



RLC10-1/4"-6MM-A

Ruland RLC10-1/4"-6MM-A, 0.250" x 6mm Long Slit Coupling, Aluminum, Clamp Style, 0.630" (16.0mm) OD, 0.925" (23.5mm) length



Description

Ruland RLC10-1/4"-6MM-A is a clamp style slit coupling with 0.2500" x 6mm bores, 0.630" (16.0mm) OD, and 0.925" (23.5mm) length. It is manufactured from a single piece of material and has two sets of intermittent slit cuts allowing for a maintenance-free coupling with high torsional stiffness in relation to comparable couplings, such as beam type. RLC10-1/4"-6MM-A is commonly used in precise positioning applications found in semiconductor, medical, and test and measurement equipment. This long style slit coupling has added torque and misalignment capabilities compared to the short style. RLC10-1/4"-6MM-A is zero-backlash, has a balanced design for reduced vibration at speeds up to 10,000 RPM, and can accommodate all forms of misalignment with light bearing loads. It is manufactured by Reliance Precision Ltd. in their County Cork, Ireland factory from 7075 aluminum for lightweight and low inertia. RLC10-1/4"-6MM-A is inventoried by Ruland and RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	0.2500 in	Small Bore (B2)	6 mm
B1 Max Shaft Penetration	0.311 in (7.9 mm)	B2 Max Shaft Penetration	0.311 in (7.9 mm)
Outer Diameter (OD)	0.630 in (16.0 mm)	Bore Tolerance	+0.001 in / -0.000 in (+0.020 mm / -0.000 mm)
Length (L)	0.925 in (23.5 mm)	Clearance Diameter (C) MAX	0.709 in (18.0 mm)
Cap Screw	M2	Screw Material	18-8 300 Series Stainless Steel
Hex Wrench Size	1.5 mm	Screw Finish	Bright
Seating Torque	0.36 Nm	Number of Screws	2
Dynamic Torque Reversing	4.9 lb-in (0.55 Nm)	Angular Misalignment	2.5°
Dynamic Torque Non-Reversing	7.5 lb-in (0.85 Nm)	Parallel Misalignment	0.008 in (0.20 mm)
Peak Torque	11.1 in-lb (1.25 Nm)	Axial Motion	0.016 in (0.40 mm)
Torsional Stiffness	12.4 lb-in/Deg (1.4 Nm/Deg)	Moment of Inertia	0.0012108 lb-in ²
Maximum Speed	10,000 RPM	Full Bearing Support Required?	Yes
Zero-Backlash?	Yes	Balanced Design	Yes
Material Specification	7075-T651 Extruded and Drawn Aluminum Bar	Temperature	-110°F to 175°F (-80°C to 80°C)
Finish Specification	SurTec 650	Manufacturer	Reliance Precision Limited
Country of Origin	Ireland	Weight (lbs)	0.020900
UPC	634529297971	Tariff Code	8483.60.8000
UNSPC	31163003		
Note 1	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
Prop 65			

⚠ WARNING This product can expose you to the chemical Nickel (metallic), known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.