600x+02    | 2,895=+01                     | 1,618+02    | 8,73 <u>8</u> ,•01          | 2,952=02                  | 1.0340+00    |
| 5.700=+02    | 2,943=+01                     | 1,674=+02   | :8,007 <b>.</b> 01          | 3.001=02                  | 1.089#+00    |
| 5,800=+02    | 2.990+01                      | 1.731=+02   | 8,48101                     | 3,049=02                  | 1./44=+00    |
| 5.900=+02    | 3,038,+01                     | 1,789=+02   | 8,361.0=01                  | 3,098.702                 | 1,000*+00    |

| DIAMETER                     | VELOCITY                           | RË              | DRAG COEF                      | RELAX TIME                     | .98 <b>UIST</b> |
|------------------------------|------------------------------------|-----------------|--------------------------------|--------------------------------|-----------------|
| 6,000±+02                    | 3, <sub>1</sub> 85 <sub>#</sub> +n | <b>.847</b> +82 | 8.245                          | 3,146,-02                      | 1.857.0+00      |
| 6.100=+112                   | 3,131,+01                          | 1,906,+02       | 8.134.01                       | 3.193,=02                      | 1.914=+00       |
| 6,200=+02                    | 3. 178+01                          | 1,966,+02       | 8.027.001                      | 3,241,02                       | 1.472+00        |
| 6.300++02                    | 3,224,+11                          | 2.027.+02       | 7.925 ni                       | 3,288,=02                      | 2.130+00        |
| 6,400++12                    | 3,270,+01                          | 2,089,+02       | 7.826 ni                       | 3,335, = 02                    | 2.1890+00       |
| 6.500++02                    | 3,310,+01                          | 2,151=+02       | 7.7310-01                      | 3.381.+02                      | 2.148+10        |
| 6.600+42                     | 3,361,+01                          | 2,214,+02       | 7.639                          | 3,427 m=02                     | 2.208=+00       |
| 6./00++02                    | 3.406.+01                          | 2,278.+02       | 7,551.0-01                     | 3.473.0=02                     | 2,2690+00       |
| 6,800=+02                    | 3,451_+01                          | 2,342,+02       | 7.465.001                      | 3,519,02                       | 2.330+00        |
| 6.900 + 02                   | 3.496.+01                          | 2,407=+02       | 7.383.=01                      | 3,565,=02                      | 2.3910+00       |
| 7.000=+02                    | 3.540 .+01                         | 2,4730+02       | 7.304=01                       | 3.61002                        | 2.453 + 00      |
| 7.100*+02                    | 3,584_+0                           | 2.540.+02       | 7,227.0-01                     | 3,65502                        | 2.216=+00       |
| 7,200=+02                    | 3,628=+01                          | 2,607,02        | 7.153.01                       | 3.700.=02                      | 2,579=+00       |
| 7.3 <sub>00#+0</sub> 2       | 3,671,0+01                         | 2,675=+02       | 7,081.0701                     | 3,/44,=02                      | 2.043#+00       |
| 7.400*+02                    | 3.715+01                           | 2,743,+02       | 7.011##01                      | 3,788,∎02                      | 2./07*+00       |
| 7,500x+02                    | 3,758 <sub>m</sub> +0              | 2,813=+02       | 6,944 mm D1                    | 3,832,02                       | 2./71#+00       |
| 1.600=+02                    | 3,801,+01                          | 2,883,+02       | 6.879=01                       | 3,876, -02                     | 2.836=+00       |
| / ·/ 00 * + 02               | 3,843 <u>m</u> +01                 | 2,953,+02       | 6.810                          | 3,9190-02                      | 2,902=+00       |
| /, <sup>0</sup> 00#+02       | 3,880,+01                          | 3,022,+02       | 6,/54,=01                      | 3,963.=02                      | 2.968-+00       |
| 1.900±+02                    | 3+920+01                           | 3.09/=+02       | 6,0.92 ± []                    | 4.000.02                       | 3,034=+00       |
| 8.000x+02                    | 3.9/0.+01                          | 3,170=+02       | 6,03/10701                     | 4.04802                        | 3.101=+00       |
| <b>0</b> • 100 <b>#</b> + 02 | 4+011++01                          | 3,243=+02       | 6,2010701                      | 4 • 0 7 1 • • 0 2              | 3.108+00        |
| 0,200,×+02                   | 4,050=+01                          | 3.31/0+02       | 6.72/0"[]                      | 4. 33. * 02                    | 3.236#+00       |
| 0.300=+02                    | 4,094,0+01                         | 3.39 m = 02     | <b>6</b> • 4 / 4 <b>⊭</b> • [] |                                | 3.3040+00       |
| 0,400±+02                    | 4 •   3 2 • + []                   | 3,40/0402       | 0,420.070                      | 4 • <u>2  </u> / <u>p</u> = 02 | 3.3/2#+00       |
| 0,200±+02                    | 4 1 / 0 1 7 1 0 1                  | 3,2420702       | 0,,370 µ.♥[] <br>≮ 405 mm      | 4.20000002                     | 3.44   # + 00   |
|                              | 4 2 5 7 4 4 4                      | 3 696 +00       |                                | 4 34                           | 3,31,0400       |
| 5 F00 + 42                   |                                    | 3 774 + 02      | - 0,277 ≌≂())<br>- 6 - 231,    | 4.382.02                       | 3.50   = = 00   |
| 8.900+402                    | 4.337.+0.                          | 3.852.+02       | 6 187 ment                     | 4.423                          | 3 221 0 + 00    |
| 9.000++02                    | 4.377.+01                          | 3.931.+02       | 6 143 mm                       | 4.463-02                       | 3.792#+00       |
| 9.100++02                    | 4,416,+11                          | 4.011.+02       |                                | 4.503-02                       | 3. 463.0+00     |
| 9.200++62                    | 4,455,+01                          | 4.091.+02       | 6.068m#01                      | 4.54402                        | 3.935#+00       |
| 9.300+02                     | 4.495.+01                          | 4.172.+02       | -6.819×=01                     | 4.583 - 12                     | 4.07**00        |
| 9.400+02                     | 4.533.+01                          | 4.253.+02       | 5,980 <b>¤</b> =01             | 4.62302                        | 4.u79+10        |
| 9.500#+02                    | 4.572.+01                          | 4.335.+02       | 5.942                          | 4.663                          | 4.1520+00       |
| 9.0ns+#2                     | 4.611.+01                          | 4.417.+12       | 5.905×01                       | 4.7n2m=n2                      | 4.25=+00        |
| 9.700++02                    | 4.649.+01                          | 4.500+02        | 5.06801                        | 4,741.0=02                     | 4.2990+00       |
| 9.800#+62                    | 4.687 + 11                         | 4,584,+02       | 5.0336.01                      | 4,780,=02                      | 4.372+10        |
| 9.900x+02                    | 4,725,+01                          | 4,668,+02       | 5,790.001                      | 4,818,02                       | 4,446+00        |
| 1.000+05                     | 4.763.+01                          | 4,753=+02       | 5,764.01                       | 4.857 - 02                     | 4.2210+00       |
| 1.010+43                     | 4.000m+01                          | 4.839.+02       | 5./310-01                      | 4,895,-02                      | 4,396=+00       |
| 1:020=+03                    | 4,838,+01                          | 4,924.+02       | 5,09901                        | 4,933=02                       | 4.0710+00       |
| 1.030=+03                    | 4,075,+01                          | Þ.011∎+02       | 5.667.0-01                     | 4,971=02                       | 4.746=+00       |
| 1.040=+(3                    | 4.9120+01                          | 5.098.+02       | 5.030.0001                     | 5.009-02                       | 4.822=+00       |
| 1.050±+03                    | 4,949 + 01                         | 5,186=+02       | 5,000=01                       | 5,046.02                       | 4.098=+00       |

| DIAMETER           | VELOCITY                 | RE                          | DRAG CUEF               | RELAX TIME                  | .90 DIST                         |
|--------------------|--------------------------|-----------------------------|-------------------------|-----------------------------|----------------------------------|
| 1.000=+00          | 5,981,=04                | 5,969=06                    | 4.021.+06               | 6,099 <b>s=</b> 07          | 1. 169 = 09                      |
| 1.100±+00          | 7,237 <u>,</u> 04        | 7 <b>.</b> 944 <b>.</b> =06 | 3.021=+06               | 7 <b>,</b> 380, <b>-</b> 07 | 1.567=09                         |
| 1.200++00          | 8,612,04                 | +D3 #=05                    | 2.327.+06               | 8,782,*07                   | 2.221==09                        |
| 1.300**00          | 1.011.03                 | 1.311.05                    | 1,030 <b>m+0</b> 6      | 1.031.000                   | 3.⊔62∞≂09                        |
| 1.400*+00          | 1.17203                  | 1.038.=05                   | 1.465.+06               | , 95 <b>∞</b> = <u>0</u> 6  | 4.122.09                         |
| 1.500+00           | 1.346.03                 | 2:014:505                   | ′ <b> , 9 ∞+</b> 06     | 1,372,=06                   | 5.436=09                         |
| 1,600=+00          | 1.531. = 03              | 2,445,-05                   | 9.017.+05               | 1,561,000                   | 7.042==09                        |
| 1.700=+00          | 1,728,=03                | 2,932.*05                   | 8,184,+05               | 1,763,-06                   | 8.98100009                       |
| 1.800=+00          | 1,938,-03                | 3,481=05                    | 6.895»+05               | 1.976 <b>.</b> +06          | 1.130.08                         |
| 1.900=+00          | 2,159,03                 | 4.094.05                    | 5,862,+05               | 2,202,=06                   | 1.403==08                        |
| 2.000*+00          | 2,392,-03                | 4,/75=05                    | 5,020x+05               | 2,440,000                   | 1.724==08                        |
| 2.100=+00          | 2.63/03                  | 5.528.=05                   | 4.342=+05               | 2,690=06                    | 2. <sub>4</sub> 96. <b>*</b> ¶08 |
| 2.200**00          | 2,89503                  | 6,356,05                    | 3,776±+05               | 2.952.06                    | 2.526=08                         |
| $2.300 \pm 00$     | 3.164.03                 | 7,262,=05                   | 3.305++05               | 3,226, • 06                 | 3.019≖∎08                        |
| 2.400++00          | 3,445,-03                | 8,251=05                    | 2.909++05               | 3,513,+06                   | 3.58.                            |
| 2.500=+00          | 3,738,03                 | 9.326. 05                   | 2,573=+05               | 3.012.000                   | 4.218**08                        |
| 2,600*+00          | 4.04303                  | 1.049.04                    | 2.288.+05               | 4,123,00                    | 4,937=08                         |
| 2./00++00          | 4,360,-03                | 1,175,-04                   | 2,043=+05               | 4,446,+16                   | 5./44=08                         |
| 2,800=+00          | 4.689.03                 | 1.310.04                    | 1,832=+05               | 4,/81,=06                   | 6.046##08                        |
| 2.900=+00          | 5,03003                  | 1,456 <sub>x</sub> =04      | 1.649.+05               | 5,129,+06                   | 7.650×+08                        |
| 3.000x+00          | 5.383 03                 | 1.012.04                    | J. 489 . + 05           | 5,489 <sub>0</sub> =06      | 8.165=08                         |
| <b>○</b> •100±+00  | 5,/4/2000                | • / /8 <b>□</b> • 04        | <u>350</u> =+05         | $5,00 _{p} = 00$            | 9.997 08                         |
