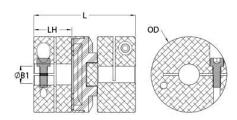




MOCT41-14-A

Ruland MOCT41-14-A, 14mm Oldham Coupling Hub, Aluminum, Clamp Style, 41.3mm OD, 18.0mm Length





Description

Ruland MOCT41-14-A is a clamp oldham coupling hub with a 14mm bore, 41.3mm OD, and 18.0mm length. It is a component of a three-piece design consisiting 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 three materials allowing the user to tailor coupling performance to their application. MOCT41-14-A can accommodate all forms of misalignment and is 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. MOCT41-14-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.

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Angular Misalignment 0.5° Parallel Misalignment 0.010 in (0.25 mm)	r roduct opecifications								
Hub Width (LH) 18.05 mm Length (L) 50.8 mm Recommended Shaft Tolerance +0.000 mm / -0.013 mm Forged Clamp Screw M4 Number of Screws 1 ea Screw Material Alloy Steel Screw Finish Black Oxide Seating Torque 4.6 Nm Hex Wrench Size 3.0 mm Torque Specifications Torque ratings vary with inserselection Angular Misalignment 0.5° Parallel Misalignment 0.010 in (0.25 mm) Max Parallel Misalignment 0.163 in (4.13 mm) Axial Motion 0.006 in (0.15 mm) Moment of Inertia 1.460 x 10° kg-m² Maximum Speed 4,500 RPM Recommended Inserts OD26/41-NL, OD26/41-NL, OD26/41-NE, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes Mechanical Fuse? Yes UPC 634529059487 Country of Origin USA Material Specification 2024-7351 Aluminum Bar Finish Black Anodized Finish Specification Sulfuria Anodized MIL-A-8625 II, Class 2 and ASTM B580 Ty Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 54°C) PEEK Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (lbs) 0.135100 Tariff Code 8483.60.8000 UNSPC 31163015 Note 1 "Now available in stainless steel!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular application mormal/typical conditions the hubs are capable of holding up to the rated torque of the disks. In some company to the rated torque of the disks. In some company to the rated torque of the disks. In some company to the rated torque of the disks. In some company to the rated torque of the disks. In some company to the rated torque of the disks. In some company to the rated torque of the disks. In some company to the rated torque of the disks. In some company to the couplings are capable of holding up to the rated torque of the disks. In some company to the coupling of the couplings are capable of holding up to the rated torque of the disks.	Bore (B1)	14 mm	Outer Diameter (OD)	41.3 mm					
Recommended Shaft Tolerance	B1 Max Shaft Penetration	18.0 mm	Bore Tolerance	+0.03 mm / -0.00 mm					
Number of Screws 1 ea Screw Material Alloy Steel Screw Finish Black Oxide Seating Torque 4.6 Nm Hex Wrench Size 3.0 mm Torque Specifications Torque ratings vary with inserselection Angular Misalignment 0.5° Parallel Misalignment 0.010 in (0.25 mm) Max Parallel Misalignment 0.163 in (4.13 mm) Axial Motion 0.006 in (0.15 mm) Moment of Inertia 1.460 x 10°5 kg-m² Maximum Speed 4,500 RPM Recommended Inserts OD26/41-AT, OD26/41-NL, OD26/41-NL, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes Mechanical Fuse? Yes UPC 634529059487 Country of Origin USA Material Specification 2024-T351 Aluminum Bar Finish Black Anodized Finish Specification Sulfuric Anodized MIL-A-8625 II, Class 2 and ASTM B580 T, Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 54°C) PEEK Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (Ibs) 0.135100 Tariff Code 8483.60.8000 UNSPC 31163015 Note 1 "Now available in stainless stee!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applicat Note 3 "Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. In some compair to the steep of the disks. In some compair to the torque of the disks. In some compair to the torque of the disks. In some compair to the torque of the disks. In some compair to the couplings are based on the physical limitations/failure point of the torque disks. In some compair to the couplings are based on the physical limitations/failure point of the torque disks. In some compair to the couplings are based on the physical limitations/failure point of the torque disks. In some compairs to the couplings are based on the physical limitations/failure point of the disks. In some compairs to the couplings are based on the physical limitations/failure point of the disks. In some compairs to the coupling are based on the physical limitations/failure point of the disks. In some compairs to the coupling are based on	Hub Width (LH)	18.05 mm	Length (L)	50.8 mm					
Screw Finish Black Oxide Seating Torque 4.6 Nm	Recommended Shaft Tolerance	+0.000 mm / -0.013 mm	Forged Clamp Screw	M4					
