



Magnaloy is the original lightweight, heavy-duty flexible drive coupling. Light weight magnesium construction makes Magnaloy couplings 76% lighter than cast iron and 36% lighter than aluminum units... and they're stronger than either!

The benefits are many... Reduced loads on bearings, shafts and pumps, for longer component life. Easier handling and installation. Rust proof and corrosion resistant.

Magnaloy's close machining tolerances (TIR of .002") assures vibration - free operation and easy, accurate alignment without need for special tools. Solid magnesium alloy permanent mold castings are heat treated and offer the highest strength-to-weight ratio available.

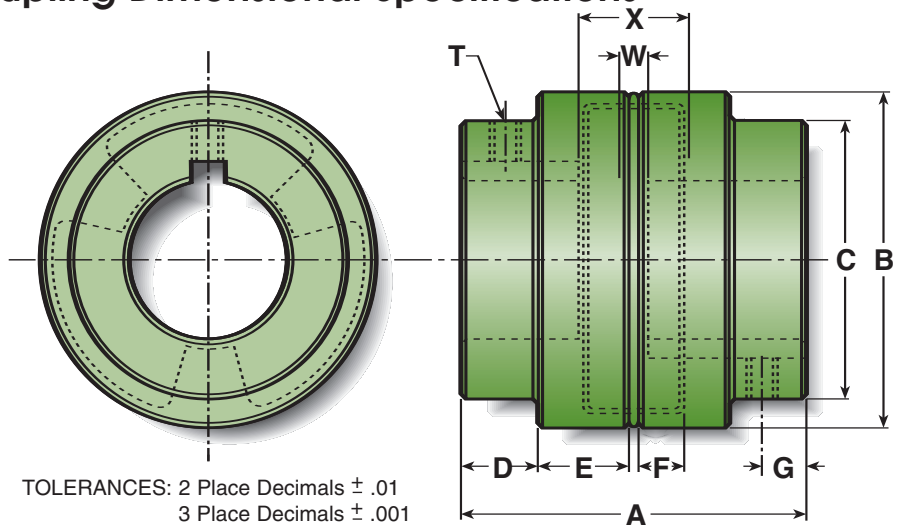
## Coupling Performance Specifications

| Coupling Model | Maximum Bore | Wr <sup>2</sup> lb.- ft. <sup>2</sup> | Insert Number | Rated Torque lb.- in. | Torsional Rigidity lb-in/Deg | Horse Power Rating@ |          |          |
|----------------|--------------|---------------------------------------|---------------|-----------------------|------------------------------|---------------------|----------|----------|
|                |              |                                       |               |                       |                              | 100 rpm             | 1200 rpm | 1800 rpm |
| 100            | 1-1/8        | .0046                                 | 170N          | 340.7                 | 42                           | .55                 | 6.5      | 9.8      |
|                |              |                                       | 170U          | 511.0                 | 53                           | .82                 | 9.8      | 14.7     |
|                |              |                                       | 170H          | 1,022.1               | 182                          | 1.65                | 19.8     | 29.7     |
| 200            | 1-3/8        | .0068                                 | 270N          | 398.3                 | 55                           | .64                 | 7.6      | 11.5     |
|                |              |                                       | 270U          | 597.4                 | 68                           | .96                 | 11.5     | 17.2     |
|                |              |                                       | 270H          | 1,194.9               | 234                          | 1.92                | 23.0     | 34.5     |
| 300            | 1-5/8        | .022                                  | 370N          | 701.4                 | 81                           | 1.12                | 13.5     | 20.2     |
|                |              |                                       | 370U          | 1,052.1               | 148                          | 1.68                | 20.2     | 30.3     |
|                |              |                                       | 370H          | 2,104.2               | 336                          | 3.36                | 40.4     | 60.6     |
| 400            | 1-7/8        | .031                                  | 470N          | 1,056.3               | 138                          | 1.69                | 20.3     | 30.4     |
|                |              |                                       | 470U          | 1,584.5               | 310                          | 2.5                 | 30.4     | 45.6     |
|                |              |                                       | 470H          | 3,168.9               | 488                          | 5.1                 | 60.8     | 91.3     |
| 500            | 2-3/8        | .071                                  | 570N          | 2,194.8               | 314                          | 3.5                 | 42.1     | 63.2     |
|                |              |                                       | 570U          | 3,292.2               | 695                          | 5.3                 | 63.2     | 94.8     |
|                |              |                                       | 570H          | 6,584.4               | 1,571                        | 10.5                | 126.4    | 189.6    |
| 600            | 2-5/8        | .16                                   | 670N          | 4,946.7               | 676                          | 7.9                 | 94.9     | 142.5    |
|                |              |                                       | 670U          | 7,420.1               | 1,510                        | 11.9                | 142.5    | 213.7    |
|                |              |                                       | 670H          | 14,840.1              | 2,960                        | 23.7                | 284.9    | 427.4    |
| 700            | 2-7/8        | .34                                   | 770N          | 11,639.8              | 1,805                        | 18.6                | 223.5    | 335.2    |
|                |              |                                       | 770U          | 17,459.7              | 2,104                        | 27.9                | 335.2    | 502.8    |
|                |              |                                       | 770H          | 29,099.5              | -                            | 46.5                | 558.75   | 838.0    |
| 800            | 3-7/8        | .95                                   | 870N          | 21,889.4              | 3,680                        | 35.0                | 420.3    | 630.4    |
|                |              |                                       | 870U          | 32,834.1              | -                            | 52.5                | 630.4    | 945.6    |
|                |              |                                       | 870H          | 47,062.2              | -                            | 75.2                | 903.0    | 1,354.5  |
| 900            | 4-3/4        | 4.20                                  | 970N          | 47,842.3              | 8,428                        | 76.5                | 918.6    | 1,377.9  |
|                |              |                                       | 970U          | 71,763.5              | -                            | 114.8               | 1,377.9  | 2,066.8  |

