

# PCMR25-10-10-A



## PRODUCT SPECIFICATIONS

Ruland PCMR25-10-10-A is a four beam coupling with 10mm x 10mm 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. PCMR25-10-10-A is well suited for applications such as encoders that require high positioning accuracy. 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. PCMR25-10-10-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 is RoHS2 and REACH compliant. PCMR25-10-10-A is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.



### DIMENSIONS

<b>Large Bore B1</b>	10 mm	<b>Small Bore B2</b>	10 mm
<b>B1 Shaft Penetration</b>	14.7 mm	<b>B2 Shaft Penetration</b>	14.7 mm
<b>Outer Diameter OD</b>	25.4 mm	<b>Bore Tolerance</b>	+0.025 mm / -.000 mm
<b>Length L</b>	31.8 mm		

### FASTENING HARDWARE

<b>Cap Screw</b>	M4	<b>Screw Material</b>	Alloy Steel
<b>Hex Wrench Size</b>	3.0 mm	<b>Screw Finish</b>	Black Oxide
<b>Seating Torque</b>	4.6 Nm	<b>Number of Screws</b>	2 ea

### PERFORMANCE SPECIFICATIONS

<b>Static Torque</b>	3.39 Nm	<b>Angular Misalignment</b>	3°
<b>Dynamic Torque Non-Reversing</b>	1.70 Nm	<b>Parallel Misalignment</b>	0.38 mm
<b>Dynamic Torque Reversing</b>	0.85 Nm	<b>Axial Motion</b>	0.25 mm
<b>Torsional Stiffness</b>	1.80 Deg/Nm	<b>Maximum Speed</b>	6,000 RPM

### ADDITIONAL INFORMATION

<b>Material Specification</b>	7075-T651 Extruded and Drawn Aluminum Bar	<b>Temperature</b>	-40°F to 225°F -40°C to 107°C
<b>Finish Specification</b>	Bright	<b>Country of Origin</b>	USA
<b>Weight (lbs.)</b>	0.1340		

### CERTIFICATIONS/STANDARDS

ISO 9001:2008	Certified	Conflict Minerals	Compliant
RoHS2	Compliant	REACH	Compliant