



RLS10-7MM-1/4"-A

Ruland RLS10-7MM-1/4"-A, 7mm x 0.250" Long Slit Coupling, Aluminum, Set Screw Style, 0.630" (16.0mm) OD, 0.925" (23.5mm) length



Description

Ruland RLS10-7MM-1/4"-A is a set screw style slit coupling with 7mm x 0.2500" 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. RLS10-7MM-1/4"-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. RLS10-7MM-1/4"-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. RLS10-7MM-1/4"-A is inventoried by Ruland and RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	7 mm	Small Bore (B2)	0.2500 in
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	0.0012116 lb-in ²	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)	0.020500	UPC	634529298176
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.