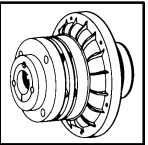


# SELECTION/DIMENSIONS



## FLEXIDYNE

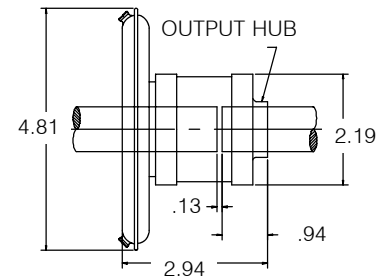
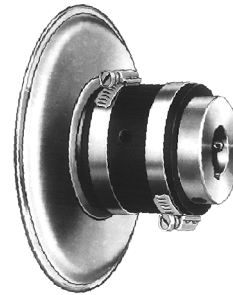
### 5C FLEXIDYNE COUPLING

The 5C FLEXIDYNE Coupling uses a formed steel housing and tubular flexible element. See ordering instructions in table below.

#### 5C FLEXIDYNE Couplings

| Available Bores | Keyway      | Part Nos.                                     |                                                 |
|-----------------|-------------|-----------------------------------------------|-------------------------------------------------|
|                 |             | MECHANISM for Motor Shaft (Avg. Wt. 2.2 Lbs.) | OUTPUT HUB for Driven Shaft (Avg. Wt. .55 Lbs.) |
| 1/2"            | 1/8 x 1/16  | .....                                         | 305120                                          |
| 5/8"            | 3/16 x 3/32 | 305115                                        | 305121                                          |
| 3/4"            | 3/16 x 3/32 | 305118                                        | 305122                                          |
| 7/8"            | 3/16 x 3/32 |                                               | 305123                                          |

**Note:** Total coupling consists of (1) output hub and (1) mechanism. Order by description x bore. To facilitate order processing, order these items by part number. Max bore of mechanism = 3/4"; output hub = 1".

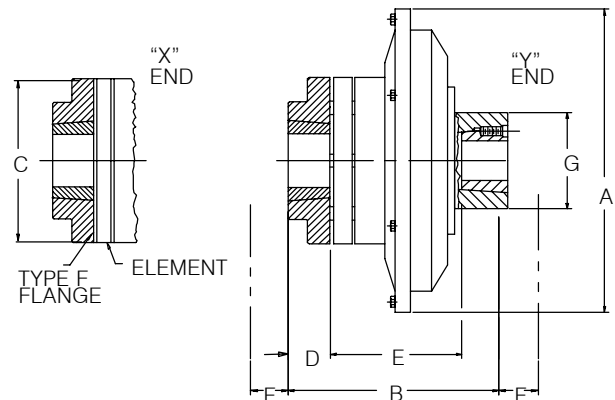


### 55C THRU 11C FLEXIDYNE COUPLINGS

The 55C thru 11C size FLEXIDYNE Coupling uses the same flexible disc used in DODGE POLY-DISC Couplings. The molded polyurethane disc offers longer life and smoother, quieter operation. Disc has excellent physical properties yet remains pliable to cushion shock loads and accommodate misalignment.

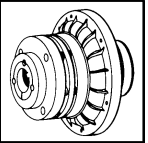
H and F Flanges, carried in stock, can be arranged in the position which best suits the application. **In H type the bushing installs from the Hub side of the flange; in F type from the Face side.**

Sufficient flow charge is furnished with each unit.



|                                                        |                         |                                          |                                      |
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# SELECTION/DIMENSIONS



