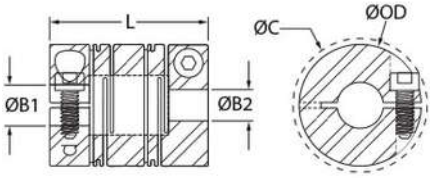
MRLC16-5-3-A

Ruland MRLC16-5-3-A, 5mm x 3mm Long Slit Coupling, Aluminum, Clamp Style, 16.0mm OD, 23.5mm length







Description

Ruland MRLC16-5-3-A is a clamp style slit coupling with 5mm x 3mm bores, 16.0mm OD, and 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. MRLC16-5-3-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. MRLC16-5-3-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. MRLC16-5-3-A is inventoried by Ruland and RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	5 mm	**Small Bore (B2)**	3 mm
B1 Max Shaft Penetration	7.9 mm	**B2 Max Shaft Penetration**	7.9 mm
Outer Diameter (OD)	0.630 in (16.0 mm)	**Bore Tolerance**	+0.020 mm / +0.000 mm
Length (L)	0.925 in (23.5 mm)	**Clearance Diameter (C) MAX**	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	0.55 Nm	**Angular Misalignment**	2.5°
Dynamic Torque Non-Reversing	0.85 Nm	**Parallel Misalignment**	0.20 mm
Peak Torque	1.25 Nm	**Axial Motion**	0.40 mm
Torsional Stiffness	1.4 Nm/Deg	**Moment of Inertia**	0.001227 lb-in²
Maximum Speed	10,000 RPM	**Full Bearing Support Required?**	Yes
Average Load at Max Parallel Offset	3.07 N	**Average Slope**	15.36 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)**	0.022300
UPC	634529304624	**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.