| 5.200+00           | 0,124,00                 | 1,750 × ()4                 | 1.22/ =+ [] 5           | 0,245,*(0                   | 1.135#+0/                        |
| 3.300r+00          | 0,7 0 <sub>1</sub> =13   | 2.145.04                    | 1,117,05                | 0,042p*00                   | 1,2850+0/                        |
| 3,400x+00          | 0,9 0,0000               | 2,340, 94                   | 1,020±05                | ./•0♡0⊭•00<br>              | 1.448.0/                         |
|                    | 7,320,5*83               | 2,209,04                    | · 9,3/9=+[]4            | · / • • /   • • [0          | 1.027#=0/                        |
|                    |                          | 2.707.04                    |                         | /, / (4, + )0               | 1.821**0/                        |
|                    |                          | 3 075 -04                   | 7,707=+04               | 0,049 <u>6</u> 900          | 2.03000/                         |
| <b>↓</b> ↓0000±↓00 |                          | 3 540 004                   | 7,020 + []4             |                             | 2.2020-07                        |
| <b>3,700,≠00</b>   | 9 <u>9</u> 9 9 9 9 9 0 3 | 3 82004                     | 0,//7m+()4<br>6 083.4m4 | 9758 - 06                   | 2.2/00007                        |
| 4.100-+00          |                          | 4 114 - 04                  | 6,200B+84               |                             | 2.119001                         |
| 4.200-+00          |                          | 4.4224                      | 5 428 404               | 1.076                       | 5. joo                           |
| 4.300.+00          | 1.106                    | 4.745.04                    | 5.050.+04               |                             | 3. / 14 0 07                     |
| 4.400-+00          | 1.50.02                  | 5.084.04                    | 4 721 + 14              |                             | 473                              |
| 4.500+00           | 1.211.002                | 5,439 mm 14                 | 4.4.13.+04              | 1.235                       | 4.457                            |
| 4.600-00           | 1.262.02                 | 5.809.04                    | 4.132.+04               | 1.290.00                    | 4.868                            |
| 4.700**00          | 1.321.02                 | 6.196. <b>.</b>             | 3.874 + 14              | 1.34705                     | 5.306#*07                        |
| 4.800.+00          | 378 - n2                 | 6.6.0                       | 3.636s+n4               | 1.405 05                    | 5. /74                           |
| 4.900+00           | 430                      | 7,022.04                    | 3.418.+14               | 1.464.= 05                  | 6.272007                         |
| 2+000*+IIN         | 1,495, 02                | 7.460.04                    | 3.217.0+n4              | 1.525                       | 6.8010-07                        |
| 2.100=+00          | 1.55502                  | 7.91704                     | 3.032.+n4               | 1,586 5                     | 7.363== 17                       |
| 2.200++un          | 1.617                    | 8,392==14                   | 2.060.+04               | 1,649=05                    | 7.960.07                         |
| >.300++00          | 1.68002                  | 8,885.04                    | 2,701++04               | 1.7130-05                   | 8.592**17                        |
| 5.400=*00          | 1.744.02                 | 9,398.=04                   | 2.554.+04               | 1,778=05                    | 9.26                             |
| 5,500++00          | 1.809-02                 | 9,929,04                    | 2.417=+04               | 1.845 05                    | 9.468007                         |

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| DIAMETER                 | VELOCITY    | RE          | DRAG COEF                   | RELAX TIME                            | ,98 DIST       |
|--------------------------|-------------|-------------|-----------------------------|---------------------------------------|----------------|
| 5.600++00                | 1,875,02    | 1,048,03    | 2.290 .+04                  | 1,912=05                              | 1.071.∞-06     |
| P+/00++00                | 1,943       | 1,102,0*03  | 2,172=+04                   |                                       | 1.120**00      |
|                          | 2082 -02    | 1,104       | 2.001.04                    | 2,02,02                               | 1.2039#00      |
|                          | 2.002.002   | i 280.∞03   | 862.404                     | 2 1 2 5 6 5                           | 1.32 ## 00     |
| 6.100#*00                | 2,225       | 1.355       | 772 + 44                    | 2,269,=05                             | 1.413##00      |
| 0 + 1 U U = + 0 U        | 2 209       | 1.422       | 688.484                     | 2,20,344                              | 1,510=000      |
| 6.300=+00                | 2.373       | 1.492.=00.  | 1,000 ge (14                | 2.420.00                              | 1.0120=00      |
| 6.4nn+4n                 | 2.449 == 02 | 1.564.*13   | 1.535 +n4                   | 2.498                                 | 1.8310006      |
| 6.5nn±+nn                | 2.526       | 1.639.=03   | 1.465 <b>*</b> n4           | 2.576                                 | 1.948##06      |
| 6,600#+00                | 2,605,02    | 1.716==03   | 399.+04                     | 2,656, 05                             | 2.0710006      |
| 6,700++00                | 2,684 02    | 1,795.=03   | 1,338.+04                   | 2,737 = 05                            | 2.200#=06      |
| 6,800±+00                | 2,765,02    | I,876∍≖03   | ÷ j,279∞+04                 | 2,819,=05                             | 2, 334 + 06    |
| 6,900#+00                | 2,847.02    | 1,960##03   | 1,225,+04                   | 2,903,05                              | 2.475==06      |
| 7.000=+00                | 2,93002     | 2:047:03    | 1,173,+04                   | 2,988.05                              | 2.622##06      |
| 7.100=+00                | 3.014.=02   | 2,136,703   | 1.124.+04                   | $3,074_{\mu}=05$                      | 2.176#=06      |
| 7.200*+00                | 3.099.02    | 2,227.03    | 1.078 + 04                  | 3, 161 = 05                           | 2,936==06      |
| /,300x+00                | 3,180,02    | 2,321==03   | 1.034.+04                   | 3,249,=05                             | 3.1030706      |
| /+400++00                | 3,274,02    | 2,418,03    | 9,727.0*03                  | . 3,339 <sub>0</sub> ≠0⊅<br>7,400 - 5 | 3.2//==00      |
| 7.500x+00                | 3,303,002   | 2,21/1000   | 9,230,+03                   | 7 501 - 55                            | 3.4780 = 00    |
|                          | 3,450,02    | 2,0 9       | 9,100,0+03                  |                                       | 3.04/##00      |
| 7 +7 UU#4UU<br>7 800-+00 | 3,547,02    | 2 831       | - 0,017#*()3<br>- 8:480.+0% | 3,9,2,2,0,00                          | 3.043.0410     |
| 7.900                    | 3.731       | 2,942       | 8:162+n3                    | 3.805                                 | 4.260000       |
| 8.000                    | 3.82602     | 3.055.=03   | 7 560.+03                   | 3:9h2n5                               | 4.480.000      |
| 8.100±+00                | 31922       | 3.17103     | 7.573.+13                   | 4.000 <u>±</u> =05                    | 4./ 19         |
| 8,200x+00                | 4.020.02    | 3.290.=03   | 7.299.+13                   | 4,099,+05                             | 4.947.0006     |
| 8.300++00                | 4.118.02    | 3,411.=03   | 7.039:+03                   | 4.200.=05                             | 5.1930-16      |
| 8.400x+00                | 4,218,02    | 3,5361=03   | 6,790=+03                   | 4,301.05                              | 5.449## 06     |
| 8,500±+00                | 4,319.02    | 3,664==03   | 6,554=+03                   | 4;4 <sub>0</sub> 4 <sub>m</sub> =05   | 5./13##06      |
| 8.600.+00                | 4.421.0=02  | 3,795,=03   | 6,328,+03                   | 4,508,-05                             | 5.988=06       |
| 8.700×+00                | 4.524.02    | 3,928=03    | 6,113=+03                   | 4,614, = 05                           | 6.272**06      |
| 8.800x+00                | 4,62902     | 4,065=03    | 5,90/0+03                   | 4,72005                               | 6.266##06      |
| 8.900 <b>=</b> +00       | 4,732,02    | 4.205.=03   | 5,710+03                    | 4,828, = 05                           | 6.571=06       |
| 9+000#+00                | 4,8420=02   | 4,349,#03   | 5,5220+03                   | 4,73/0=05                             | /.186=06       |
| Y.100x+00                | 4,950,02    | 4,495,000   | 5.342=+03                   | <u>、</u> り・047ゅ=05                    | 7.511.0000     |
| 7,∠00±+00                |             | 4,045 = 03  | 5,17Up+03                   |                                       | · /;048##06    |
| 9 400 ± 400              | 5 981 - 02  | 4 954 873   |                             | 5-385 -05                             | 0,190**00      |
| 7.500×+00                | 5 394 - 02  | 5.114-=03   | 4,040 ± 03                  | 55500 +05                             |                |
| 9.6nn + nn               | 5.5 n8 n2   | 5.277.sn3   | 4,551L+n3                   | 5.617.+05                             | 9. <u>1</u> 00 |
| 9.7nn±+nn                | 5.6234012   | 5.444==03   | 4.412+13                    | .5.734_=n5                            | 9./in/4 = 06   |
| Υ.δηη <b>±</b> +εε       | 5.748.402   | 5.614.=03   | 4.279.+13                   | 5,853 • n5                            | 1.1.1.1.0.05   |
| 9,900±+00                | 5,85712     | 5,787.03    | 4,150 <b>.</b> +n3          | 5,973 - 15                            | 1.a53.e.15     |
| 1.000#+01                | 5,976 - 02  | 5,964. 03   | 4.027 .+ 13                 | 6.09405                               | 1, 196#• N5    |
| 1.100=+01                | 7,229.02    | 7°,936 - 03 | 3.027.+03                   | 7.372=05                              | 1.007 - 05     |



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| DIAMETER   | VEFACILA                | RE                      | DRAG COEF               | RELAX TIME                          | ,90 DIST              |
|------------|-------------------------|-------------------------|-------------------------|-------------------------------------|-----------------------|
| 1.200x+01  | 8.60002                 | 1.03n.=02               | 2.333 <b>.</b> +n3      | 8.770                               | 2,278=05              |
| 1.300 + 01 | 1.009.01                | 1.309.02                | 1.837.+03               | 1.029=04                            | 3.141=05              |
| 1.400.+01  | 1.17001                 | 1.634.=02               | 1.472.+03               | 1,193,04                            | 4.228==05             |
| 1.500=+01  | 1.34201                 | 2.019.02                | 1,198,+13               | 1.369 04                            | 5.576=05              |
| 1,600+01   | 1.5201                  | 2,437.02                | 9.681.+02               | 1,556=04                            | 7.223##05             |
| 1.700#+01  | 1.722.01                | 2.921.02                | 8.249.+02               | 1.756.04                            | 9.212== 15            |
| 1.800x+01  | 1.929                   | 3.465.02                | 6.959 <b>.</b> +D2      | 1.967 - n4                          | 1.159=14              |
| 1.900=+11  | 2.147.01                | 4,072=02                | 5.927 + 02              | 2.190.04                            | 1.439=04              |
| 2.000++01  | 2.37701                 | 4,745.02                | 5.091++02               | 2,424,=04                           | 1./68==04             |
| 2.100++01  | 2.6 801                 | 5,487.02                | 4,400,+02               | 2,670,=04                           | 2.150=04              |
| 2,200=+01  | 2,870=01                | 6,302=02                | 3,841,402               | 2,927,*04                           | 2. 39   #= 04         |
| 2.300 +01  | 3,133,01                | 7,192=*02               | 3.369#*02               | 3,195.+04                           | 3. <sub>0</sub> 97ו04 |
| 2.400=+01  | 3,407,01                | 8,161,02                | 2,973 <b>*</b> 02       | 3,475=04                            | 3.673=04              |