## FLEXIDYNE

### 55C THRU 11C FLEXIDYNE COUPLINGS

| Cplg. Size | Bore Range of Bushing |          | Max. RPM | Cplg. Less Bushings | Items required for Complete Coupling † |                            |          |        |          |          |         |               |          |              |
|------------|-----------------------|----------|----------|---------------------|----------------------------------------|----------------------------|----------|--------|----------|----------|---------|---------------|----------|--------------|
|            |                       |          |          |                     | Mechanism (Includes Disc)              | Poly-Disc Flange w/o Bush. |          |        |          | Bushings |         |               |          |              |
|            | Min.                  | Max      |          | Wt. Lbs.            |                                        | Part No.                   | Wt. Lbs. | Size   | TYPE H   | TYPE F   | Wt. Lbs | Motor End     |          | Driven End   |
|            |                       |          |          |                     | Part No.                               |                            |          |        | Part No. | Bush No. |         | Avg. Wt. Lbs. | Bush No. | Avg. Wt. Lbs |
| 55C        | 1/2                   | 1        | 1800     | 5.0                 | 305019                                 | 4.0                        | 25/8     | 008057 | 008058   | 1.0      | 1008    | .2            | 1008     | .2           |
| 70C        | 3/4                   | 1 1/4    | 1800     | 15.6                | 305025                                 | 13.6                       | 4        | 008041 | 008040   | 2.0      | 1215    | .7            | 1610     | .7           |
| 75C        | 1/2                   | 1 11/16  | 1800     | 18.6                | 305058                                 | 14.1                       | 5 1/4    | 008043 | 008042   | 4.5      | 1615    | 1.0           | 1610     | .7           |
| 9C         | 1/2                   | 2 11/16  | 1800     | 40.6                | 309074                                 | 30.6                       | 7        | 008045 | 008044   | 10.0     | 2517    | 2.8           | 2517     | 2.8          |
| 11C        | 1/2                   | 2 11/16  | 1800     | 57.2                | 311074                                 | 44.2                       | 8        | 008047 | 008046   | 13.0     | 2517    | 2.8           | 2517     | 2.8          |
| Cplg. Size | Replacement Poly-Disc |          |          | A                   | B                                      | C                          | D        | E<br>◆ | F<br>▲   | G        | X End   | Y End         |          |              |
|            | No.                   | Part No. | Wt. Lbs  |                     |                                        |                            |          |        |          |          |         |               |          |              |
| 55C        | 25/8                  | 008030   | .1       | 5.38                | 3.50                                   | 2.63                       | 0.88     | 1.41   | .75      | 2.25     | Driven  | Motor         |          |              |
| 70C        | 4                     | 008032   | .2       | 8.13                | 6.06                                   | 4.00                       | ★        | 3.56   | 1.06     | 3.63     | Motor   | Driven        |          |              |
| 75C        | 5 1/4                 | 008033   | .5       | 8.13                | 6.38                                   | 5.25                       | ★        | 3.88   | 1.06     | 3.63     |         |               |          |              |
| 9C         | 7                     | 008034   | .9       | 9.50                | 8.63                                   | 7.00                       | 1.75     | 5.13   | 1.63     | 4.13     |         |               |          |              |
| 11C        | 8                     | 008035   | 1.5      | 11.25               | 9.63                                   | 8.00                       | 1.75     | 6.13   | 1.63     | 4.88     |         |               |          |              |

Complete coupling consists of (1) Mechanism, including flexible disc, (1) POLY-DISC Flange, and two Bushings. TAPER-LOCK bushings sold separately.

† To facilitate order processing specify part numbers. Determine whether H or F Flange is required and order accordingly.

※ Motor End: 1/2" - 1 1/4" (Min./Max.); Driven End: 1/2" - 1 5/8".

◆ Normal dimension. Shaft end float which increases or decreases "E" by slight amounts is permissible.

★ 1" on driven end, 1 1/2" on motor end.

▲ Space required to loosen bushing with shortened hex key using screws as jack screws—no puller required.

