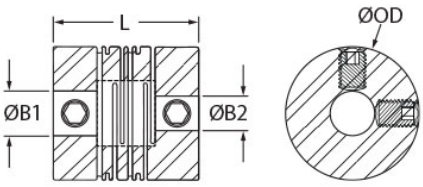
RLS10-1/4"-5MM-A

Ruland RLS10-1/4"-5MM-A, 0.250" x 5mm Long Slit Coupling, Aluminum, Set Screw Style, 0.630" (16.0mm) OD, 0.925" (23.5mm) length





Description

Ruland RLS10-1/4"-5MM-A is a set screw style slit coupling with 0.2500" x 5mm 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. RLS10-1/4"-5MM-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. RLS10-1/4"-5MM-A is zero-backlash, has a balanced design for reduced vibration at speeds up to 17,000 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. RLS10-1/4"-5MM-A is inventoried by Ruland and RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	0.2500 in	**Small Bore (B2)**	5 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)	**Forged Set Screw**	M3
Screw Material	18-8 300 Series Stainless Steel	**Hex Wrench Size**	1.5 mm
Screw Finish	Bright	**Seating Torque**	0.73 Nm
Number of Screws	4	**Dynamic Torque Reversing**	6.6 lb-in (0.75 Nm)
Angular Misalignment	2.5°	**Dynamic Torque Non-Reversing**	10.2 lb-in (1.15 Nm)
Parallel Misalignment	0.008 in (0.20 mm)	**Peak Torque**	16.8 in-lb (1.90 Nm)
Axial Motion	0.016 in (0.40 mm)	**Torsional Stiffness**	12.4 lb-in/Deg (1.4 Nm/Deg)
Moment of Inertia	0.0012258 lb-in²	**Maximum Speed**	17,000 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)	0.021400	**UPC**	634529298091
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.