| 2,500=+01  | 3,6920=01               | 9.2110-02               | 2,638∍+02               | 3,765 <u>,</u> =04                  | 4.327**04             |
| 2,600=+01  | 3,98701                 | 1,035.01                | 2,352##02               | 4,066,=04                           | 5.0640=04             |
| 2,700=+01  | 4,293=01                | 1.157.01                | 2,107++02               | 4,378,-04                           | 5,0910-04             |
| 2,800x+01  | 4,608,01                | ,288±=0                 | 1,896,+02               | 4./00.=04                           | 6.816=04              |
| 2•900≖+0I  | 4,934,001               | 1,428,01                | 1./13=+02               | 2.032.09                            | 7.847.04              |
| S.000±+01  | 5.270.00                | 1,578=01                | 1.554.+02               | 5,374,04                            | 8,989=*04             |
| 3,100++01  | 5+6 2==0                | 1./3/.*01               | 1,414,02                | 5,/20,=04                           | 1.025==03             |
| 3.200x+01  | 5,967,01                | 1,706,01                | 1.292.02                | 0,08/p=04                           | 1.103#=03             |
| 3.300x+01  | 6,333,01                | ∠,000m*0 <br>2.075 = 01 | 1,180,02                |                                     | 1.308=03              |
|            | 0,/(0s=())              |                         |                         | 7 207 - 04                          | 1.402**03             |
| 3 600 101  | 7,077,01                | 2 586 -01               |                         | 7 608 -04                           | 1.023##[]3            |
| 3 700 ±01  | /•º//⊯≣[] <br>7 875 -01 | 2 908 -01               | 9,202±♥() <br>9 381.+41 |                                     | 1,720,000             |
|            |                         |                         | 7 971                   |                                     | 2 75 - 03             |
| 3.900±+01  | 8.694                   | 3.384                   | 7 42 4                  | 8.866                               | 2. 179×10             |
| 4.000.00   | 9,115,01                | 3.639.=01               | 6 924 + ni              | 9,295 = 04                          | 2.595==03             |
| 4.100+01   | 9,543                   | 3.905.00                | 6.475.+11               | 9.73104                             | 2.822=*03             |
| 4.200+01   | 9.978                   | 4,182,701               | 6.068 <b></b>           | 1.017.003                           | 3                     |
| 4.300+01   | 1.042.+00               | 4.471.01                | 5.697.+11               | 1.062 - 03                          | 3.310**03             |
| 4,400++01  | 1.187.+00               | 4,772.01                | 5.359 .+ 01             | 1,108.03                            | 3.571=03              |
| 4.500x+01  | 1.132.+00               | 5.084.=01               | 5,0510+01               | 1,154,=03                           | 3.045=03              |
| 4.600=+01  | 1,178 ± 00              | 5,408,-01               | 4,768.+01               | 1,2010-03                           | 4.130=03              |
| 4,700,+01  | 1,224=+00               | 5,743-01                | 4,209=+01               | 1,249 = 03                          | 4.428==03             |
| 4.800*+01  | 1.271=+00               | 6,090,01                | 4,2710+01               | 1,296,03                            | 4./38==03             |
| 4.900=+01  | 1.319+00                | 6,450=01                | 4.052=+01               | 1,345 - 03                          | 5,0600,03             |
| 2.000=+01  | 1.367.+00               | 6,820,01                | 3,049=+01               | 1,39403                             | 5,3950003             |
| 2.100×+01  | (1+412m+00              | 7,203,01                | 3,662=+01               | 1,443 = 03                          | 5.143=03              |
| 2.200**01  | 1.464.+00               | 1,298,=01               | 3,4890+01               | 1,493,03                            | 6,104=03              |
| 2.300=+11  | 1.515m+00               | 0.005.00                | 3,520 =+01              | 1,243,03                            | 6.4/7.03              |
| 7.400×+01  | 1,200=+00               | 0,425=01                | 5+1/7=+01               | 1, 740 = 03                         | 0,004##03             |
| 2,200±+01  | 1.010+00                |                         | 3,040,000               | 1,045p=03                           | 1.204                 |
|            | 1,000=+00               | ¥+€9/≠=[]]              | 2,Y 1∞+0                | ,090g♥[]3<br>  748 - 5 <sup>2</sup> | /.6//#=[3             |
| 2+/00x+01  | 1 * / 1 * * * 00        | ♥,/フ∠»"()               | 2./70#*01               | 1 * / 40 × 00                       | 0.104##05             |

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| DIAMETER                                    | VELOCITY                                 | RĘ                      | DRAG ÇØEF                | RELAX TIME                       | .98 UIST       |
|---|--|-------------------------|--------------------------|----------------------------------|----------------|
| 5.800x+01                                   | 1.765 <b>.+</b> 00                       | 1.022.+00               | 2.677.+fil               | 1.8nn.=03                        | 8.5440013      |
| 5,900++01                                   | 1,817,+00                                | 1.070.+00               | 2.571.i+ni               | 1.853.003                        | 8,998==03      |
| 6.000=+01                                   | 1,869,+00                                | 1.119.+00               | 2.471 .+01               | 1,906,=03                        | 9.465 13       |
| 6.100#+01                                   | 1.921.+00                                | 1,169,+00               | 2.378.+11                | 1,959,=03                        | 9.946==n3      |
| 6.200+01                                    | 1,973,+00                                | 1,221,+00               | 2.290.+01                | 2,012,03                         | 1.144==02      |
| 6.3nnx+n1                                   | 2. 126. • 11                             | 1.274.+00               | 2.207.+01                | 2.06603                          | 1. 195 == 12   |
| 6,400x+01                                   | 2.079.+00                                | 1.328.+00               | 2.129.+11                | 2.121                            | 1.147.002      |
| 6,500*+01                                   | 2.133.+00                                | 1.384.+00               | 2.055.+01                | 2.175.=03                        | 1.2010002      |
| 0.000.+01                                   | 2.187.+00                                | 1.441.+00               | i.984.+ni                | 2,230,03                         | 1.256**02      |
| 6,700x+01                                   | 2.242.+00                                | 1,499,00                | 1.9[8 <b>.</b> +1]       | 2,286,=03                        | 1.3130-12      |
| 6.800#+01                                   | 2,297,+00                                | 1,559,+00               | 1.854 <b>#</b> #01       | 2,342,=03                        | 1.3710012      |
| 0,900,+01                                   | 2,352,+00                                | 1,620,+00               | 1.794.+01                | 2,398.03                         | 1.43           |
| 7.000++01                                   | 2,408,+00                                | 1,682,+00               | 1.737.+01                | 2,455,03                         | 1.491=02       |
| 7.100++01                                   | 2,464,+00                                | 1.746.+00               | 1.682 <b>.</b> +01       | 2,513,003                        | 1.553##02      |
| 7.200*+01                                   | 2,521+00                                 | 1,812.+00               | 629 +01                  | 2,57                             | 1.017==02      |
| 7.300++01                                   | 2,579,+00                                | 1.879.+00               | 1,579 <b>+</b> 11        | 2,62903                          | 1.082==02      |
| 7.400++01                                   | 2,637,+00                                | 1,947,+00               | 1,531+01                 | 2,689,=03                        | 1.749=02       |
| 7.500x+01                                   | 2,695=+00                                | 2.017.+00               | ,485 <u>m</u> +0         | 2,749_03                         | 1.017=02       |
| 7,600.**01                                  | 2,755,+00                                | 2,089,+00               | <b> ,440,</b> ,★01       | 2,80903                          | 1.886=02       |
| 7.700×+01                                   | 2.8150+00                                | 2,163,+00               | 1,398,+01                | 2,870,003                        | 1.957##02      |
| 7.800*+61                                   | 2,875,+00                                | 2,238,+00               | 1.357 ×01                | 2.932#*03                        | 2.030**02      |
| 7.900×+01                                   | 2,937,+00                                | 2,316,+00               | 1.517=+01                | _2,995 <b>∞</b> *03 ′            | 2.104==02      |
| 8,000≖+01                                   | 2,999×+00                                | 2,394,+00               | 1.279.+01                | 3,058 <sub>0</sub> =03           | 2.179**02      |
| 8•100*+01                                   | 3,062,+00                                | 2,475+00                | 1,243=+01                | 3,122,=03                        | 2.256=02       |
| 8+200++01                                   | 3,125=+00                                | 2,558.+00               | 1.207.+01                | 3,187,-03                        | 2.335==02      |
| 8.300**01                                   | 3,189,+00                                | 2,642=+00               | 1,174,+01                | 3,252,03                         | 2.414=02       |
| 8,400,+01                                   | 3,254,+00                                | 2,/28,+00               | <b> , 4 ∞+</b> 0         | 3, <u>518</u> , •03              | 2.496**02      |
| Ø,500±+01                                   | 3,319=+00                                | 2,816=+00               | 1.110=+01                | 3,38503                          | 2.379=02       |
| 8,000 <b>#</b> +U1                          | 3,382,+00                                | 2+202*+00               | 1.080++01                | 3,452==03                        | 2,063=02       |
| Ø+/00#+0                                    | 3,451=+00                                | 2,996=+00               | 1.051#+01                | 3,219=03                         | 2./49==02      |
| 0,0 <b>0</b> +00                            | 3.51/0+00                                | 3,088 <b>"</b> *00      | 1,023#*01                | 3,286,-03                        | 2.037=02       |
| 0,900=+01                                   | 3,583p+00                                | 3,182=+00               | 9,973,400                | 3,053p+03                        | 2.925##02      |
| ¥+000±+01                                   | 3.040.+00                                | 3,27/#+00               | 9,/20.+00                | 3,720,=03                        | 5.016=02       |
| 9 • 100 ± + 0.1                             | 3,/[3,+00                                | 3,372=+00               | 9,493=+00                | 3 + / 8 / <b>∌ ™ () 3</b>        | 3.108==02      |
| 7 • 200 ± +01                               | 3:///m+00                                | 3,408,700               | 9.274.+00                | 3,052=*03                        | 3.201=02       |
| 9 • 3 [ [ # + [] ]                          | 3+04Un+00                                | 3,264,400               | 9.0/0=+00                | 3,7(0==03                        | 3.296=02       |
| 7 • 4 0 0 <b>x</b> + 0 1                    | 3+901±+00                                | <b>3,000,0</b> *00      | 8,0738+00                | 3,7/8, 03                        | 3.393##02      |
| 7+200±+01                                   | 3,90Um+00                                |                         | 8./14=00                 | 4.0000=00                        | 3.49   # 7 0.2 |