**Keyways**—See tables below for Standard Keyways and Shallow Keyways

Keyways

#### Standard Keyways

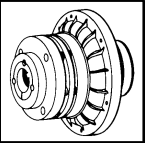
| Bore Range               | Keyway      |
|--------------------------|-------------|
| 1/2 - 9/16 Incl.         | 1/8 x 1/16  |
| over 9/16 - 7/8 Incl.    | 3/16 x 3/32 |
| over 7/8 - 1-1/4 Incl.   | 1/4 x 1/8   |
| over 1-1/4 - 1-3/8 Incl. | 5/16 x 5/32 |
| over 1-3/8 - 1-3/4 Incl. | 3/8 x 3/16  |
| over 1-3/4 - 2-1/4 Incl. | 1/2 x 1/4   |
| over 2-1/4 - 2-3/4 Incl. | 5/8 x 5/16  |
| over 2-3/4 - 3-1/4 Incl. | 3/4 x 3/8   |
| over 3-1/4 - 3-3/4 Incl. | 7/8 x 7/16  |
| over 3-3/4 - 4-1/2 Incl. | 1 x 1/2     |
| over 4-1/2 - 5-1/2 Incl. | 1-1/4 x 5/8 |
| over 5-1/2 - 6-1/2 Incl. | 1-1/2 x 3/4 |

#### Shallow Keyways

| Bush No.     | Bore Range     | Note: Key furnished for these exceptions only. |
|--------------|----------------|------------------------------------------------|
| 1008         | 15/16-1        |                                                |
| 1610<br>1615 | 1 9/16-1 11/16 |                                                |
| 2517         | 2 5/16-2 11/16 | Note: Key furnished for these exceptions only. |

|                                                        |                         |                                          |                                      |
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# SELECTION/DIMENSIONS



## FLEXIDYNE

### TYPE PH FLEXIDYNE COUPLINGS

This unique combination of PARA-FLEX coupling and FLEXIDYNE mechanism offers maximum protection for motors and driven machines. The FLEXIDYNE unit allows the motor to accelerate quickly and start the load smoothly while the PARA-FLEX coupling permits up to 1° angular misalignment, up to 1/16" parallel misalignment and 3/32" end float. Consequently, starting torque can be tailored to the driven load requirements while torsional and lateral vibration and shock loads are being absorbed or cushioned.

The driven end of the couplings uses TAPER-LOCK bushings only. However, the motor end is available bushed or bored-to-size. Bored-to-size flanges accommodate larger shafts than possible with bushed flanges. Smaller size flanges are reversible offering the H and F position from the same flange. A choice of H or F flanges is offered for size PX140. A speed drop cutout is furnished with 15116 and larger sizes.



| TAPER-LOCK Bushings |               |               |                  |               |
|---------------------|---------------|---------------|------------------|---------------|
| Cplg. Size          | For Mechanism |               | For Flange Assy. |               |
|                     | No.           | Avg. Wt. Lbs. | No.              | Avg. Wt. Lbs. |
| 987                 | 2517          | 2.8           | 1610             | .7            |
| 1196                | 2517          | 2.8           | 2012             | 1.4           |
| 15116               | 3030          | 7.4           | 2517             | 2.8           |
| D15116              | 3030          | 7.4           | 2517             | 2.8           |
| D15131              | 3030          | 7.4           | 2517             | 2.8           |
| 18172               | 3535          | 11.5          | 3535             | 11.5          |
| D18172              | 3535          | 11.5          | 3535             | 11.5          |

Note: For Keyway information see footnote next page.

