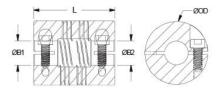




PCMR22-8-5-SS

Ruland PCMR22-8-5-SS, 8mm x 5mm Four Beam Coupling, Stainless Steel, Clamp Style, 22.2mm OD, 27.0mm Length





Description

Ruland PCMR22-8-5-SS is a clamp style four beam coupling with 8mm x 5mm bores, 22.2mm OD, and 27.0mm length. It is machined from a single piece of material and feature two sets of two spiral cuts. This gives it higher torque capacity, lower windup, and larger body sizes than single beam couplings. PCMR22-8-5-SS is zero-backlash and has a balanced design for reduced vibration at high speeds of up to 6,000 RPM. This four beam spiral coupling is zero-backlash and has a balanced design for reduced vibration at high speeds of up to 6,000 RPM. All hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. PCMR22-8-5-SS is made from 303 stainless steel for increased torque capacity. It is machined from bar stock that is sourced exclusively from North American mills and RoHS3 and REACH compliant. PCMR22-8-5-SS is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

| 2.7 mm 2.2 mm 7.0 mm 3 5 mm 1 Nm 62 Nm 25 Nm 49 Nm 19 Deg/Nm | Small Bore (B2) B2 Max Shaft Penetration Bore Tolerance Recommended Shaft Tolerance Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment Axial Motion | 5 mm 12.7 mm +0.025 mm / -0.000 mm +0.000 mm / -0.013 mm Alloy Steel Black Oxide 2 ea 3° 0.20 mm |
|---|--|--|
| 2.2 mm 7.0 mm 3 5 mm 1 Nm 62 Nm 25 Nm 49 Nm 19 Deg/Nm | Bore Tolerance Recommended Shaft Tolerance Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment | +0.025 mm / -0.000 mm +0.000 mm / -0.013 mm Alloy Steel Black Oxide 2 ea 3° 0.20 mm |
| 7.0 mm 3 5 mm 1 Nm 62 Nm 25 Nm 49 Nm 19 Deg/Nm | Recommended Shaft Tolerance Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment | +0.000 mm / -0.013 mm Alloy Steel Black Oxide 2 ea 3° 0.20 mm |
| 3 5 mm 1 Nm 62 Nm 25 Nm 49 Nm 19 Deg/Nm | Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment | Alloy Steel Black Oxide 2 ea 3° 0.20 mm |
| 5 mm 1 Nm 62 Nm 25 Nm 49 Nm 19 Deg/Nm | Screw Finish Number of Screws Angular Misalignment Parallel Misalignment | Black Oxide 2 ea 3° 0.20 mm |
| 1 Nm 62 Nm 25 Nm 49 Nm 19 Deg/Nm | Number of Screws Angular Misalignment Parallel Misalignment | 2 ea 3° 0.20 mm |
| 62 Nm 25 Nm 49 Nm 19 Deg/Nm | Angular Misalignment Parallel Misalignment | 3° 0.20 mm |
| 25 Nm 49 Nm 19 Deg/Nm | Parallel Misalignment | 0.20 mm |
| 49 Nm 19 Deg/Nm | | |
| 19 Deg/Nm | Axial Motion | |
| • | | 0.13 mm |
| | Moment of Inertia | 4.594 x10 ⁻⁶ kg-m ² |
| 000 RPM | Full Bearing Support Required? | Yes |
| es | Balanced Design | Yes |
| <u>W:BT-1R-1/4-18.3</u> | Recommended Hex Key | Metric Hex Keys |
| ype 303 Austenitic, Non-Magnetic ar | Temperature | -40°F to 350°F (-40°C to 176°C) |
| right, No Plating | Manufacturer | Ruland Manufacturing |
| SA | Weight (Ibs) | 0.136200 |
| 34529048894 | Tariff Code | 8483.60.8000 |
| 1163003 | | |
| orque ratings are at maximum misa | alignment. | |
| Performance ratings are for guidance only. The user must determine suitability for a particular application. | | |
| Torque ratings for the couplings are based on the physical limitations/failure point of the machined beams. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the machined beams. In some cases, especially when the smallest standard bores are used or where shafts are | | |
| | - | e machined beams. Please consul |
| | | ene Thiourea and Nickel (metallic), |
| | V:BT-1R-1/4-18.3 pe 303 Austenitic, Non-Magnetic ir ight, No Plating SA 4529048894 163003 rque ratings are at maximum misa erformance ratings are for guidanc rque ratings for the couplings are ider normal/typical conditions the ams. In some cases, especially w dersized, slippage on the shaft is chnical support for more assistanc WARNING This product can expo own to the State of California to ca | V:BT-1R-1/4-18.3 Recommended Hex Key pe 303 Austenitic, Non-Magnetic Temperature ight, No Plating Manufacturer SA Weight (lbs) 4529048894 Tariff Code 163003 rque ratings are at maximum misalignment. erformance ratings are for guidance only. The user must determine sui arque ratings for the couplings are based on the physical limitations/faileder normal/typical conditions the hubs are capable of holding up to the suitable of the suitable |

determine if the misalignment parameters are within the limits of the coupling. (Angular

Misialignment: 3°, Parallel Misalignment: 0.20 mm, Axial Motion: 0.13 mm)

- 2. Fully tighten the M3 screw on one hub to the recommended seating torque of 2.1 Nm using a 2.5 mm hex torque wrench.
- 3. Before tightening the screws on the second hub, rotate the coupling by hand to allow it to reach its free length.
- 4. Tighten the screws on the second hub to the recommended seating torque. Make sure the coupling remains axially relaxed and the misalignment angle remains centered along the length of the coupling.
- 5. The shafts may extend into the relieved portion of the bore as long as it does not exceed the shaft penetration length of 12.7 mm.