| 7 • 0    {  # + ()  <br>G - 7 = 0 - 1 - 0 + | 4 0 0 0 0                                |                         |                          | 4 J J 7 D # 7 ] 5                | 3.370=02       |
| 7+/00×+01                                   | 4.007.0+00                               |                         | 0,42/##00                | 4 147 m 133                      | 3.07  == 02    |
|   | H +   [] Y ≥ + 0 []<br>4 - 1 6 5 - + n n | ▼•UI2#TUU<br>4 II5 ±00  | 0,00 <b>∠≥</b> ♥[]]      |                                  | 3.1740002      |
| * + 7 UU# * UI                              | *•102#₹UU                                |                         | 0,21UMT[]]<br>0,21UMT[]] | 7+6+107 [3                       | 3.070#*02      |
|   | 4+227#*00                                | ▼+< ▽⊭▼()()<br>5,202+n. | 0,0°∠≈*00<br>4 309 4 30  | <b>∀</b> ,08/±●03<br>4 9/16 = 6% | 4.005=02       |
| 1 100=102                                   | ¬+♀∠₩⇒▼₩0<br>5.425.+00                   | 6.497.+00               |                          | 5 577 m 7                        | 0.1400002      |
| I + ∠ U U # ▼ U ∠                           |  |                         |                          | ノ+ノ339×133                       |                |
| I ♦ ♀ U Û ★ ♥ Û ⊄                           | 0.00000000                               | · • ~ 3 < # * UU        | <b>⊃•</b> ⊧⊙≀⊭≖00        | 0.100m=00                        | 1.2100000      |

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| DIAMETER   | VELOCITY               | RE                 | DRAG COEF                            | RELAX TIME                   | ,98 DIST               |
|--|------------------------|--------------------|--------------------------------------|------------------------------|------------------------|
| 1.400=+02  | 6,652,+00              | 9,294,+00          | 4,5500+00                            | 6,784 <b>,=</b> 03           | 9.473==02              |
| 1.500=+02  | 7,271=+00              | 1,088,+01          | 4.081=+00                            | 7,415,=03                    | 1.122##01              |
| 1,600++02  | 7,892,+00              | 1.260.+01          | 3,695,+00                            | 8,048,+03                    | 1.311##01              |
| 1.700=+02  | 8,514,+00              | 1,444,+01          | 3.373.+00                            | 8,682,=03                    | 1.214=01               |
| 1,800=+02  | 9,136,+00              | 1,641,0+01         | 3.102+00                             | 9,317,=03                    | 1./32=01               |
| 1,900=+02  | 9,758,+00              | 1,850,+01          | 2.870.+00                            | 9,951,003                    | 1.965#=01              |
| 2.000++02  | 1.038,+01              | 2,072,+01          | 2.670.+00                            | 1.058.02                     | 2.211=01               |
| 2.100++02  | 1.100=+01              | 2,305+01           | 2,496.+00                            | 1,122,-02                    | 2.470=01               |
| 2,200++02  | 1,162,+01              | 2,551++01          | 2.344.+00                            | 1,185,02                     | 2./44==01              |
| 2,300++12  | 1,223,+01              | 2,808.+01          | 2.210++00                            | 1,248,02                     | 3.130=01               |
| 2.400 + 02   | 1,285,+01              | 3.077=+01          | 2,091++00                            | 1,310,02                     | 3.329##01              |
| 2.500 + 12   | 1,346 <b>.+0</b> 1     | 3,358,*01          | 1,985,+00                            | <b>,</b> 373 <b>,</b> ≖02    | 3.641=01               |
| 2,600++02  | 1,407,+01              | 3,650,+01          | .890 <b>.</b> +00                    | 1,435,=02                    | 3.965=#01              |
| 2.700++02  | 1,467,+01              | 3,954,+01          | 1,804=+00                            | 1,496,=02                    | 4.302 -01              |
| 2,800*+02  | 1,528,+01              | 4,269.+01          | 1,726=+00                            | 1,558,02                     | 4.65 ##01              |
| 2,900=+02  | ,588 <u>s</u> +0       | 4,595.+01          | 1,655 <b>s</b> +00                   | 1,619,02                     | 5.011##01              |
| 3,000++02  | 1,647 <b>,</b> +01     | 4,932=+01          | 1,590#+00                            | 1,680p=02                    | 5.383**01              |
| 3.100+112  | 1,707,+01              | 5,280.+01          | 1,531=+00                            | 1,740,02                     | 5,166##01              |
| $3.200 \pm + 02$   | ,766 <b></b> ,+0       | 5,639 <b>.</b> *01 | ,476 <b>⊭</b> +00                    | ,800 <b>#</b> =02            | 6.16 **0               |
| 3,300*+02  | 1,824,+01              | 6,008 <b>.+</b> 01 | j,426∍+00                            | 1 <b>,</b> 860, <b>,</b> =02 | 6,566##0               |
| 3,400x+02  | ,883 <b>,+</b> 0       | 6,388 <b>*</b> *01 | ,380∞+00                             | 1,920,=02                    | 6,982==0               |
| 3,500*+02  | 1,941,+01              | 6,778,+01          | 1,337,+00                            | 1,979,#02                    | 7,408##0               |
| 3,600x+02  | 1,998,+01              | 7.179.+01          | ,297 <b>±</b> +00                    | 2,038 <sub>2</sub> =02       | 7.845=-01              |
| 3.700++02  | 2,055,+01              | 7,590×+01          | 1,260,+00                            | 2,096,02                     | 8.291==01              |
| 3.800*+12  | 2:112:+01              | 8+011=+01          | ,225 <b>∞+</b> 00                    | 2,154 = 02                   | 8./48#*0               |
| 3,900x+02  | 2.169.+01              | 8,441,+01          | 1,192,+00                            | 2,212,02                     | 9.215##01              |
| 4.000*+02  | 2.225 = 01             | 8,882=+01          | 1.162.+00                            | 2,269,=02                    | 9.090**01              |
| 4.100=+02  | 2,281=+01              | 9,333,+01          | 1.134=+00                            | 2,326.02                     | 1.018+00               |
| 4.200 + 02   | 2.330 + 01             | 9,193,+01          | 1.10/#*00                            | 2,383,02                     | 1.067#+00              |
| 4.500=+02  | 2.391=+01              | 1.026=+02          | 1,081=+00                            | 2,439,*02                    | 1.17#+00               |
| 4.400++02  | 2.440.+01              | 1.074.+02          | 1,05/#+00                            | 2,495,02                     | 1.169#+00              |
|  | 2,201=+01              | 1 1 23 2 12        |                                      | 2,200,000                    | 1.221#+00              |
| 4.000#+02  |                        |                    |                                      |                              | 1.2/4=+00              |
| $\frac{\pi}{4} \frac{1}{8} \frac{1}{2} \frac{1}$ |                        | 1+624#706          | 0 740 -0                             |                              | 1.32/#*00              |
|  | 2,002,0701             |                    | 9 1 7 C 0 7 []                       | 2 7 60 - 02                  | 1.302-400              |
| *• <b>&gt;</b> UU <b>#</b> *U <b>2</b>   |                        |                    | 9,2000-01                            | 2 807 - 02                   | 1.43/#*[][             |
|  |                        | 1 435 +02          | 9.00/#*[]<br>0.202 =01               |                              | 1.474#400              |
|  |                        | 1,40,402           | 9,222 - 01                           |                              |                        |
| + 6UU# + 06  | 2+0/6x7UI<br>2 424 ±ni | 1.547.+02          | 9,0070701<br>9,015                   | 2,980 - 12                   |                        |
|  | 2 975 + PI             | 11004-+02          | 9 772 - n -                          | 3.034.002                    | 1.00/#*00              |
| ★★▼UU#▼UA<br>5 500×402   | 3 027 - 01             | 1.661.000          | 0 # / / 4 # 7 U  <br>8 6 % 6 . = A ( | 3.086 -02                    | 1. 186                 |
|  |                        | 1.700-+00          |                                      | 3,138,=02                    | 1.700 PTU              |
|  | UT&//U+U               | 1172UPTUC          | 0,-U-#70 <br>9 379                   | 3.100 = 02                   | 1.04/24()              |
| 5 800-+02  | 3 178.401              | 1.840.+02          | 0,07787U <br>8 259.eei               | 3.241                        | 1+7U0PTUU<br>1 470m400 |
| 5.900-402  | U+1/20701<br>3 228     | 1.901-+02          | 9 144                                | 3,292                        | 2 .334400              |
| ~ * < 0 0 * * 0 4  | ~+~~~»~!!              | + # # U I # " U 4  |                                      | ~ = ~ < b ~ U 4              | 2.00000                |

| DIAMETER               | VELOCITY                         | RE               | DRAG COEF               | RELAX TIME                              | ,98 DIST           |
|------------------------|----------------------------------|------------------|-------------------------|---|--------------------|
| 9+000++02              | 3,277,+01                        | 1,963,+02        | 8,034==01               | 3,342=02                                | 2.096#+00          |
| 6,100x+02              | 3,327,+01                        | 2,025,+02        | 7,928.01                | 3,392,=02                               | 2.101##00          |
| 6,200*+02              | 3,376∍≠01                        | 2,089,+02        | 7,826# <b>#</b> 0       | 3,442.02                                | 2.225 * 00         |
| 6,300++02              | 3,424,+01                        | 2,153,+02        | 7,728,01                | 3,492.02                                | 2.291++00          |
| $4,400 \pm + 02$       | $3,473_{\mu}+01$                 | 2,218+02         | 7,633,001               | 3,54   = 02                             | 2,357#+00          |
| 6,500x+02              | 3,521,+01                        | 2,284,+02        | 7,542=01                | 3,59 <sub>0,0</sub> =02                 | 2.423+00           |
| 6,600*+02              | 3,568,+01                        | 2,350#+02        | 7,455==0                | 3,639,02                                | 2,490**00          |
| 6,700x+02              | 3,616.+01                        | 2,418:+02        | 7,370±=01               | 3,687,02                                | 2, , , 58, +00     |
| 6,600#+02              | 3,663,+01                        | 2,486+02         | 7,289 <u>#</u> =0       | 3,736 = 02                              | 2.627#*00          |
| 6,900++02              | 3,710=+01                        | 2,555.+02        | 7.210=01                | 3,/83,*02                               | 2,096+00           |
| 7+000=+02              | 3,75/=+01                        | 2.024.+02        | 7,134#=01               | 3,03[p=02                               | 2./65#+00          |
| 7.100++02              | 3,803=+01                        | 2,095,+02        | 7,040#*01               | 3,878 <sub>2</sub> =02                  | 2.835=+00          |
| 7.200++02              | 3,849,+01                        | 2,766,+02        | 6,989=01                | 3,925,02                                | 2,906**00          |
| 1.300±+02              | 3,892=+01                        | 2,038=02         | 0,921#=01               | 3,7/20=02                               | 2,9//#*00          |
| 7.400x+02              | 3.941.+01                        | 2,910=+02        | 6,854 <u>m</u> =0       | 4,018,02                                | 3.049**00          |
| 1.200*+02              | 3,900,+01                        | 2,703,0702       | 0,790,00                | 4,000,002                               | 3.121.00           |
| 7.7.5.1.2              | 4.031#*01                        | 3 170 +00        | 0,/2/#=0                | 7 • • • • • • • • • • • • • • • • • • • | 3.1948=00          |
| 7 800 102              |                                  | 3 207 +02        | 6,007##[]<br>6 608 - 51 | 4 2 0 0 0 0 0 2                         | 3.20/2000          |
| 7 900 ±02              | 1 1 2 U M T U 1<br>4 1 6 5 + n 1 | 3 283 + 12       | 6.000m001               | 4,247,=02                               | 3 415-400          |
|                        |                                  | 3 340/402        | 6 496                   | 4 202 = 02                              | 3 489=+00          |
| 0+UUUx+U2<br>8 L00++02 | 4 252                            | 3.438.+02        | 6 442                   | 4.336.02                                | 3 365-40           |