## Magnaloy Coupling Dimensional Specifications

### Models 100, 200, 300, 400

|   | 100    | 200     | 300     | 400    |
|---|--------|---------|---------|--------|
| A | 2.54   | 3.10    | 3.58    | 4.24   |
| B | 2.600  | 2.900   | 3.450   | 3.980  |
| C | 2.00   | 2.25    | 2.90    | 3.05   |
| D | 0.56   | 0.68    | 0.78    | 1.00   |
| E | 0.68   | 0.84    | 0.96    | 1.06   |
| F | 0.42   | 0.42    | 0.44    | 0.54   |
| G | 0.31   | 0.43    | 0.56    | 0.73   |
| W | 1/16   | 1/16    | 1/16    | 1/16   |
| X | 0.90   | 0.90    | 0.98    | 1.20   |
| T | 1/4-20 | 5/16-18 | 5/16-18 | 3/8-16 |

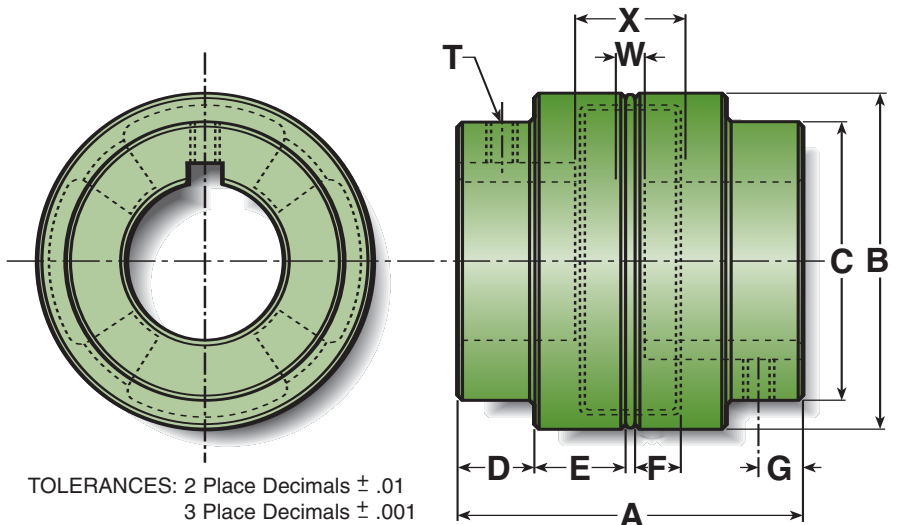


### Model 500

|   | 500    |
|---|--------|
| A | 4.67   |
| B | 4.800  |
| C | 4.00   |
| D | 1.04   |
| E | 1.23   |
| F | 0.64   |
| G | 0.70   |
| W | 1/16   |
| X | 1.41   |
| T | 3/8-16 |

X\*: Maximum Space between shaft ends to allow full shaft engagement in Hub Bore.

W\*: Minimum spacing between shaft ends.



\* Given for reference only.