### TYPE PH FLEXIDYNE COUPLINGS W/ TAPER-LOCK FLANGES

| Cplg. Size | Cplg. Less Bushings◆ | Items Req'd. for Complete Coupling ▲ |                                 |          |          |                      |                                 |       |                                |        |        |          |       |          |          |
|------------|----------------------|--------------------------------------|---------------------------------|----------|----------|----------------------|---------------------------------|-------|--------------------------------|--------|--------|----------|-------|----------|----------|
|            |                      | MECHANISM                            |                                 |          |          | TAPER-LOCK FLG. ASSY |                                 |       |                                |        |        | ELEMENT  |       |          |          |
|            |                      | Driven End Bore Range                |                                 | Part No. | Wt. Lbs. | Motor End Bore Range |                                 | Size  | Part Nos. for Respective Types |        |        | Wt. Lbs. | Size  | Part No. | Wt. lbs. |
|            |                      |                                      |                                 |          |          |                      |                                 |       | St'd. (Reversible)             | Type H | Type F |          |       |          |          |
| Wt. Lbs.   | Min.                 | Max.                                 |                                 |          | Min.     | Max.                 |                                 |       |                                |        |        |          |       |          |          |
| 987        | 46.7                 | 1/2                                  | 2 <sup>11</sup> / <sub>16</sub> | 309077†  | 40       | 1/2                  | 1 <sup>11</sup> / <sub>16</sub> | PX70  | 010603                         | .....  | .....  | 5.1      | PH87  | 011227   | 1.6      |
| 1196       | 65.5                 | 1/2                                  | 2 <sup>11</sup> / <sub>16</sub> | 311077   | 56       | 1/2                  | 2 <sup>1</sup> / <sub>8</sub>   | PX80  | 010604                         | .....  | .....  | 7.4      | PH96  | 011228   | 2.1      |
| 15116      | 137.5                | 15/16                                | 3 <sup>1</sup> / <sub>4</sub>   | 315073   | 120      | 1/2                  | 2 <sup>11</sup> / <sub>16</sub> | PX100 | 010606                         | .....  | .....  | 15.0     | PH116 | 011230   | 2.5      |
| D15116     | 184.5                | 15/16                                | 3 <sup>1</sup> / <sub>4</sub>   | 315074   | 167      | 1/2                  | 2 <sup>11</sup> / <sub>16</sub> | PX100 | 010606                         | .....  | .....  | 15.0     | PH116 | 011230   | 2.5      |
| D15131     | 175.7                | 15/16                                | 3 <sup>1</sup> / <sub>4</sub>   | 315075   | 150      | 1/2                  | 2 <sup>11</sup> / <sub>16</sub> | PX110 | 010607                         | .....  | .....  | 21.6     | PH131 | 011231   | 4.1      |
| 18172      | 314.2                | 13/16                                | 3 <sup>15</sup> / <sub>16</sub> | 318110   | 242      | 13/16                | 3 <sup>15</sup> / <sub>16</sub> | PX140 | .....                          | 011134 | 011154 | 64.0     | PH172 | 011234   | 8.2      |
| D18172     | 320.2                | 13/16                                | 3 <sup>15</sup> / <sub>16</sub> | 318400   | 248      | 13/16                | 3 <sup>15</sup> / <sub>16</sub> | PX140 | .....                          | 011134 | 011154 | 64.0     | PH172 | 011234   | 8.2      |

♦ When ordering bushings, specify bore and part number.

† Assembled-to-order. Consult DODGE for delivery.

▲ To facilitate order processing specify part numbers. In sizes 18172 and D18172, determine whether H or F Flange is required and order accordingly. Complete Coupling consists of (1) Mechanism, (1) Taper-Lock Flange Assembly, (1) Element and (2) Bushings.

