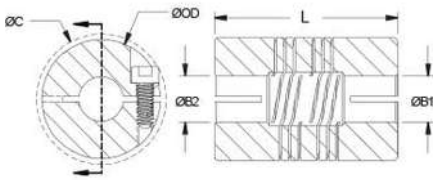
ROCMD51-18-18-AN

Ruland ROCMD51-18-18-AN, 18mm x 18mm Six Beam Coupling, Aluminum, Clamp Style, 50.0mm OD, 76.0mm Length







Description

Ruland ROCMD51-18-18-AN is a six beam coupling with 18mm x 18mm bores, 50.0mm OD, and 76.0mm length. It is machined from a single piece of material and features two sets of three spiral cuts. This D-series beam coupling has more space between each beam for increased misalignment when compared to F- and B-series six beam couplings. It has a reference mark on the outer diameter to identify the larger bore. All hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. ROCMD51-18-18-AN is made from 7075 aluminum for lightweight and low inertia. It is machined from bar stock that is sourced exclusively from North American mills and RoHS3, REACH, and Conflict Minerals compliant. ROCMD51-18-18-AN is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	18 mm	**Small Bore (B2)**	18 mm
B1 Max Shaft Penetration	37.0 mm	**B2 Max Shaft Penetration**	37.0 mm
Outer Diameter (OD)	2.000 in (50.8 mm)	**Bore Tolerance**	+0.025 mm / -0.000 mm
Length (L)	3.000 in (76.2 mm)	**Clearance Diameter (C) MAX**	57.2 mm
Cap Screw	M6	**Screw Material**	Alloy Steel
Screw Finish	Black Oxide	**Seating Torque**	16 Nm
Number of Screws	2	**Dynamic Torque Reversing**	10.15 Nm
Angular Misalignment	6.0°	**Dynamic Torque Non-Reversing**	5.08 Nm
Parallel Misalignment	1.52 mm	**Static Torque**	20.3 Nm
Axial Motion	0.76 mm	**Torsional Stiffness**	Rating Coming Soon
Moment of Inertia	114.298 $x10^{-6}$ $kg\text{-}m^2$	**Maximum Speed**	6,000 RPM
Full Bearing Support Required?	Yes	**Zero-Backlash?**	Yes
Balanced Design	Yes	**Recommended Hex Key**	Metric Hex Keys
Material Specification	2024-T351 Aluminum Bar	**Temperature**	-40°F to 225°F (-40°C to 107°C)
Finish Specification	Sulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize	**Manufacturer**	Ruland Manufacturing
Country of Origin	USA	**Weight (lbs)**	0.696400
UPC	63452943403	**Tariff Code**	8483.60.8000
UNSPC	31163003		
Note 1	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
Note 4	Stainless steel options available upon request.		