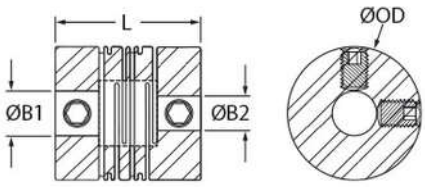
MRLS8-4-3-A

Ruland MRLS8-4-3-A, 4mm x 3mm Long Slit Coupling, Aluminum, Set Screw Style, 8.0mm OD, 14.5mm length







Description

Ruland MRLS8-4-3-A is a set screw style slit coupling with 4mm x 3mm bores, 8.0mm OD, and 14.5mm 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. MRLS8-4-3-A has small dimensions and is designed to mate with micro motors, ball screws, and lead screws in high precision medical and scientific equipment. This long style slit coupling has added torque and misalignment capabilities compared to the short style. MRLS8-4-3-A is zero-backlash, has a balanced design for reduced vibration at speeds up to 24,000 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. MRLS8-4-3-A is inventoried by Ruland and RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	4 mm	**Small Bore (B2)**	3 mm
B1 Max Shaft Penetration	5.2 mm	**B2 Max Shaft Penetration**	5.2 mm
Outer Diameter (OD)	0.315 in (8.0 mm)	**Bore Tolerance**	+0.010 mm / -0.000 mm
Length (L)	0.570 in (14.5 mm)	**Forged Set Screw**	M1.6
Screw Material	18-8 300 Series Stainless Steel	**Hex Wrench Size**	0.7 mm
Screw Finish	Bright	**Number of Screws**	4
Dynamic Torque Reversing	0.20 Nm	**Angular Misalignment**	2.0°
Dynamic Torque Non-Reversing	0.30 Nm	**Parallel Misalignment**	0.10 mm
Peak Torque	0.50 Nm	**Axial Motion**	0.10 mm
Torsional Stiffness	0.2 Nm/Deg	**Moment of Inertia**	0.00004716 lb-in²
Maximum Speed	24,000 RPM	**Full Bearing Support Required?**	Yes
Average Load at Max Parallel Offset	0.49 N	**Average Slope**	9.8 N/mm
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)**	0.003100
UPC	634529296455	**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.