### TYPE PH FLEXIDYNE COUPLINGS W/BORED-TO-SIZE FLANGES

| Cplg. Size | Coupling Less Bushings ♦ |            | BS FLANGE ASSEMBLY |            |          |          |                           |            |           |
|------------|--------------------------|------------|--------------------|------------|----------|----------|---------------------------|------------|-----------|
|            | Rgh. Bored               | Fin. Bored | Size               | Rgh. Bored |          |          | Fin. Bored w St'd. K.W. * |            |           |
|            |                          |            |                    | Bore ★     | Part No. | Wt. Lbs. | Motor End Bore Range ▼    | Wt. Lbs. ♦ | Set Screw |
|            | Wt. Lbs.                 | Wt. Lbs.   |                    |            |          |          |                           |            |           |
| 987        | 49.5                     | 47.3       | PX70BS             | None       | 010301   | 7.9      | 1/2-2 1/8                 | 5.7        | ■         |
| 1196       | 69.1                     | 66.3       | PX80BS             |            | 010302   | 11       | 1/2-2 9/16                | 8.2        |           |
| 15116      | 147.5                    | 139.5      | PX100BS            |            | 010304   | 25       | 1/2-3 1/4                 | 17         |           |
| D15116     | 194.5                    | 186.5      | PX100BS            |            | 010304   | 25       | 1/2-3 1/4                 | 17         |           |
| D15131     | 189.1                    | 176.1      | PX110BS            |            | 010305   | 35       | 1/2-3 15/16               | 22         |           |
| 18172      | 336.2                    | 311.2      | PX140BS            | 2 1/4      | 010530   | 86       | 2 3/4-4 1/2               | 61         | ♣         |
| D18172     | 342.2                    | 317.2      | PX140BS            | 2 1/4      | 010530   | 86       | 2 3/4-4 1/2               | 61         |           |

Note: Complete Coupling consists of (1) Mechanism, (1) BS Flange Assembly, (1) Element and (1) Bushing.

♥ Bored per order—Sizes PX70 thru PX110 are furnished with a clearance fit from nominal bores (up to 2" +.000-.000, over 2" +.0015 -.0000). In PX140 size, tolerance will be applied to custom bores (up to 3" +.000 -.001, over 3" thru 6" +.0000 -.0015; over 6" +.000 -.002). Largest Bore listed should be considered as maximum.

■ One furnished over keyway.

♣ Not furnished unless specified on order.

\* Standard keyway is the same as shown on page PT3-11. For shallow keyway exceptions, see table at right:

NOTE: Taper-Lock bushings sold separately

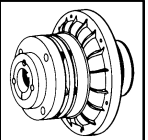
♦ Approximate weight with maximum bore.

★ -.010 to -.015, no keyway.

| BS Fig. Size | Bore Range      | Keyway     | NOTE—Key furnished for these exceptions only. |
|--------------|-----------------|------------|-----------------------------------------------|
| PX70         | 2-2 1/8         | 1/2 x 1/8  |                                               |
| PX80         | 2-3/8-2-9/16    | 5/8 x 3/16 |                                               |
| PX100        | 3-1/16-3-1/4    | 3/4 x 3/16 |                                               |
| PX110        | 3-11/16-3-3/4   | 7/8 x 1/4  |                                               |
|              | 3-13/16-3-15/16 | 1 x 1/4    |                                               |

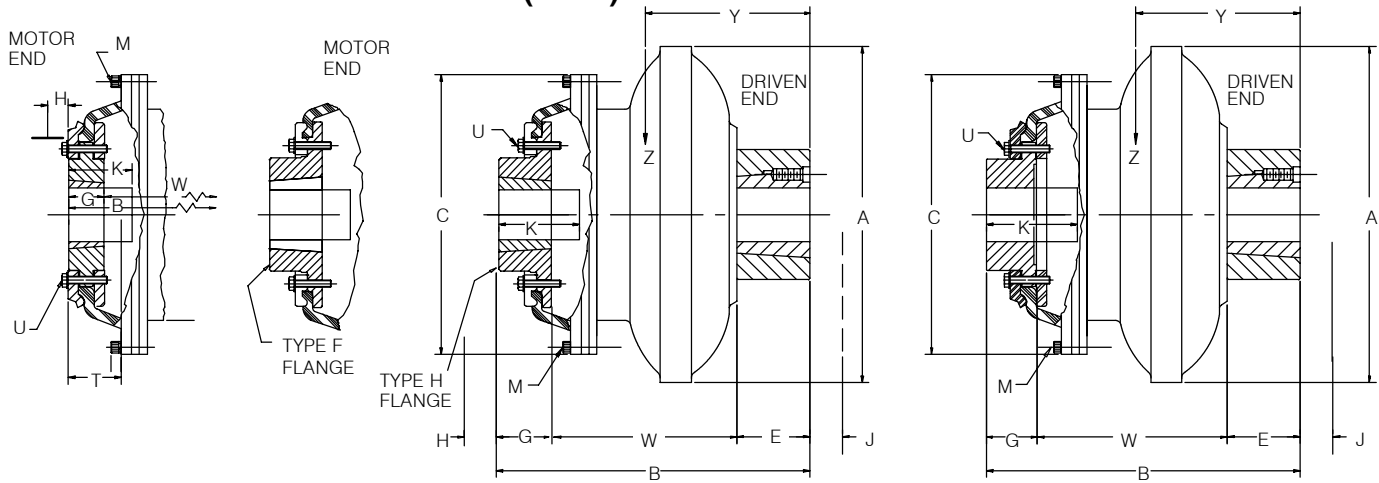
|                                                        |                         |                                          |                                      |
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# SELECTION/DIMENSIONS



