



RLS8-1/4"-5MM-A

Ruland RLS8-1/4"-5MM-A, 0.250" x 5mm Long Slit Coupling, Aluminum, Set Screw Style, 0.512" (13.0mm) OD, 0.778" (20.0mm) length



Description

Ruland RLS8-1/4"-5MM-A is a set screw style slit coupling with 0.2500" x 5mm bores, 0.512" (13.0mm) OD, and 0.778" (20.0mm) 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. RLS8-1/4"-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. RLS8-1/4"-5MM-A is zero-backlash, has a balanced design for reduced vibration at speeds up to 20,000 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. RLS8-1/4"-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	0.276 in (7.0 mm)	B2 Max Shaft Penetration	0.276 in (7.0 mm)
Outer Diameter (OD)	0.512 in (13.0 mm)	Bore Tolerance	+0.001 in / -0.000 in (+0.020 mm / -0.000 mm)
Length (L)	0.787 in (20.0 mm)	Forged Set Screw	M2.5
Screw Material	18-8 300 Series Stainless Steel	Hex Wrench Size	1.3 mm
Screw Finish	Bright	Seating Torque	0.44 Nm
Number of Screws	4	Dynamic Torque Reversing	4.4 lb-in (0.50 Nm)
Angular Misalignment	2.5°	Dynamic Torque Non-Reversing	6.2 lb-in (0.70 Nm)
Parallel Misalignment	0.006 in (0.15 mm)	Peak Torque	10.6 in-lb (1.20 Nm)
Axial Motion	0.012 in (0.30 mm)	Torsional Stiffness	8.0 lb-in/Deg (0.9 Nm/Deg)
Moment of Inertia	0.000443 lb-in ²	Maximum Speed	20,000 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)	0.011100	UPC	634529297179
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.