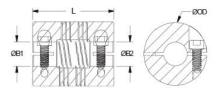




## PCMR25-10-7-SS

Ruland PCMR25-10-7-SS, 10mm x 7mm Four Beam Coupling, Stainless Steel, Clamp Style, 25.4mm OD, 31.8mm Length





## Description

Ruland PCMR25-10-7-SS is a clamp style four beam coupling with 10mm x 7mm 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. PCMR25-10-7-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. PCMR25-10-7-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. PCMR25-10-7-SS is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

## **Product Specifications**

7 mm 4 mm 8 mm 6 mm 6 Nm 2 Nm 3 Nm 1 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	7 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
4 mm 8 mm 8 mm 6 Nm 2 Nm 3 Nm 1 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° 0.38 mm
8 mm 8 mm 9 mm 9 Nm 6 Nm 12 Nm 3 Nm 1 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° 0.38 mm
mm 5 Nm 6 Nm 2 Nm 3 Nm 1 Deg/Nm	Screw Material Screw Finish Number of Screws Angular Misalignment Parallel Misalignment	Alloy Steel Black Oxide 2 ea 3° 0.38 mm
mm Nm 6 Nm 2 Nm 3 Nm 1 Deg/Nm	Screw Finish Number of Screws Angular Misalignment Parallel Misalignment	Black Oxide 2 ea 3° 0.38 mm
6 Nm 6 Nm 2 Nm 3 Nm 1 Deg/Nm	Number of Screws Angular Misalignment Parallel Misalignment	2 ea 3° 0.38 mm
6 Nm 2 Nm 3 Nm 1 Deg/Nm	Angular Misalignment Parallel Misalignment	3° 0.38 mm
2 Nm 3 Nm 1 Deg/Nm	Parallel Misalignment	0.38 mm
3 Nm 1 Deg/Nm		
1 Deg/Nm	Axial Motion	0.25 mm
•		0.20 11111
	Moment of Inertia	9.275 x10 <sup>-6</sup> kg-m <sup>2</sup>
00 RPM	Full Bearing Support Required?	Yes
S	Balanced Design	Yes
/:BT-1R-1/4-41.0	Recommended Hex Key	Metric Hex Keys
be 303 Austenitic, Non-Magnetic r	Temperature	-40°F to 350°F (-40°C to 176°C)
ght, No Plating	Manufacturer	Ruland Manufacturing
A	Weight (Ibs)	0.209600
4529193686	Tariff Code	8483.60.8000
163003		
rque 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 undersized, slippage on the shaft is possible below the rated torque of the machined beams. Please consul		
WARNING This product can expo	ose you to chemicals including Ethyl	ene Thiourea and Nickel (metallic),
1 1 1 1 1 1 1 1 1 1 1 1 1 1	BT-1R-1/4-41.0 e 303 Austenitic, Non-Magnetic ht, No Plating 529193686 63003 que ratings are at maximum misa ormance ratings are for guidanc que ratings for the couplings are er normal/typical conditions the ms. In some cases, especially w ersized, slippage on the shaft is nical support for more assistance VARNING This product can expo	BT-1R-1/4-41.0 Recommended Hex Key   a 303 Austenitic, Non-Magnetic Temperature   ht, No Plating Manufacturer   A Weight (Ibs)   529193686 Tariff Code   63003 gue ratings are at maximum misalignment.   ormance ratings are for guidance only. The user must determine sui gue ratings for the couplings are based on the physical limitations/fai er normal/typical conditions the hubs are capable of holding up to th ms. In some cases, especially when the smallest standard bores are

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.