### Models 600, 700, 800, 900

|   | 600    | 700    | 800    | 900    |
|---|--------|--------|--------|--------|
| A | 5.98   | 6.99   | 7.99   | 10.15  |
| B | 5.975  | 6.900  | 8.600  | 11.400 |
| C | 4.50   | 5.19   | 7.00   | 8.30   |
| D | 1.60   | 2.08   | 2.25   | 2.75   |
| E | 1.33   | 1.32   | 1.62   | 2.20   |
| F | 0.62   | 0.89   | 1.00   | 1.32   |
| G | 1.13   | 1.13   | 1.58   | 1.88   |
| W | 1/16   | 1/16   | 1/16   | 1/16   |
| X | 1.36   | 1.97   | 2.25   | 2.89   |
| T | 3/8-16 | 1/2-13 | 1/2-13 | 3/4-10 |



## Standard Bore and Keyway Combinations

| Magnaloy "Standard" Bore & Key Combinations |               |              |     |     |     |     |     |     |     |     |     |     |
|---|---------------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Model Code                                  | Bore/Key Code | Model →      |     | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|   |               | Bore         | Key |     |     |     |     |     |     |     |     |     |
| M   | 01203         | 3/8 x 3/32   |     | •   | •   |     |     |     |     |     |     |     |
| M   | 01403         | 7/16 x 3/32  |     | •   | •   |     |     |     |     |     |     |     |
| M   | 01404         | 7/16 x 1/8   |     | •   | •   |     |     |     |     |     |     |     |
| M   | 01604         | 1/2 x 1/8    |     | •   | •   | •   |     |     |     |     |     |     |
| M   | 01804         | 9/16 x 1/8   |     | •   | •   | •   |     |     |     |     |     |     |
| M   | 02005         | 5/8 x 5/32   |     | •   | •   | •   |     |     |     |     |     |     |
| M   | 02006         | 5/8 x 3/16   |     | •   | •   | •   |     |     |     |     |     |     |
| M   | 02206         | 11/16 x 3/16 |     | •   | •   | •   | •   |     |     |     |     |     |
| M   | 02404         | 3/4 x 1/8    |     | •   | •   | •   |     |     |     |     |     |     |
| M   | 02406         | 3/4 x 3/16   |     | •   | •   | •   | •   | •   |     |     |     |     |
| M   | 02806         | 7/8 x 3/16   |     | •   | •   | •   | •   | •   | •   |     |     |     |
| M   | 02808         | 7/8 x 1/4    |     | •   | •   | •   | •   | •   |     |     |     |     |
| M   | 03008         | 15/16 x 1/4  |     | •   | •   | •   |     |     |     |     |     |     |
| M   | 10006         | 1 x 3/16     |     | •   | •   | •   | •   | •   |     |     |     |     |
| M   | 10008         | 1 x 1/4      |     | •   | •   | •   | •   | •   |     |     |     |     |
| M   | 10408         | 1 1/8 x 1/4  |     | •   | •   | •   | •   | •   |     |     |     |     |
| M   | 10608         | 1 3/16 x 1/4 |     |     |     | •   |     | •   |     |     |     |     |
| M   | 10808         | 1 1/4 x 1/4  |     |     | •   | •   | •   | •   |     |     |     |     |
| M   | 10810         | 1 1/4 x 5/16 |     |     | •   | •   | •   | •   | •   |     |     |     |
| M   | 11210         | 1 3/8 x 5/16 |     |     | •   | •   | •   | •   | •   |     |     |     |
| M   | 11212         | 1 3/8 x 3/8  |     |     |     | •   |     |     |     |     |     |     |
| M   | 11412         | 1 7/16 x 3/8 |     |     |     | •   | •   | •   |     |     |     |     |
| M   | 11610         | 1 1/2 x 5/16 |     |     |     |     | •   | •   | •   |     |     |     |
| M   | 11612         | 1 1/2 x 3/8  |     |     |     | •   | •   | •   | •   | •   |     |     |
| M   | 12012         | 1 5/8 x 3/8  |     |     |     | •   | •   | •   | •   | •   |     |     |
| M   | 12412         | 1 3/4 x 3/8  |     |     |     |     | •   | •   | •   | •   |     |     |

