



Magnaloy couplings are available with a variety of special features which include splined bores. The "Splined Coupling Specifications" chart on page 7 shows several "in-house" splines available for quick delivery. Many additional splined bores are available upon contacting the factory, including straight side 'PTO' type splines and metric splines.



The Clamp-Type Coupling utilizes the basic Magnaloy coupling with the addition of the clamp feature. Developed to compensate for variations in spline formation methods and tolerances. Assures centering of the coupling and positive retention on the shaft. The clamp feature is suggested for all splined couplings, but is also available in smooth bored and keyed models.



Magnaloy's Steel Bushed Splined Bore* Coupling combines all the design and lightweight features of the Magnaloy Coupling with the added spline tooth strength and wear resistance of steel. Under normal conditions the standard "Splined Bore" coupling will perform satisfactorily and the addition of the "Clamp Feature" compensates for various fit conditions. When heavy cyclic loads, reverse loading and high torque loads exist in combination with fit variations, spline tooth failures and fretting can be corrected by utilizing Magnaloy's steel bushed coupling. Of course, to achieve optimum benefits, Magnaloy's clamp feature is recommended - assuring accurate centering and positive retention of the coupling on the shaft.

*Although the steel bushing feature was designed primarily for spline bores, it is also available smooth bored and keyed.

Splined Coupling Specifications

| Spline Size | | | Pressure Angle (Degrees) | SAE Design | Major Diameter (Inches) | Std. Coupling Available Model Sizes | Steel Bushed Coupling | |
|-----------------|-------|-------------|--------------------------|------------|-------------------------|-------------------------------------|-----------------------|-----------------------|
| Number of Teeth | Pitch | Spline Code | | | | | Bushing ϕ | Available Model Sizes |
| 9 | 16/32 | 0916 | 30° | A | .625 | 100-900 | 1.250 | 200-900 |
| 13 | 8/16 | 1308 | 30° | D,E | 1.750 | 400-900 | 2.625 | 600-900 |
| 13 | 16/32 | 1316 | 30° | B | .875 | 100-900 | 1.500 | 300-900 |
| 14 | 12/24 | 1412 | 30° | C | 1.250 | 200-900 | 2.250 | 500-900 |
| 15 | 8/16 | 1508 | 30° | F | 2.000 | 500-900 | 3.500 | 800-900 |
| 15 | 16/32 | 1516 | 30° | BB | 1.000 | 100-900 | 1.750 | 400-900 |
| 17 | 12/24 | 1712 | 30° | CC | 1.500 | 300-900 | 2.250 | 500-900 |
| 21 | 16/32 | 2116 | 30° | | 1.375 | 300-900 | 2.250 | 500-900 |
| 23 | 16/32 | 2316 | 30° | | 1.500 | 300-900 | 2.250* | 500-900 |
| 27 | 16/32 | 2716 | 30° | | 1.750 | 400-900 | 2.625 | 600-900 |
| 40 | 16/32 | 4016 | 30° | | 2.562 | 600-900 | 3.875 | 800-900 |

*NOTE: With Model 600-900 Bushing O.D. is 2.625

Spline Type Identifier Code – A = Spline B = Steel Bushing Spline C = Clamp Type

Part Number Usage: Magnaloy Splined Coupling part numbers may be specified using the following format: Start with letter 'M' designating Magnaloy, follow with 3 digit model code (100, 200, etc.), next use single letter Spline Type Identifier Code ('A' for regular spline or 'B' for steel bushing) then the specific 4 digit spline code.

If a clamp type coupling is specified - use the letter code 'C' after the spline code.

Example: Model 300 hub with 13 tooth 16/32 splined bore, M300A1316; same as above with steel bushing, M300B1316; same as above with steel bushing and clamp, M300B1316C.

Clamp Type Coupling Specifications

| Coupling Model | Bolt Location | | U | |
|----------------|---------------|------|-----------|------------------|
| | Z | Y | Bolt Size | Torque Spec. |
| 100 | .31 | .68 | 1/4-20 | 130-140 in. lbs. |
| 200 | .43 | .75 | 1/4-20 | 130-140 in. lbs. |
| 300 | .47 | .95 | 5/16-18 | 210-220 in. lbs. |
| 400 | .69 | 1.06 | 5/16-18 | 210-220 in. lbs. |
| 500 | .72 | 1.25 | 3/8-16 | 300-310 in. lbs. |
| 600 | 1.13 | 1.50 | 7/16-14 | 35-36 ft. lbs. |
| 700 | 1.13 | 1.75 | 7/16-14 | 35-36 ft. lbs. |
| 800 | 1.44 | 2.56 | 1/2-13 | 49-50 ft. lbs. |
| 900* | .75 & 2.19 | 3.00 | 3/4-10 | 100-110 ft. lbs. |

* Model 900 utilizes two bolt clamp design.