| 8.200++02              | 4.296.+01                        | 3.516-+02        | 6 390 -= 01             | 4.381                                   | 3.040000           |
| 5.3nn+n2               | 4.339.+01                        | 3.594.+02        | 6.340                   | 4,425,*02                               | 3.//6#+00          |
| 8.400±+02              | 4.382.+01                        | 3.674.+02        | 6.291                   | 4.469                                   | 3.793.400          |
| 8.500+02               | 4.425.+01                        | 3.754_+n2        | 6.243                   | 4.513.=02                               | 3.07.0**00         |
| 8.600+02               | 4.468.+01                        | 3.835.+02        | 6.197.ni                | 4.556 - 12                              | 3.947 <b>∍</b> +nn |
| 8.7nn+++2              | 4.510.+01                        | 3.916.+02        | 6.151.mmni              | 4,599, 12                               | 4.025**00          |
| 8.8nn+12               | 4.552.+01                        | 3,998=+02        | 6.1n8##nj               | 4,642,=02                               | 4.104#*00          |
| 8,900++02              | 4.594.+11                        | 4,081=+02        | 6.065 <u>m</u> =ni      | 4,685                                   | 4.182**00          |
| 9,000*+02              | 4.636.+01                        | 4,164=+02        | 6.02301                 | 4,727,02                                | 4.261#*00          |
| 9.100.+02              | 4,677,+01                        | 4,248=+02        | 5,983,001               | 4,770.02                                | 4.34   =+00        |
| 9,200=+02              | 4.719.+01                        | 4,332=+02        | 5,943,001               | 4,812,02                                | 4.421++00          |
| 9.300**02              | 4,760+01                         | 4,418=+02        | 5,904.01                | 4,854,*02                               | 4,501=+00          |
| 9.400=+02              | 4,800,+01                        | 4,503=*02        | 5,867 <b>#</b> #0       | 4,895,=02                               | 4.582#+00          |
| 9,500x+02              | 4,841,+01                        | 4.290.*02        | 5,830.00                | 4,937.02                                | 4,063#+00          |
| 9,600++02              | 4,881_+01                        | 4,677,*02        | 5,795 <u>n</u> =01      | 4,978,=02                               | 4.745=+00          |
| 9.700x+02              | 4,922=+01                        | 4,764.+02        | 5,760=01                | 5.019.02                                | 4.027=+00          |
| 9,800*+02 -            | 4,961_+01                        | 4,853.*02        | 5,726,01                | 5,060,02                                | 4,409=+00          |
| 9,900x+02              | 5,001#+01                        | 4,941.02         | 5,693,001               | 5,100,02                                | 4,991==00          |
| 1.000=+03              | 5,041,01                         | 2,031=+02        | 5,060#=01               | 5,140,=02                               | 5.074 + 00         |
| 1•0 <u>10</u> =+03     | 5,080,+01                        | 5,121=+02        | 5,629 = 01              | 5,181,#02                               | 5.158**00          |
| 1.020+03               | 5+12+01                          | 2.211=*02        | 5,598=01                | 5,221=02                                | 5.24   =+00        |
| 1,030,+03              | 5,150,+01                        | <b>2.302+02</b>  | 5,56/##01               | <b>5,2</b> 60 <b>⊳</b> ≠02              | 5.325=+00          |
| 1.040=+03              | 5 • 197 • 01                     | 5,394=+02        | 5,538,000               | 5,300,02                                | 5.410+00           |
| 1,050=+03              | 5,230,0+01                       | <b>5,486,+02</b> | 5,50Y##01               | 5; 339                                  | 5,494#+00          |

| DIAMETER                | VELOCITY                  | RE                           | DRAG COEF             | RELAX TIME                                | ,98 DIST                |
|-------------------------|---------------------------|------------------------------|-----------------------|---|-------------------------|
| I.000×+00               | 6,524 <sub>0</sub> =04    | 6,511.=06                    | 3,686⊭≠06             | 6,65307                                   | 1.272=09                |
| 1.100=+00               | 7,895 <b>∞</b> ≠04        | 8,667∎≖06                    | 2.769.+06             | 8,05  <b>n</b> =07                        | 1.065##09               |
| 1+200++00               | 9,395.=04                 | 1,125==05                    | 2,133,+06             | 9,58  <b>µ</b> =07                        | . 2.044=-09             |
| 1.300++00               | 1.103.=03                 | 1.431=05                     | 1,078 <b>.+</b> 06    | • 24 <b>⊭</b> =06                         | 3.045==09               |
| 1.400=+00               | 1,279.03                  | 1,787=05                     | <b> ,343∞+</b> 06     | 1,304,=06                                 | 4.406=09                |
| 1,500=+00               | 1,468,-03                 | 2,198.*05                    | 1.092.+06             | 1,497,=06                                 | 6.47   #=09             |
| 1.600#+00               | <b>,</b> 678 <b>≖</b> ∎03 | 2,667.405                    | 8,999±+05             | 1,703=06                                  | 8.382##09               |
| 1.700×+00               | <b>,</b> 886 <b>,</b> ∗ĝ3 | 3,199,=05                    | 7,502+05              | 1,923,=06                                 | , <u>j69**0</u> 8       |
| 1,800±+00               | 2.114=03                  | 3,797,-05                    | 6,320=+05             | 2,156 <b>"</b> =06                        | ,344##08                |
| 1.900+00                | 2,355.03                  | 4,466,=05                    | - 5, 374 <b>±+</b> 05 | 2,402=06                                  | 1.070#08                |
| 2:000=+00               | 2,610=03                  | <b>5,209=0</b> 5             | 4,00/=+05             | 2,06 ,=06                                 | 2.021008                |
| 2+100=+00               | 2,877.0=03                | 6.030.+05                    | 3,980++05             | 2,934,=06                                 | 2.495##08               |
| 2.200*+00               | 3, 158, 703               | 6,93305                      | 3,462,+05             | 3,220,=00                                 | 3.007#=08               |
| $2.300 \pm 00$          | $3,451_{m}=03$            | 1,922.05                     | 3,029,+05             | 3,220, *00                                | 3.594##08               |
| 2+400++00               | 3,758,03                  | 9.001=*05                    | 2,660,+05             | 3,832,=06                                 | 4.263##08               |
| 2.500=+00               | 4.078.03                  | 1.017=04                     | 2,359,+05             | 4 • 158 • 00                              | 5, 12(**08              |
| 2,000=+00               | 4,410,*03                 | •   44 <b>⊭</b> = 04         | 2.09/=+05             | 4,498 <sub>0</sub> =00                    | 5.476==08               |
| 2./00=+00               | 4,/50,03                  | 1,282,=04                    | 1.073=+05             | 4,070,000                                 | 6,837#*08               |
| 2,000#+00               | 5.112=03                  | I+#29#≖04<br>I 689 - 64      |                       | <b>&gt;; ∠   0;; = i) 0</b><br>5 505 - 06 | 7.910=08                |
| 2,700++00               |                           |                              | ,2  ±♥()2             |   | 7,100000                |
| 4 ∎UUU±+UU<br>4 ±00.+00 |                           |                              | ,007µ≠05              | 6 394 = 06                                | 1.0432007               |
| V; IUU≠+UU<br>3 300 +00 | 0,2/Us=US                 |                              | 1.25.405              |   | 1.1200007               |
| V•200±+00<br>3 308±+00  | 7 1.5 -03                 | 2 34 0 04                    | 1,122,4405            | 7 245 = 06                                | 1.321-+07               |
| ა.400 <u>,</u> +იი      | 7.542                     | 2,559                        | +U≤°≢+U⊅<br>0 378+n4  | 7.691                                     | 1. /23 == 07            |
| 3.500±+00               | 7.99203                   | 2.792.=04                    | 8 597.+14             | 8.150-*06                                 | 1.936##07               |
| 3.6nn+in                | 8.455                     | 3.138.=14                    | 7.901.404             | 8.622                                     | 2.168=07                |
| 3.7nn++0n               | 8.93203                   | 3.298.04                     | 7.277 <b>.</b> +04    | 9.108.00                                  | 2.419=07                |
| 3.800x+00               | 9.421.0.03                | 3.573.=04                    | 6.718=+14             | 9.6 <sub>0</sub> 7                        | 2.092=17                |
| 3.900±+00               | 9.923 - n3                | 3.862.=04                    | 6.214.+14             | 1.012.05                                  | 2.988 + n7              |
| 4.000*+00               | 1.044.=02                 | 4.167.=n4                    | 5.760.+04             | 1.064.=05                                 | 3.318##17               |
| 4.100=+00               | 1,097.02                  | 4,487,-04                    | 5,349,+04             | 1,118,-05                                 | 3.652 07                |
| 4,200++00               | 1.151.02                  | 4,824.04                     | 4,970,+04             | 1,174,=05                                 | 4. 122 07               |
| 4.300*+00               | 1.200 02                  | 5,177=04                     | 4,637+04              | 1,230,05                                  | 4,421==07               |
| 4.400=+00               | 1.263.02                  | 5,546,=04                    | 4,328,+04             | 1,288,05                                  | 4.848=07                |
| .4.500=+00              | 1.321.02                  | 5.933 <u>.</u> #04           | 4,045,+04             | ,347 <sub>b</sub> =05                     | 5,305=07                |
| 4,000=+00               | 1,380,02                  | 6,337.=04                    | 3,787=+04             | 1,408,-05                                 | 5,794=07                |
| 4./00=+00               | 1.441=02                  | 6.76 <b>0</b> =04            | 3.551#*04             | 1.470.05                                  | 6,316==0/               |
| 4.600=+00               | 1,503,02                  | /.200==04                    | 3,333m+04             | 1,233 - 0.5                               | 6.8720=07               |
| 4+700++00               | 1,560                     | /,060                        | 3, 34, 0+ 14          | 1,29/m=05                                 | /.405#e07               |
| 2+000++00               | 1.051.02                  | 0,138,04                     | 2,747.04              | , 00 3 <b>b</b> € [] 7                    | 0.U22×1/                |
| 2+100++00               | 1:09/                     |                              | 2,4/70+04             | • / 3 () <b>● () 7</b>                    | 0./042#0/               |
|                         | KI+K09∞≢02                | - 7+ 24==()4<br>- 9 607 = ∩4 | - 2,0260+04           | 1+/77#"()2<br>  840 = 45                  | 7 4 / 4 × m () /        |
|                         |                           |                              | 2,4/000004            | 1 940 - 05                                | I•UZ3≥≂00               |
|                         | 1.973                     |                              | 2 2 16 - + 14         | 14 17 UMEU2<br>2.010                      | I+ U∠#™UO<br>I. 186∞≖06 |
| ~ * * 0 0 * * () 0      | 11// Mail UC              |                              |                       |   | 1.100-000               |

| DIAMETER                           | VELOCITY                | RE  | DRAG CUEF               | RELAX TIME                                     | ,98 DIST          |
|------------------------------------|-------------------------|---|-------------------------|--|-------------------|
| 5.600*+00                          | 2,046 <b>*</b> 02       | 1.143.=03                                     | 2.099.+04               | 2.08605  | 1.275 06          |