## FLEXIDYNE

### TYPE PH FLEXIDYNE COUPLINGS (cont.)



| Coupling<br>Size | Max.<br>RPM              | A     | B                           |                             | C                                | E<br>♣ | G                           |                             | H†                       | J†   | K▲                          |                             | M◆<br>(No.) & Size of<br>Screws |        |                  |
|------------------|--------------------------|-------|-----------------------------|-----------------------------|----------------------------------|--------|-----------------------------|-----------------------------|--------------------------|------|-----------------------------|-----------------------------|---------------------------------|--------|------------------|
|                  |                          |       | TAPER-<br>LOCK<br>Flange    | Bored-<br>to-Size<br>Flange |                                  |        | TAPER-<br>LOCK<br>Flange    | Bored-<br>to-Size<br>Flange |                          |      | TAPER-<br>LOCK<br>Flange    | Bored-<br>To-Size<br>Flange |                                 |        |                  |
| 987              | 1800                     | 9.50  | 8.75                        | 9.75                        | 9.44                             | 1.75   | 1.00                        | 1.75                        | 1.06                     | 1.63 | 3.19                        | 4.19                        | (8) 5/16-18 x 1-1/4             |        |                  |
| 1196             | 1800                     | 11.25 | 10.06                       | 11.19                       | 10.31                            | 1.75   | 1.25                        | 2.00                        | 1.38                     | 1.38 | 4.38                        | 5.50                        | (6) 3/8-16 x 1-1/2              |        |                  |
| 15116            | 1800                     | 14.50 | 12.31                       | 13.81                       | 12.31                            | 3.00   | 1.75                        | 2.63                        | 1.63                     | 2.06 | 4.44                        | 5.94                        | (8) 3/8-16 x 1-1/2              |        |                  |
| D15116           | 1800                     | 14.50 | 13.88                       | 15.31                       | 12.31                            | 3.00   | 1.75                        | 2.63                        | 1.63                     | 2.06 | 4.44                        | 5.94                        | (8) 3/8-16 x 1-1/2              |        |                  |
| D15131           | 1800                     | 14.50 | 14.63                       | 16.38                       | 13.81                            | 3.00   | 1.75                        | 3.00                        | 1.63                     | 2.06 | 5.19                        | 6.94                        | (8) 3/8-16 x 2                  |        |                  |
| 18172            | 1500                     | 18.00 | 16.31                       | 17.44                       | 18.31                            | 3.50   | 3.50                        | 3.88                        | 2.63                     | 2.63 | 7.50                        | 8.50                        | (8) 1/2-13 x 2                  |        |                  |
| D18172           | 1500                     | 18.00 | 17.81                       | 18.94                       | 18.31                            | 3.50   | 3.50                        | 3.88                        | 2.63                     | 2.63 | 7.31                        | 8.50                        | (8) 1/2-13 x 2                  |        |                  |
| Coupling<br>Size | T                        |       |                             |                             | U**<br>No. and Size<br>of Screws |        |                             |                             | W■                       |      |                             |                             | X                               | Y<br>♣ | Z<br>♠<br>(Lbs.) |
|                  | TAPER-<br>LOCK<br>Flange |       | Bored-<br>to-Size<br>Flange |                             | TAPER-<br>LOCK<br>Flange         |        | Bored-<br>to-Size<br>Flange |                             | TAPER-<br>LOCK<br>Flange |      | Bored-<br>to-Size<br>Flange |                             |                                 |        |                  |
| 987              | 1.59                     |       | 1.59                        |                             | (5) 5/16-18 x 1-1/2              |        | (5) 5/16-18 x 1-1/2         |                             | 5.94                     |      | 6.25                        |                             | ..                              | 3.88   | 43.00            |
| 1196             | 1.91                     |       | 1.91                        |                             | (6) 5/16-18 x 1-1/2              |        | (6) 5/16-18 x 1-1/2         |                             | 7.06                     |      | 7.44                        |                             | ..                              | 4.13   | 66.00            |
| 15116            | 2.09                     |       | 2.09                        |                             | (6) 3/8-16 x 1-3/4               |        | (6) 3/8-16 x 1-3/4          |                             | 7.56                     |      | 8.19                        |                             | ..                              | 5.50   | 107.00           |
| D15116           | 2.09                     |       | 2.09                        |                             | (6) 3/8-16 x 1-3/4               |        | (6) 3/8-16 x 1-3/4          |                             | 9.13                     |      | 9.69                        |                             | ..                              | 6.50   | 153.00           |
| D15131           | 2.56                     |       | 2.56                        |                             | (6) 3/8-16 x 2                   |        | (6) 3/8-16 x 2              |                             | 9.88                     |      | 10.38                       |                             | ..                              | 6.50   | 153.00           |
| 18172            | 3.63                     |       | 3.00                        |                             | (8) 1/2-13 x 2-1/2               |        | (8) 1/2-13 x 2-1/4          |                             | 9.31                     |      | 10.06                       |                             | 0.19                            | 6.75   | 209.00           |
| D18172           | 3.63                     |       | 3.00                        |                             | (8) 1/2-13 x 2-1/2               |        | (8) 1/2-13 x 2-1/4          |                             | 10.81                    |      | 11.56                       |                             | 0.19                            | 6.69   | 284.00           |

