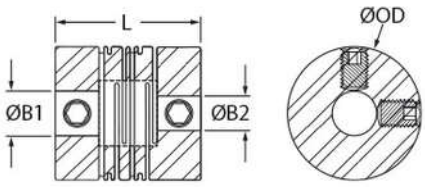
MRSS20-10-5-A

Ruland MRSS20-10-5-A, 10mm x 5mm Short Slit Coupling, Aluminum, Set Screw Style, 20.0mm OD, 21.5mm length







Description

Ruland MRSS20-10-5-A is a set screw style slit coupling with 10mm x 5mm bores, 20.0mm OD, and 21.5mm 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. MRSS20-10-5-A is commonly used in precise positioning applications found in semiconductor, medical, and test and measurement equipment. This short style slit coupling is ideal for compact installations where the long type may not fit. It is a suitable alternative to comparatively sized disc couplings due to the ability to accommodate all forms of misalignment whereas a single disc coupling has no accomodation for parallel misalignment. MRSS20-10-5-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. MRSS20-10-5-A is inventoried by Ruland and RoHS3 and REACH compliant.

Product Specifications

Bore (B1)	10 mm	**Small Bore (B2)**	5 mm
B1 Max Shaft Penetration	8.6 mm	**B2 Max Shaft Penetration**	8.6 mm
Outer Diameter (OD)	0.787 in (20.0 mm)	**Bore Tolerance**	+0.020 mm / +0.000 mm
Length (L)	0.846 in (21.5 mm)	**Forged Set Screw**	M4
Screw Material	18-8 300 Series Stainless Steel	**Hex Wrench Size**	2.0 mm
Screw Finish	Bright	**Seating Torque**	1.76 Nm
Number of Screws	4	**Dynamic Torque Reversing**	1.30 Nm
Angular Misalignment	3.0°	**Dynamic Torque Non-Reversing**	1.95 Nm
Parallel Misalignment	0.12 mm	**Peak Torque**	3.25 Nm
Axial Motion	0.50 mm	**Torsional Stiffness**	1.9 Nm/Deg
Moment of Inertia	0.0026603 lb-in²	**Maximum Speed**	20,000 RPM
Full Bearing Support Required?	Yes	**Average Load at Max Parallel Offset**	5.13 N
Average Slope	42.74 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)	0.028800	**UPC**	634529299111
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.