| 2+700++00                          | 2,19,02                 | 1+206==03                                     | 1,991 <b>#</b> +04      | 2. 61. = 05                                    | 1.369             |
| 2,800 <b>*</b> +00                 | 2,194,*02               | 1,270=03                                      | 1,890,+04               | 2,238,=05                                      | 1.468=06          |
| 2,900=+00                          | 2.271.002               | 1.33/##[3                                     | 1.795=*04               | 2.3 0  | 1.5720006         |
| 000=+00                            | 2,340,02                | 1,70,000                                      | •/0/∍+04                | 2,395,05                                       | 1,002##00         |
|                                    | 2:42/ = 02              |   | 1.022 H+ 14             |  | 1./97==00         |
| 0 + 200 + 00                       | 2,20/m*02               | 1,202,000                                     | 1.047±±=04.             | 2,00/0=00                                      | 1.9100000         |
| 0,000#+00<br>5.400-+00             | 2,572                   | 1,0204403                                     | 407.+04                 | 2,725  | 2 79 - 06         |
| 6 500.+00                          | 2 786                   | 1.788   | 1.343.+4                | 2 8 10.00                                      | 2,1/9==00         |
| 6.600 <u>+</u> 00                  | 2,841.=02               | 1.8725#83                                     | 283.+04                 | 2.897  | 2.465             |
| 6.700++00                          | 2,928.=02               | 1.958.403                                     | 1.226.+04               | 2.986  | 2.018##06         |
| 6,8nnx+nn                          | 3.016.002               | 2.047.003                                     | 1.173.+14               | 3.17615  | 2./79             |
| 6,900±+00                          | 3.105                   | 2.138.03                                      | 1.123.+14               | 3, 167, = 05                                   | 2.946==06         |
| 7.000**00                          | 3,196, = 02             | 2,233,=03                                     | 1.075.+04               | 3,259,=05                                      | 3, 121==86        |
| 7.100.+00                          | 3,288,02                | 2,330,=03                                     | 1.030.+04               | 3,353, = 05                                    | 3.304==06         |
| 7.200=+00                          | 3,381.02                | 2,430=03                                      | 9.882.+03               | 3,448,-05                                      | 3,495==06         |
| 7.300=+00                          | 3,470,02                | 2,532,=03                                     | 9,481m+03               | 3,544 <sub>0</sub> =05                         | 3,093==06         |
| 7,400=+00                          | 3,572.02                | 2,638,=03                                     | 9,102=+03               | 3,642.05                                       | 3,401=06          |
| 7.500∗+00                          | 3,667,0702              | 2,746,=03                                     | 8,/43=+13               | 3, 14   = 05                                   | 4.116=06          |
| 7,600≖+U0                          | 3,76/1=02               | 2,857.03                                      | 8,403=+03               | 3,842,-05                                      | 4,341==06         |
| + 00 = + 00                        | 3,86/                   | 2.971=03                                      | 8.080.00                | 3,943,=05                                      | 4.975=06          |
| /,800×+00                          | 3,900 02                | 3,089.=03                                     | 7,773=+03               | 4,040,05                                       | 4,818=76          |
| 7.900*+00                          | 4.070.*02               | 3.209.03                                      | 7,482,+03               | 4, 15   10 = 05                                | 5.070==06         |
| 0.000×+00                          | 4,1/40=02               | 3 450 - 03                                    | 7.202=+03               | 4.200 = 00                                     | 5.333##00         |
| V+100×+00<br>b 200 +00             | 4 385 -02               | 3 588 403                                     |                         |  | 5,009##00         |
| 0 + 2 () () ≠ () ()<br>b. 3no + on | 4,492,002               | 3.721.=03                                     | 6 453 + 13              | 4,581,05                                       | 6 8               |
| 8.400 ± + 00                       | 4.6 n l n 2             | 3.857   | 6.225.403               | 4.692.05                                       | 6.485**06         |
| 8.5nn±+un                          | 4.711.02                | 3.997.*13                                     | 6.000+03                | 4.804.05                                       | 6.800##06         |
| 8.6n0x+00                          | 4.823                   | 4.139.=13                                     | 5.8nl.+n3               | 4.9.18.+n5                                     | 7.127.000         |
| 8.700=+00                          | 4.935 02                | 4,285,-03                                     | 5.004.+03               | 5.033  | 7.465#=06         |
| 8,800±+00                          | 5,050=02                | 4,435,=03                                     | 5.415,+03               | 5,149,05                                       | 7.016**06         |
| 8,900=+00                          | 5,165,02                | 4,588,=03                                     | 5,235,+03               | 5,267.+05                                      | 8. 178            |
| 9.000++00                          | 5,281,02                | 4,744=03                                      | 5,062=+03               | 5,386p×05                                      | 8,553##06         |
| 9,100++00                          | 5,399.02                | 4,904,*03                                     | 4,898 + 03              | .5,5 <sub>0</sub> 6 <sub>0</sub> ,• <u>0</u> 5 | 8.940=06          |
| 9+200++00                          | 5.519 02                | 5,067,03                                      | 4,740=+03               | 5°,628,=05                                     | 9.341=06          |
| 9,300+00                           | 5,639 <sub>m</sub> =02  | 5,234,-03                                     | 4,589.+03               | 5,750, *05                                     | 9,/55=*06         |
| 9.400=+00                          | 5,761.02                | 5,404==03                                     | 4.444=+03               | 5,875,=05                                      | 1.018##05         |
| 7,500=+00                          | 5,884,02                | 5,579, • 03                                   | 4.302.+03               | 6,000×=05                                      | 1.062==05         |
| 7,000x+00                          | 0.00005                 | <sup>1</sup> 2 • / 50 ± ₹ 03<br>5 0 × 0 = - 3 | 4,172,0+03              | 0,127,05                                       | 1.108##05         |
| 7+/00=+00                          | 0, 134 02               |   | 4,042=+03               | 0, <u>2</u> 77, * []7                          | 1.125##15         |
| 7,000=+00                          | 0,201,02                | 0 1 2 3 m # 0 3<br>6 3 1 7 7                  | 3,723=+03               | 0,000 × 00                                     | 1.204+*05         |
|                                    | 010078702<br>6 519 - 52 | 0,913=*03<br>6.506=03                         | 3,∎⊽∏⊅∎♥[3<br>7 692:±≈7 | 6 648 - 5E                                     | 1,274= <u>0</u> 5 |
| I • UUU# ▼ UI                      | 7,885 - no              | 8.657   | 0,0728-US               | 8.04.)   |                   |
|                                    | / • U U V 🖬 " [] Z      | ~,~~,»~,                                      | 2 · · · ~ # * US        | ~+U~!»~02                                      | 1+7 3 2 2 10      |

| DIAMETER                         | VELOCITY                  | RE         | DRAG COEF             | RELAX TIME             | ,98 DIST    |
|----------------------------------|---------------------------|------------|-----------------------|------------------------|-------------|
| 1.200=+01                        | 9,381 <sub>m</sub> =02    | 1,123,02   | 2.139 + 03            | 9,566 <u>=</u> =05     | 2./12=05    |
| 1.300*+01                        | 1.10101                   | 1,428,=02  | 1,684=+03             | 1,122,-04              | 3,/38=05    |
| 1.400.+01                        | 1.276.001                 | 1,78202    | 1.350=+03             | 1.301.04               | 5.0320005   |
| 1.500=+01                        | 1.46401                   | 2,191-02   | 1.099 = + 03          | 1,493=04               | 6.037==05   |
| 1,600 <b>+</b> +01               | 1,664,=01                 | 2,658.=02  | 9,063,+02             | 1,697.0-04             | 8.397=05    |
| 1.700=+01                        | 1.877.01                  | 3,185,-02  | 7.567.+02             | 1,915=04               | 1.196=04    |
| 1.800**01                        | 2.103.=01                 | 3,778,02   | 6.385,+02             | 2,145,=04              | 1.379==04   |
| 1.900=+01                        | 2.341.01                  | 4,440=02   | 5,438,+02             | 2,388,-04              | 1./13#004   |
| 2,000=+01                        | 2,592,01                  | 5,173,02   | 4,672+02              | 2,64304                | 2.104=04    |
| 2.100=+01                        | 2,854.01                  | 5,982=02   | 4,045++02             | 2,911,-04              | 2,559=04    |
| 2.200**01                        | 3.129.01                  | 6,870,02   | 3,526=+02             | 3,191,=04              | 3.084##04   |
| 2,300,+01                        | 3+4 5**0                  | 7,839,*02  | 3,094,+02             | 3,483,-04              | 3.686##04   |
| 2.400++01                        | 3.713.001                 | 8,894,=02  | 2,731,402             | 3,78704                | 4.372=04    |
| 2.500*+01                        | 4,023.001                 | I•004≠=01  | 2,423,+02             | 4,103,04               | 5.150.04    |
| 2,600*+01                        | 4.344.01                  | 1,127,01   | 2,162=+02             | 4,430,=04              | 6.027=04    |
| 2,700++01                        | 4,676,-01                 | 1.260="01  | 1.937+02              | 4,769,=04              | 7.012==04   |
| 2,800*+01                        | 5.020.00                  | 1,403=01   | 1,744,*02             | 5,119,=04              | 8.113==04   |
| 2,900++01                        | 5,374.01                  | 1,555,01   | 1.576.+02             | 5,480,-04              | 9.339##04   |
| 3.000*+01                        | 5,738,01                  | 1.718.01   | 1,430=+02             | 5,851.04               | 1.070==03   |
| 3.100x+01                        | 6.115.001                 | 1.891.01   | 1.302#+02             | 6,234 = 04             | 1.220003    |
| 3,200++61                        | 6,490, <b>#</b> 01        | 2,075,01   | 1,189,+02             | 6,026 <sub>#</sub> =04 | 1.377##03   |
| 3.300*+01                        | 6,892,01                  | 2,270==01  | 1.090=+02             | 7.028.04               | 1. 344=03   |
| 0,400x+01                        | 7.290 = 01                | 2,476,01   | 1.002=+02             | 7,440,=04              | 1.122=03    |
| S,⊃[]x+[]]                       | /./07.=01                 | 2,093,=01  | 9,240=+01             | /,861                  | 1.910=03    |
| 3.000+01                         | 8.131.01                  | 2,921=01   | 8,543,+01             | 8,292,04               | 2.111=03    |
| 3./(0x+0)                        | 8.502.00                  | 3,162,=01  | 7.919=+01             | 8,/3 ,#04              | 2.323=03    |
|                                  | <b>9</b> •00! <b>≠0</b> 1 | 3,413=01   | 7,359∍+0              | 9,179 <sub>p</sub> =04 | 2.348==03   |
| 3.900x+01                        | 9,440,00                  | 3,0//#*[]] | 6,052=+01             | <b>9,034 04</b>        | 2.184=03    |
|                                  | <b>∀ • ∀ [] ⊄ ⊕ ♥ []</b>  |            | 0,400,0401            | 1+010=00               | 3.034=003   |