Hex Wrench Size 3.0 mm Torque Specifications Torque ratings vary with inserselection Angular Misalignment 0.5° Parallel Misalignment 0.163 in (4.13 mm) Axial Motion 0.006 in (0.15 mm) Moment of Inertia 1.460 x 10° kg-m² Maximum Speed 4,500 RPM Recommended Inserts OD26/41-AT, OD26/41-NL, OD26/41-NL, OD26/41-NL, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes Mechanical Fuse? Yes UPC 634529059487 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-8625 II, Class 2 and ASTM B580 Ty Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (Ibs) 0.135100 Tariff Code 3483.60.8000 UNSPC 31163015 Note 1 "Now available in stainless steel!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applicat Note 3 "Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. In some c.	Number of Screws	1 ea	Screw Material	Alloy Steel					
Angular Misalignment O.5° Parallel Misalignment O.163 in (4.13 mm) Axial Motion O.006 in (0.15 mm) Max Parallel Misalignment O.163 in (4.13 mm) Axial Motion O.006 in (0.15 mm) Moment of Inertia A,500 RPM Recommended Inserts OD26/41-AT, OD26/41-NL, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes Mechanical Fuse? Yes UPC 634529059487 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-8625 II, Class 2 and ASTM B580 Ty Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 54°C) PEEK Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (lbs) O.135100 Tariff Code 8483.60.8000 UNSPC 31163015 Note 1 "Now available in stainless steel!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applicat Note 3 "Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. In some c	Screw Finish	Black Oxide	Seating Torque	4.6 Nm					
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Moment of Inertia 1.460 x 10 ⁻⁵ kg·m ² Maximum Speed 4,500 RPM	Angular Misalignment	0.5°	Parallel Misalignment	0.010 in (0.25 mm)					
Recommended Inserts OD26/41-AT, OD26/41-NI, OD26/41-NI, OD26/41-NI, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes Mechanical Fuse? Yes UPC 634529059487 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-8625 II, Class 2 and ASTM B580 Ty Black Anodize Manufacturer Ruland Manufacturing Temperature Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (Ibs) 0.135100 Tariff Code 8483.60.8000 UNSPC 31163015 Note 1 "Now available in stainless stee!!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applicat "Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. normal/typical conditions the hubs are capable of holding up to the rated torque of the disks. In some of	Max Parallel Misalignment	0.163 in (4.13 mm)	Axial Motion	0.006 in (0.15 mm)					
Zero-Backlash? Yes Balanced Design Yes Mechanical Fuse? Yes UPC 634529059487 Country of Origin USA Material Specification 2024-T351 Aluminum Bar Finish Black Anodized Finish Specification Sulfuric Anodized MIL-A-8625 II, Class 2 and ASTM B580 Ty Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 54°C) PEEK Disk -10°F to 130°F (-2 to 148°C) Weight (Ibs) 0.135100 Tariff Code 8483.60.8000 UNSPC 31163015 Note 1 "Now available in stainless stee!!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applicat Note 3 "Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. In some co	Moment of Inertia	1.460 x 10 ⁻⁵ kg-m ²	Maximum Speed	4,500 RPM					
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UNSPC 31163015 Note 1 "Now available in stainless steel!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applicated a	Manufacturer	Ruland Manufacturing	Temperature	Nylon Disk -10°F to 130°F (-23°C to 54°C) PEEK Disk -10°F to 300°F (-23°C					
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, , ,	Note 3	normal/typical conditions the hubs	are capable of holding up to the rate	d torque of the disks. In some cases,					

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."

Prop 65

▲ WARNING This product can expose you to the chemical Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Installation Instructions

- 1. Align the bores of the MOCT41-14-A oldham coupling hubs on the shafts that are to be joined and determine if the misalignment parameters are within the limits of the coupling. (*Angular Misalignment:* 0.5° *Parallel Misalignment:* 0.010 in (0.25 mm), *Axial Motion:* 0.006 in (0.15 mm))
- 2. Rotate the hubs on the shaft so the drive tenons are located 90° from each other.
- 3. Place a torque disk so one groove fits over the drive tenons of a hub and center the disk by hand.
- 4. Insert a shim with the thickness of the coupling's axial motion rating into the groove of the torque disk.
- 5. Slide the tenons of the second hub into the mating groove in the disk until it touches the shim stock.
- 6. Fully tighten the M4 screw(s) on each hub to the recommended seating torque of 4.6 Nm using a 3.0 mm hex torque wrench.
- 7. Remove the shim stock to leave a small gap between the top of the drive tenons and the torque disk to allow for axial movement.