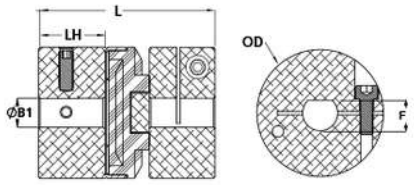
MOCT19-5/4.5D-A

Ruland MOCT19-5/4.5D-A, 5/4.5Dmm Oldham Coupling Hub, Aluminum, Clamp Style With D-Bore, 19.1mm OD, 7.6mm Length





Description

Ruland MOCT19-5/4.5D-A is a clamp d-bore oldham coupling hub with 5/4.5D bore, 19.1mm OD, and 9.7mm length. The d-bore allows for positive drive in applications where the coupling can not slip. It is a component of a three-piece design consisting of two anodized aluminum hubs press fit onto a center disk. This three-piece design allows for a highly customizable coupling that easily combines clamp or set screw hubs with inch, metric, keyed, and keyless bores. Disks are available in acetal plastic for zero-backlash and high torsional stiffness, nylon for shock absorption and dampening, and PEEK for high temperature and cleanroom environments. MOCT19-5/4.5D-A can accommodate all forms of misalignment and are especially useful in applications with high parallel misalignment (up to 10% of the OD). It operates with low bearing loads protecting sensitive system components such as bearings and has a balanced design for reduced vibration at speeds up to 6,000 RPM. Hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. MOCT19-5/4.5D-A is machined from bar stock that is sourced exclusively from North American mills and is RoHS3 and REACH compliant. It is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	5/4.5D mm	**Flat (F)**	4.50 mm
Flat Tolerance	+.002”/-.000”	**Outer Diameter (OD)**	0.750 in (19.1 mm)
B1 Max Shaft Penetration	9.7 mm	**Bore Tolerance**	+0.03 mm / -0.00 mm
Hub Width (LH)	9.65 mm	**Length (L)**	1.000 in (25.4 mm)
Recommended Shaft Tolerance	+0.000 mm / -0.013 mm	**Forged Clamp Screw**	M2.5
Number of Screws	1 ea	**Screw Material**	Alloy Steel
Screw Finish	Black Oxide	**Seating Torque**	1.21 Nm
Hex Wrench Size	2.0 mm	**Torque Specifications**	Torque ratings vary with insert selection
Angular Misalignment	0.5°	**Parallel Misalignment**	0.008 in (0.20 mm)
Max Parallel Misalignment	0.075 in (1.91 mm)	**Axial Motion**	0.004 in (0.10 mm)
Moment of Inertia	3.506 x 10^{-7} kg-m^2	**Maximum Speed**	4,500 RPM
Recommended Inserts	OD12/19-AT, OD12/19-NL, OD12/19-PEK	**Full Bearing Support Required?**	Yes
Zero-Backlash?	Yes	**Balanced Design**	Yes
Mechanical Fuse?	Yes	**UPC**	65432942055
Country of Origin	USA	**Material Specification**	2024-T351 Aluminum Bar
Finish	Black Anodized	**Finish Specification**	Sulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize
Manufacturer	Ruland Manufacturing	**Temperature**	Acetal Disk -10°F to 150°F (-23°C to 65°) Nylon Disk -10°F to 130°F (-23°C to 54°C) PEEK Disk -10°F to 300°F (-23°C to 148°C)

Weight (lbs)	0.016032	**Tariff Code**	8483.60.8000
UNSPC	31163015		
Note 1	"Performance ratings are for guidance only. The user must determine suitability for a particular application."		
Note 2	"Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. Under normal/typical conditions the hubs are capable of holding up to the rated torque of the disks. In some cases` especially when the smallest standard bores are used or where shafts are undersized` slippage on the shaft is possible below the rated torque of the disks. Keyways are available to provide additional torque capacity in the shaft/hub connection when required. Please consult technical support for more assistance."		