| Magnaloy "Standard" Bore & Key Combinations |               |               |     |     |     |     |     |     |     |     |     |     |
|---|---------------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Model Code                                  | Bore/Key Code | Model →       |     | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 |
|   |               | Bore          | Key |     |     |     |     |     |     |     |     |     |
| M   | 12414         | 1 3/4 x 7/16  |     |     |     |     |     | •   | •   | •   | •   | •   |
| M   | 12816         | 1 7/8 x 1/2   |     |     |     |     |     | •   | •   | •   | •   | •   |
| M   | 13016         | 1 15/16 x 1/2 |     |     |     |     |     |     | •   | •   |     |     |
| M   | 20016         | 2 x 1/2       |     |     |     |     |     |     | •   | •   | •   | •   |
| M   | 20416         | 2 1/8 x 1/2   |     |     |     |     |     |     | •   | •   | •   | •   |
| M   | 20816         | 2 1/4 x 1/2   |     |     |     |     |     |     | •   | •   | •   | •   |
| M   | 21220         | 2 3/8 x 5/8   |     |     |     |     |     |     | •   | •   | •   | •   |
| M   | 21620         | 2 1/2 x 5/8   |     |     |     |     |     |     |     | •   | •   | •   |
| M   | 22020         | 2 5/8 x 5/8   |     |     |     |     |     |     |     | •   | •   | •   |
| M   | 22420         | 2 3/4 x 5/8   |     |     |     |     |     |     |     |     | •   | •   |
| M   | 22824         | 2 7/8 x 3/4   |     |     |     |     |     |     |     |     | •   | •   |
| M   | 30024         | 3 x 3/4       |     |     |     |     |     |     |     |     |     | •   |
| M   | 30824         | 3 1/4 x 3/4   |     |     |     |     |     |     |     |     |     | •   |
| M   | 31228         | 3 3/8 x 7/8   |     |     |     |     |     |     |     |     |     | •   |
| M   | 31628         | 3 1/2 x 7/8   |     |     |     |     |     |     |     |     |     | •   |
| M   | 32028         | 3 5/8 x 7/8   |     |     |     |     |     |     |     |     |     | •   |
| M   | 32428         | 3 3/4 x 7/8   |     |     |     |     |     |     |     |     |     | •   |
| M   | 32832         | 3 7/8 x 1     |     |     |     |     |     |     |     |     |     | •   |
| M   | 40032         | 4 x 1         |     |     |     |     |     |     |     |     |     | •   |
| M   | 40432         | 4 1/8 x 1     |     |     |     |     |     |     |     |     |     | •   |
| M   | 40832         | 4 1/4 x 1     |     |     |     |     |     |     |     |     |     | •   |
| M   | 41232         | 4 3/8 x 1     |     |     |     |     |     |     |     |     |     | •   |
| M   | 41632         | 4 1/2 x 1     |     |     |     |     |     |     |     |     |     | •   |
| M   | 41640         | 4 1/2 x 1 1/4 |     |     |     |     |     |     |     |     |     | •   |
| M   | 42040         | 4 5/8 x 1 1/4 |     |     |     |     |     |     |     |     |     | •   |
| M   | 42440         | 4 3/4 x 1 1/4 |     |     |     |     |     |     |     |     |     | •   |

Shaded Area: AGMA semi-standard bore key combinations.

**Part Number Usage:** Magnaloy Coupling Hub part numbers may be specified using the following format: Start with letter "M" designating Magnaloy, followed by 3 digit Model Code (100, 200, etc.), then the specific 5 digit Bore Key Code.

**Example:** Model 500 hub with a 1 3/8 bore and 5/16 keyway would be specified as: M50011210 - No bore hubs are designated as 'R' code, ie: M500R.

### Bore Tolerances

| Over | Include | Tolerance        |
|------|---------|------------------|
| --   | 1       | +0.0008/ +0.0003 |
| 1    | 2       | +0.0013/ +0.0005 |
| 2    | 3       | +0.0018/ +0.0008 |
| 3    | 4       | +0.0020/ +0.0010 |
| 4    | 5       | +0.0023/ +0.0010 |

### Additional Coupling Specifications

| Model Number                                   | 100   | 200   | 300   | 400   | 500   | 600   | 700   | 800   | 900   |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Bore                                   | 1-1/8 | 1-3/8 | 1-5/8 | 1-7/8 | 2-3/8 | 2-5/8 | 2-7/8 | 3-7/8 | 4-3/4 |
| Complete Coupling Approx. Wght.<br>(Solid Hub) | 3/4   | 1     | 2     | 3     | 4     | 7     | 12    | 18    | 38    |
| Number of Drive Lugs                           | 3     | 3     | 3     | 3     | 4     | 6     | 6     | 6     | 6     |
| Hub Movement for Insert Removal                | .74   | .74   | .75   | .98   | 1.12  | 1.02  | 1.50  | 1.63  | 2.27  |
| Basic Insert Number                            | 170   | 270   | 370   | 470   | 570   | 670   | 770   | 870   | 970   |