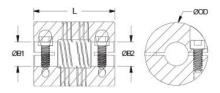




PCMR25-8-8-A

Ruland PCMR25-8-8-A, 8mm x 8mm Four Beam Coupling, Aluminum, Clamp Style, 25.4mm OD, 31.8mm Length





Description

Ruland PCMR25-8-8-A is a clamp style four beam coupling with 8mm x 8mm bores, 25.4mm OD, and 31.8mm 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. PCMR25-8-8-A 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. PCMR25-8-8-A is made from 7075 aluminum for lightweight and low inertia. It is machined from bar stock that is sourced exclusively from North American mills and RoHS3 and REACH compliant. PCMR25-8-8-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)8 mmSmall Bore (B2)B1 Max Shaft Penetration14.7 mmB2 Max Shaft PenetrationOuter Diameter (OD)25.4 mmBore ToleranceLength (L)31.8 mmRecommended Shaft ToleranceCap ScrewM4Screw MaterialHex Wrench Size3.0 mmScrew FinishSeating Torque4.6 NmNumber of ScrewsDynamic Torque Reversing0.93 NmAngular MisalignmentDynamic Torque Non-Reversing1.87 NmParallel MisalignmentStatic Torque3.73 NmAxial MotionTorsional Stiffness1.57 Deg/NmMoment of Inertia	8 mm 14.7 mm +0.025 mm / -0.000 mm +0.000 mm / -0.013 mm Alloy Steel Black Oxide 2 ea 3° 0.38 mm 0.25 mm 3.394 x10 ⁻⁶ kg-m ²
Outer Diameter (OD)25.4 mmBore ToleranceLength (L)31.8 mmRecommended Shaft ToleranceCap ScrewM4Screw MaterialHex Wrench Size3.0 mmScrew FinishSeating Torque4.6 NmNumber of ScrewsDynamic Torque Reversing0.93 NmAngular MisalignmentDynamic Torque Non-Reversing1.87 NmParallel MisalignmentStatic Torque3.73 NmAxial Motion	+0.025 mm / -0.000 mm +0.000 mm / -0.013 mm Alloy Steel Black Oxide 2 ea 3° 0.38 mm 0.25 mm
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Seating Torque4.6 NmNumber of ScrewsDynamic Torque Reversing0.93 NmAngular MisalignmentDynamic Torque Non-Reversing1.87 NmParallel MisalignmentStatic Torque3.73 NmAxial Motion	2 ea 3° 0.38 mm 0.25 mm
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Dynamic Torque Non-Reversing1.87 NmParallel MisalignmentStatic Torque3.73 NmAxial Motion	0.38 mm 0.25 mm
Static Torque 3.73 Nm Axial Motion	0.25 mm
Torsional Stiffness 1.57 Deg/Nm Moment of Inertia	$3.394 \times 10^{-6} \text{ kg-m}^2$
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Maximum Speed 6,000 RPM Full Bearing Support Required?	Yes
Zero-Backlash? Yes Balanced Design	Yes
Torque Wrench TW:BT-1R-1/4-41.0 Recommended Hex Key	Metric Hex Keys
Material Specification 7075-T651 Extruded and Drawn Temperature Aluminum Bar Aluminum Bar <td< td=""><td>-40°F to 225°F (-40°C to 107°C)</td></td<>	-40°F to 225°F (-40°C to 107°C)
Finish Specification Bright, No Plating Manufacturer	Ruland Manufacturing
Country of Origin USA Weight (Ibs)	0.081000
UPC 634529031742 Tariff Code	8483.60.8000
UNSPC 31163003	
Note 1 Torque ratings are at maximum misalignment.	
Note 2 Performance ratings are for guidance only. The user must determine se	uitability for a particular application.
Note 3 Torque ratings for the couplings are based on the physical limitations/fa Under normal/typical conditions the hubs are capable of holding up to t	he rated torque of the machined
beams. In some cases, especially when the smallest standard bores ar undersized, slippage on the shaft is possible below the rated torque of technical support for more assistance.	
Prop 65 California to cause cancer and birth defects or other reproductive harm www.P65Warnings.ca.gov.	
Installation Instructions	
 Align the bores of the PCMR25-8-8-A four beam coupling on the provide the provided the provided	he shafts that are to be joined and

determine if the misalignment parameters are within the limits of the coupling. (*Angular Misialignment:* 3°, *Parallel Misalignment:* 0.38 mm, *Axial Motion:* 0.25 mm)

- 2. Fully tighten the M4 screw on one hub to the recommended seating torque of 4.6 Nm using a 3.0 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 14.7 mm.