

MINIATURE BALL COUPLINGS



HIGH-SPEED
ACCOMMODATES AXIAL MOTION
UP TO 15° ANGULAR OFFSET

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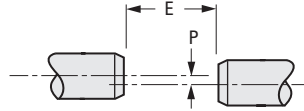
> MATERIAL:

End Sections - 303 Stainless Steel
Center Section - Nylon or 303 Stainless Steel



> FEATURES:

Allows angular and lateral misalignment and axial motion.
A constant-velocity assembly.
Exhibits low friction loss.
Has a low moment of inertia.
Will operate well at high speeds.
Units with nylon centers provide electrical isolation between shafts.

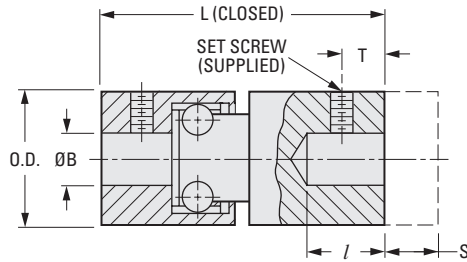


> SPECIFICATIONS:

Low Backlash: 1° - 2°
Lubrication: Molybdenum disulphide and grease

Units with other bores and/or with greater axial travel available on special order.

◇ Angular offset under max. operating conditions is 5°.



| MISALIGNMENT VS. SPEED & TORQUE | | |
|---------------------------------|-----------|-------------------|
| Angular Misalignment | Speed rpm | Percentage Torque |
| 5° | 20000 | — |
| 6° - 10° | 10000 | 50% |
| 11° - 15° | 5000 | 66% |

| MAXIMUM OPERATING CONDITIONS ◇ | | | | | |
|--------------------------------|----------------|------------------------|-----------------------|---------------------|------------------------|
| O.D. | Torque ozf in. | | P Max. Lateral Offset | S Max. Axial Motion | E Axial Shaft Distance |
| | Nylon Center | Stainless Steel Center | | | |
| 7/32 | 25 | 100 | .02 | 1/8 | 3/8 |
| 5/16 | 50 | 200 | .03 | 1/8 | 13/32 |
| 7/16 | 150 | 600 | .05 | 1/8 | 1/2 |
| 9/16 | 400 | 1600 | .07 | 1/8 | 11/16 |
| 1 | 800 | 3200 | .07 | 1/8 | 13/16 |

INCH COMPONENT

| Catalog Number | | O.D. | B Bore +.001 -.000 (Typ) | l Depth of B (Typ) | L Closed | Set Screw | |
|-----------------|------------------------|------|--------------------------|--------------------|----------|-----------|------------|
| Nylon Center | Stainless Steel Center | | | | | T Δ (Typ) | Size (Typ) |
| — | S58PY5-MJC0207 | 7/32 | .0625 | 9/64 | 5/8 | .06 | #2-56 |
| — | S58PY5-MJC0307 | 7/32 | .0938 | 9/64 | 5/8 | .06 | #2-56 |
| — | S58PY5-MJC0407 | 7/32 | .125 | 9/64 | 5/8 | .06 | #2-56 |
| S58PZ5-MJC0310 | S58PY5-MJC0310 | 5/16 | .0938 | 5/32 | 23/32 | .08 | #2-56 |
| S58PZ5-MJC0410 | S58PY5-MJC0410 | 5/16 | .125 | 5/32 | 23/32 | .08 | #2-56 |
| S58PZ5-MJC0414 | S58PY5-MJC0414 | 7/16 | .125 | 3/16 | 7/8 | .11 | #4-40 |
| S58PZ5-MJC0614 | S58PY5-MJC0614 | 7/16 | .1875 | 3/16 | 7/8 | .11 | #4-40 |
| S58PZ5-MJC0814 | S58PY5-MJC0814 | 7/16 | .250 | 3/16 | 7/8 | .11 | #4-40 |
| S58PZ5-MJC0818 | S58PY5-MJC0818 | 9/16 | .250 | 5/16 | 1-5/16 | .16 | #10-32 |
| S58PZ5-MJC1018 | S58PY5-MJC1018 | 9/16 | .3125 | 5/16 | 1-5/16 | .16 | #10-32 |
| S58PZ5-MJC1218 | S58PY5-MJC1218 | 9/16 | .375 | 5/16 | 1-5/16 | .16 | #10-32 |
| *S58PZ5-MJC1232 | *S58PY5-MJC1232 | 1 | .375 | 17/32 | 1-7/8 | .25 | 1/4-20 |
| *S58PZ5-MJC1632 | *S58PY5-MJC1632 | 1 | .500 | 17/32 | 1-7/8 | .25 | 1/4-20 |
| *S58PZ5-MJC2032 | *S58PY5-MJC2032 | 1 | .625 | 17/32 | 1-7/8 | .25 | 1/4-20 |

* These couplings utilize four ball races for smoother operation and larger torque capacity.

Δ Angular relationship between tapped holes may vary freely.

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