| <b>▼</b> + 1 () () = <b>+</b> () | 1.0000+00                 | 4 64 0     | 5,900,000             | 1,02/10-03             | 3.2900-03   |
| 4.308.+01                        |                           | 4.853.=01  | 5,0 2±+[]<br>5,275±+0 | •   () 2 ± • () 3      | 3.7/1##03   |
| 4.400.+01                        | 111074-00                 | 5.178      | A 965 + 01            | 1.202.03               | 3.6598803   |
| 4.500-+01                        | 1.228.+00                 | 5.515      | 4 682 + 01            | 1 252 3                | 4 477 - 03  |
| 4.600+01                         | 1.277.+00                 | 5.865.201  | 4 425 + 61            | 1.303.=03              | 4 406=03    |
| 4.700.+01                        | 327 +00                   | 6.227.eni  | 4 185 + 01            | 1.35403                | 5 40 mm n 3 |
| 4.800.+111                       | 1.378.+00                 | 6.601.=01  | 3.966+11              | 1.405.003              | 5. 506=03   |
| 4.9.00.+01                       | 1.429.+00                 | 6.988.•ni  | 3.765.+01             | 1.457.=03              | 5.077.03    |
| 2.000.+01                        | 1.481.+00                 | 7.3881     | 3.579=+01             | 1.510-03               | 6.263#=03   |
| 2.100++111                       | 1,533_+nn                 | 7.8nn.ni   | 3.4n7+ni              | 1.563 - n3             | 6.0630=03   |
| 5.200x+01                        | 1,585,+00                 | 8,225,01   | 3.248.+01             | 1.016.03               | 7. 178.013  |
| 5.500 + 11                       | 1.638.+00                 | 8,663.01   | 3.100+01              | 1.07003                | 7.208=03    |
| 5,400x+01                        | 1,691,+00                 | 9,113.01   | 2,963,+01             | 1,724.=03              | 7.952=13    |
| 5.500++01                        | 1,745,+00                 | 9,577.01   | 2.835.+01             | 1,779 03               | 8.412== 13  |
| 5.600x+01                        | 1,799,+00                 | 1.005=+00  | 2.710.+01             | 1,834.=03              | 8,887=03    |
| 5.700×+01                        | 1,853 <u>n+00</u>         | 1.054.00   | 2.004=+01             | 1,890,03               | 9.376==03   |

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| DIAMETER                               | VELOCITY               | RE                      | DRAG COEF               | RELAX TIME                               | .90 DIST          |
|--|------------------------|-------------------------|-------------------------|--|-------------------|
| 5,800=+01                              | 1,908,+00              | 1.104.+00               | 2,500,+01               | 3. <mark>ب 946 ه = 03</mark>             | 9.482==03         |
| 5.900x+01                              | 1,963,+00              | 1.156 + 00              | 2,402+01                | 2.0020-03                                | 1.040=02          |
| 6,000x+01                              | 2+019+00               | 1,209=+00               | 2.310=+01               | 2,059,-03                                | 1.094#002         |
| 6.100=+01                              | 2,075,+00              | 1,263.+00               | 2,224.01                | 2,116,03                                 | 1.149##02         |
| $0,200 \pm 01$                         | $2,131_{+}00$          | 1,319m+00               | 2,142,+01               | 2,173.03                                 | 1.206#=02         |
| 0.300x+01                              | 2,188,+00              | 1.376.+00               | 2,062 <u>m</u> +0       | 2,231,0=03                               | 1.264=02          |
| 0,400x+01                              | 2,242,+00              | 1,434,+00               | 1,992,01                | 2.289.00                                 | 1.324=02          |
| 0,2()x+()1                             | 2,303,+00              | 1.4494.8400             | ,92 <b>9</b> # <b>†</b> | 2,348, = 03                              | 1.385##02         |
| 0,000±+01                              |                        | 1,255µ≠00               | 1,000m+01               | 2.467.003                                | 1,449##02         |
| Q ≠ 7 0 0 ± + 0 1<br>6 - 8 n n = + 0 1 | 2.479.+00              | I,010≞*UU<br>I.682∞≢00  | i 737                   | 2,528.=03                                | 1.2130002         |
| 6.900=+01                              | 2.538.+00              | 1.748.+00               | •/0/⊯/0 <br>  680+0     | 2,58903                                  | 1.648 mm 02       |
|  | 2,599.+00              | 1.815.+00               | 1 626 + 01              | 2:650                                    | 1./17+=02         |
| 7.100±+01                              | 2.660.+00              | 1.885.+00               | 1.575,+11               | 2.712.13                                 | 1.788 = 12        |
| 7.200.+01                              | 2.721.+00              | 1.955.+00               | 1.525.+01               | 2.775 13                                 | 1.861##02         |
| 7.300++01                              | 2,784,+00              | 2,028,+00               | 478.+01                 | 2,839,=03                                | 1.936==02         |
| 7,400=+01                              | 2,847 +00              | 2.102.00                | 1,433 <b>,+0</b> 1      | 2;903=03                                 | 2.012-02          |
| 7.500=+01                              | 2,910=+00              | 2,178,+00               | 1,389=+01               | 2 <b>,</b> 968, <b>,</b> •03             | 2.089**02         |
| 7.600**01                              | 2.975*+00              | 2,256,+00               | 1,347+01                | 3,034,0-03                               | 2.169.02          |
| 7.700×+01                              | 3,040=+00              | 2,336,+00               | 1,30/=+01               | 3,100,=03                                | 2,250=02          |
| /.800=+01                              | 3,100+00               | 2,418,+00               | 1.200.+01               | 3, 108==03                               | 2.33 <b>**</b> 02 |
| /,Y00x+()                              | 3 1 / S = 1 0 0        | 2,202,00                |                         | 3, <u>∠</u> 30, # []3<br>7, 3, 5, - 0, 3 | 2.917##02         |
| 0,000x+01                              | 3+241x+00              | 2,20/#700               |                         | 3,374 -03                                | 2.203##02         |
|  |                        | 2 764 + 00              | 1.128.+01               |  | 2.57              |
| 8.300-+01                              | 3.447.+00              | 2,855,+00               | 1,129#*01               | 3.5.5.*03                                | 2.773**82         |
| 8.400±+01                              | 3.516.+00              | 2.948.+00               | 1.060 <b> + 0</b> 1     | 3.286. = 03                              | 2.064=02          |
| 8.5nn++01                              | 3.580,+00              | 3.042.+00               | 1.037.+01               | 3.657.03                                 | 2. 959 - 12       |
| 8.600±+01                              | 3.656 .+00             | 3,138,+00               | 1.009=+01               | 3.728.=03                                | 3. 155== 02       |
| 8.700 + 01                             | 3,720,+00              | 3,235,+00               | 9,833,+00               | 3,799 03                                 | 3.153#=02         |
| 8,800x+01                              | 3,795,+00              | 3,333,+00               | 9,587 <b>±+</b> 00      | 3,87 <sub>0=</sub> =03                   | 3.253 == 02       |
| 8.900x+01                              | 3,863 <sub>0</sub> +00 | 3,432,+00               | 9,355 <b>,</b> +00      | 3,940, = 03                              | 3.354 = 02        |
| 2.000×+01                              | 3,931_+00              | 3,531,+00               | 9,140,+00               | 4.008.03                                 | 3.4570-02         |
| 9+100++01                              | 3,990,+00              | 3,629,+00               | 8.941.00                | 4,075=*03                                | 3.26   # = 02     |
| 9+200×+01                              | 4,05%=+00              | 3,/2/#+00               | 8,/00+00                | 4, 140=03                                | 3.008#=02         |
| 9.300x+01                              | 4 1 2 0 1 2 0 0        | 3+024#*U[]<br>4 9+9 +00 | 8,590,00                | 4 2 6 0 - 07                             | 3.776.502         |
| 7∎4UU±+UI<br>9 500                     | $4 + 1/0_{10} \neq 00$ | 3,995,+00               | 8,470±*00<br>9 394_+00  | 4,207                                    | 3,000##U2         |
| 9.600.+01                              | 4.276.+00              | 4.097.+00               | 8 236                   | 4.361.*03                                | 4.1.100=02        |
| 9.700.+01                              | 4.339.+00              | 4.201.+00               | 8,083,+00               | 4.42503                                  | 4.225 = 02        |
| 9.8nn+n1                               | 4.4n2+nn               | 4.305.+00               | 7.935»+nn               | 4.48903                                  | 4.342=02          |
| 9.900x+01                              | 4,465 <u>**</u> nn     | 4,411,+00               | 7,792.+00               | 4,553.=03                                | 4,46 n== 12       |
| 1.000=+02                              | 4,528,+00              | 4,519=+00               | 7,654.+00               | 4.0.17.=03                               | 4, 28 0= 02       |
| 1,100=+02                              | 5,163,+00              | 5,668,+00               | 6,474,+00               | 5,265.*03                                | 5.874=02          |
| 1.200=+02                              | 5,807+00               | 6,954,+00               | 5,584,+00               | 5,921=03                                 | 7.339==02         |
| 1.300-+02                              | 6.456 <u>.</u> +nn     | 8.376 <b>.</b> *nn      | 4.894m+nn               | 6.584.=03                                | 8.974             |

| DIAMETER          | VELOCITY                  | RÉ                                      | DRAG COEF                   | RELAX TIME             | ,98 DIST                        |
|-------------------|---------------------------|---|-----------------------------|------------------------|---------------------------------|
| 1.400*+02         | 7.110=+00                 | 9,934=+00                               | 4,345±+00                   | 7,25jp=03              | l.u78∞≖01                       |
| 1.500++02         | 7,767 <b>,+</b> 00        | 1,163,*01                               | 3.901=+00                   | 7,920,03               | 1.275==01                       |
| 1,600*+02         | 8,425+00                  | •345¤+0                                 | 3,536,+00                   | 8,59203                | <b> .488≠</b> ≢0                |
| 1.700.+02         | 9,085_+00                 | 1.541.0+01                              | 3,232=+00                   | 9,264,=03              | 1./18==01                       |
| 1.800=+02         | 9,744.+00                 | 1,750 <i>m</i> +01                      | 2,974=+00                   | 9,937.=03              | 1.964==01                       |
| 1.900=+02         | 1.040±+01                 | 1,973 <u>,+01</u>                       | 2,755,+00                   | 1,061,02               | 2.225==01                       |
| 2.000=+02         | •  <u>0</u> ¢ <u>w</u> +0 | 2,208=+01                               | 2,565=+00                   | 1,128,02               | 2.02**01                        |
| 2.100=+02         | 1,172,+01                 | 2,456,+01                               | 2,400 <b>+</b> +00          | 1,19502                | 2.795==01                       |
| 2.200.+02         | 1:237:+01                 | 2.716=+01                               | 2,250#+00                   | 1,261=02               | 3.102==01                       |
| 2.300++02         | 1,302,+01                 | 2,989,+01                               | 2.128.+00                   | 1,328,=02              | 3,423==01                       |
| 2.400++02         | 1,36/_+01                 | 3,274=+01                               | 2,015=+00                   | 1,394,02               | 5.159==01                       |
| 2.500++02         | 1.432.+01                 | 3,572=+01                               | 1,914=+00                   | 1,460,=02              | 4.109#=01                       |