- ♣ Driven shaft should not extend into coupling beyond dimension E.
- † Space required to loosen bushing with shortened hex key using screws as jackscrew—no puller required.
- ▲ Motor shaft may extend into coupling beyond dimension G but not beyond dimension K.
- \* Reversible flanges permit Type H or F from the same flange.
- Normal distance between shafts. End float which increases or decreases W by slight amounts is permissible.
- ♣ Distance from driven end to center of gravity of driven section of coupling.
- ♠ Weight of driven section with maximum bore and flow charge.

- ◆ Socket head cap screw.
  - \*\* Hex head cap screw, SAE Grade 8; Optional: Nickel plated Grade 8 screws
- Keyways—Standard Keyways are shown on page PT3-11. For Shallow keyway exceptions see table below.

| Bush. No. | Bore Range       | NOTE—Key furnished for these exceptions only. See TAPER-LOCK section for Keyway information. |
|-----------|------------------|----------------------------------------------------------------------------------------------|
| 1610      | 1-9/16 - 1-5/8   |                                                                                              |
| 2012      | 1-15/16 - 2-1/8  |                                                                                              |
| 2517      | 2-5/16 - 2-11/16 |                                                                                              |
| 3030      | 2-13/16 - 3-1/4  |                                                                                              |
| 3535      | 3-5/16 - 3-15/16 |                                                                                              |

|                                                        |                         |                                          |                                      |
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