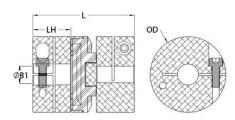




## MOCT41-12-A

Ruland MOCT41-12-A, 12mm Oldham Coupling Hub, Aluminum, Clamp Style, 41.3mm OD, 18.0mm Length





## **Description**

Ruland MOCT41-12-A is a clamp oldham coupling hub with a 12mm 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. MOCT41-12-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. MOCT41-12-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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Bore (B1)	12 mm	Outer Diameter (OD)	41.3 mm				
B1 Max Shaft Penetration	18.0 mm	Bore Tolerance	+0.03 mm / -0.00 mm				
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 insert selection				
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	1.468 x 10 <sup>-5</sup> kg-m <sup>2</sup>	Maximum Speed	4,500 RPM				
Recommended Inserts	<u>OD26/41-AT, OD26/41-NL,</u> <u>OD26/41-PEK</u>	Full Bearing Support Required?	Yes				
Zero-Backlash?	Yes	Balanced Design	Yes				
Mechanical Fuse?	Yes	UPC	634529059470				
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)	0.139400	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."						
Note 3	normal/typical conditions the hubs	re based on the physical limitations/fa are capable of holding up to the rated lard bores are used or where shafts a	d torque of the disks. In some cases,				
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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 <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

## **Installation Instructions**

- Align the bores of the MOCT41-12-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.