| 2.000*+02         | 1,496,+01                 | 3,882=+01                               | 1,823,+00                   | 1,225,02               | 4.475##01                       |
| 2,700=+02         | 1,560,+01                 | 4,203,401                               | 1./41#+00                   | •29  <b>⊭</b> ≋02      | 4.020=01                        |
| 2,800*+02         | 1,624,01                  | 4,23/=+01                               | ,00/m+00                    | 1.000.000              | 5,241==01                       |
| 2.900=+02         | ,08/m+0                   | 4,882=+01                               | 1.299=+00                   | 1.720.02               | 5.045#=0                        |
| 3.000=+02         | 1./50.+01                 | 2,239=*[]                               | 1,530=+00                   | 1,784,02               |                                 |
| S + 100 ± + 0 ≥   | 1,8 4 2 9 4 1             |   | ,481ø <b>+</b> 00           |                        | 6,490,000                       |
|                   | 1+0/9#+01                 | 5 377 + 0 L                             | ,427»♥00<br> ,381,400       |                        |                                 |
| J 4 9 0 + 02      | 1,930,+01                 |   | ,36 #*UU<br>  337           | 2 037 -02              | 7 849 - 01                      |
| 3 500 ±02         |                           |   | 1.30/m+00                   | 2,099,002              | 8 125-01                        |
| 0,200±+02         | 2,02,0401                 | 7,614,201                               | 1.258.400                   | 2,161,402              | 8.813##81                       |
| 3.709++02         | 2:180.+01                 | 8.048.+01                               | 1,222,00                    | 2.22302                | 9.512##01                       |
| 3.500++02         | 2,239,+01                 | 8.493.+01                               | 1 (89-+00                   | 2.284.#02              | 9.422##01                       |
| 3.9nn+n2          | 2.299.+01                 | 8,948,+01                               | 1.158.+00                   | 2.344.=02              | 1.134=+00                       |
| 4.000**02         | 2.358 + 11                | 9.414.+01                               | 1.129=+00                   | 2.405.02               | 1.187=+00                       |
| 4.100++02         | 2.417,+01                 | 9,689.+01                               | 1.101.+00                   | 2,465,02               | 1.141+00                        |
| 4.200++112        | 2.475.+01                 | 1.0380+02                               | 1,076.+00                   | 2,524.02               | 1.197 + 00                      |
| 4.300 + 02        | 2,533=+01                 | 1.087.+02                               | 1.051++00                   | 2,583,=02              | 1.253=+00                       |
| 4,400*+02         | 2,591±+01                 | 1,138,+02                               | 1.029.+00                   | 2,642,-02              | 1.310=+00                       |
| 4,500*+02         | 2,648,+01                 | 1,189.+02                               | 1,007=+00                   | 2,700,-02              | 1.368=+00                       |
| 4.600x+02         | 2,702+01                  | 1,242,+02                               | 9,862.01                    | 2,158,02               | 1.427+00                        |
| 4,700++02         | 2,761.+01                 | 1,295.+02                               | .9,071=01                   | 2,016,02               | 1.4870+00                       |
| 4,800x+02         | 2+81/#+01                 | 1.3500+02                               | 9,480,2 = []                | 2,0/3,0*02             | 1.74/#+00                       |
| 4.900×+02         | 2,8/3+01                  | 1,402=+02                               | 9.313.8                     | 2, 730, 802            | 1.009++00                       |
| 2.000=+02         | 2,929:+01                 | 1,461.402                               | 9,14/01                     | 2,700,702              | 1.0720+00                       |
| 2 • 100 = + 02    | 2,984=+01                 | 1,219=+02                               | 8,907,0701                  | 3.000 €02<br>3.000 €02 |                                 |
| 2.200+02          | 3.030 <u>0</u> +01        | 1,2//                                   | (8. a 0.7 µ ■ () (          | 3, U20, "U2            |                                 |
|                   | 3 46 +0                   | 1+400=*02                               | ·0・リティング[]]<br>- 6 558/4=51 | 3,209.*02              | [, gu 4 # # []]                 |
| 2+7UU#782         |                           | 1 757 + 00                              | 8.427.eni                   | 3.263.*02              | 1+700#700<br>1.997w4nn          |
| UU×=UA<br>5.60002 | 3,2534404                 | 111111111111111111111111111111111111111 | 8.30601                     | 3.318-+02              | 1 + 7 - 7 = 00<br>2. $164 = 00$ |
| 5,700++02         | 3,306-+01                 | 1.881.+02                               | 8.181.em                    | 3.372.02               | 2.1329+00                       |
| 5,8nn+42          | 3,359+01                  | 1.944.+12                               | 8.060                       | 3,425. • 02            | 2.2010+00                       |
| 2.900x+02         | 3,411+01                  | 2.009.+02                               | 7,955                       | 3,479=*02              | 2.271++00                       |

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| DIAMETER           | VEFOCILA               | RE                 | DRAG COEF          | RELAX TIME                  | ,90 DIST               |
|--------------------|------------------------|--------------------|--------------------|-----------------------------|------------------------|
| 0,000#+02          | 3,463,+01              | 2,074.+02          | 7,849,##0          | 3,532,*02                   | 2.34   =+00            |
| 6,100=+02          | 0+4 +0   3,5           | 2,140,+02          | 7.747.01           | 3,584,=02                   | 2,413+00               |
| 6,200++02          | 3,566,+01              | 2,207.+02          | 7,649,001          | 3,037,-02                   | 2,484=+00              |
| 6,300±+02          | 3,617,+01              | 2,274,+02          | 7,555,000          | 3,689,02                    | 2,557=+00              |
| 6,400x+02          | 3,668,+01              | 2,343,+02          | 7.465              | 3,740,02                    | 2.030+00               |
| 6.500.+02          | 3,718,+01              | 2,412+02           | 7.377.01           | 3,792,-02                   | 2.704++00              |
| 6.6nn+112          | 3.768.+01              | 2.482.+02          | 7.293.=01          | 3.843.=02                   | 2./79.+00              |
| 6.700.+02          | 3,818,+01              | 2,553,+02          | 7.212.01           | 3.893.02                    | 2.854++00              |
| 6,800++02          | 3,867,+01              | 2,625,+02          | 7.134.001          | 3,944,=02                   | 2,930++00              |
| 6.900++02          | 3.916.+01              | 2.697.+02          | 7.058.01           | 3,994 = 02                  | 3.006**00              |
| 7.000x+02          | 3,965,+01              | 2.770.+02          | 6.98501            | 4,044,=02                   | 3.183#+00              |
| 7.100.+02          | 4.014.+01              | 2,844,+02          | 6.914.001          | 4,093,02                    | 3.161#*00              |
| 7.200++02          | 4.062.+01              | 2.919.+02          | 6.846 m=11         | 4.142.02                    | 3.239#+00              |
| 7.300.+02          | 4.110.+01              | 2,994.+02          | 6,780-01           | 4,191,0-02                  | 3.318#+00              |
| 7,400=+02          | 4,158,+01              | 3,071,+02          | 6.716.001          | 4,240,02                    | 3.397=+00              |
| 7.500++02          | 4,205,+01              | 3,148,+02          | 6.054.=01          | 4,288 = 02                  | 3.477#+00              |
| 7.000.+02          | 4,252.+01              | 3,225.+02          | 6,594=01           | 4,336,=02                   | 3, 258 + 00            |
| 7.700++02          | 4,299,+01              | 3,304.+02          | 6,530##01          | 4,384 = 02                  | 3.039=+00              |
| 7.800.+02          | 4,346,+01              | 3,383,+02          | 6.480.001          | 4,432,002                   | 3,/20=+00              |
| 7.900+02           | 4.392.+01              | 3,463,+02          | 6,425,01           | 4,479,=02                   | 3.803**00              |
| 8.000+02           | 4,438,+01              | 3,543.+02          | 6.372.01           | 4,526,02                    | 3.885 + 00             |
| 0.100++02          | 4,484,+01              | 3,625,+02          | 6,3210-01          | 4,573,802                   | 3,968#+00              |
| b.200++02          | 4,530,+01              | 3,707.+02          | 6,271=01           | 4,619,=02                   | 4, 152 + 00            |
| 6.300x+02          | 4,575,+01              | 3,790=+02          | 6,222=01           | 4,665,=02                   | 4.136##00              |
| 0,400±+02          | 4.620.+01              | 3.873.+02          | 6.175.001          | 4,711=02                    | 4.221 +00              |
| 8.500++02          | 4,665,+01              | 3,957=+02          | 6,129=01           | 4,757 <u>,</u> -02          | 4.306+00               |
| 8.600++02          | 4,709m+01              | 4,042=+02          | 6,08501            | 4,802,-02                   | 4,392==00              |
| b,700±+02          | 4,753,+01              | 4,127**02          | 6.0410-01          | 4,847 <u>,</u> = <u>1</u> 2 | 4.478.00               |
| 6,800±+02          | 4,797 <u>,</u> +01     | 4,213,+02          | 5,999m=01          | 4,892,*02                   | 4, 264 + 00            |
| 8,900#+02          | 4.841.+01              | 4,300=+02          | 5,958 <u>.</u> #01 | 4,937,02                    | 4,651=+00              |
| 9.000*+02          | 4,885_+01              | 4,388.402          | 5,918.01           | 4,981.02                    | 4./39**00              |
| 9+100*+02          | 4,92 <sup>8</sup> ±+01 | 4,476,+02          | 5,879±≂0           | 5,026,02                    | 4.827=+00              |
| 9.200=+02          | 4,971#+01              | 4,564.02           | 5,841              | 5,069,02                    | 4.415+00               |
| 9,300x+02          | 5.014.+01              | 4,654,+02          | 5,804×*01          | 5,113,02                    | 5.y04#*00              |
| 9,400*+02          | 5+057 <b>+</b> +01     | 4,744,02           | 5,768#*0           | 5.157 <b>.</b> 02           | 5, <sub>1</sub> 93#+00 |
| 9,500*+02          | 5,099,+01              | 4,834=+02          | 5,733×01           | 5,200 <b>,</b> *02          | . 5. <b>, 83⊭+</b> 00  |
| 9.600*+02          | 5,14[#+0]              | 4,926,+02          | 5,698,01           | 5,243,*02                   | 5,273# <b>*</b> 00     |
| 9,700=+02          | 5,183,+01              | 5,018=+02          | 5,665 <b>±</b> *0  | 5,286,*02                   | 5.363#+00              |
| 9,800x+02          | 5,225,+01              | 5,110+02           | 5,632.000          | 5,328 <sub>0</sub> =02      | 5.454**00              |
| 9,900*+02          | 5,267,+01              | 5,203+02           | 5,600+*01          | 5,37   <b>n</b> • 02        | 5.545**00              |
| 1.000x+03          | 5.308 .+01             | 5,297 m+02         | 5.569 = 01         | 5,4:3=02                    | 5,537#+00              |
| 1.010=+03          | 5.349 + 01             | <b>D</b> , 592=+02 | 5.539.01           | 5,455. 02                   | 5./29#+00              |
| 1.020=+03          | 5+390=+01              | 5,487.+02          | 5,509=01           | 5,496,=02                   | 5.0210+00              |
| 1,030++03          | 5,430+0i               | 2;282**02          | 5.480.01           | 5,238.02                    | 5.914++00              |
| $1.040 \times +03$ | () + a   5 • 47 • 5    | 5,678 + D2         | 5,452.01           | 5,579,02                    | 6.u07=+00              |
| 1,050±+03          | 5,511,+01              | 5,175 <b>±</b> +02 | 5.424×*01          | 5,620p#02                   | 6.101+00               |

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