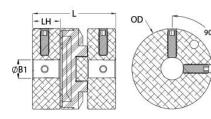




MOST41-18-A

Ruland MOST41-18-A, 18mm Oldham Coupling Hub, Aluminum, Set Screw Style, 41.3mm OD, 18.0mm Length





Description

Ruland MOST41-18-A is a set screw oldham coupling hub with a 18mm 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. MOST41-18-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. MOST41-18-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

	ications

Angular Misalignment 0.5° Parallel Misalignment 0.010 in (0.25 mm)	r roduct opecifications			
Hub Width (LH) 18.00 mm	Bore (B1)	18 mm	Outer Diameter (OD)	41.3 mm
Recommended Shaft Tolerance +0.000 mm / -0.013 mm Forged Set Screw M5 Number of Screws 2 ea 90° apart Screw Material Alloy Steel Screw Finish Black Oxide Seating Torque 4 Nm Hex Wrench Size 2.5 mm Torque Specifications Torque ratings vary with inserse 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 1.52 × 10° kg-m² Maximum Speed 4,500 RPM Recommended Inserts OD26/41-NL, OD26/41-NL, OD26/41-NL, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes Country of Origin USA Material Specification 2024-T351 Aluminum Bar Finish Black Anodized Finish Specification Sulfuric Anodized MIL-A-862e II, class 2 and ASTM B580 T Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (lbs) 0.131500 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 applica Note 3 "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	B1 Max Shaft Penetration	18.0 mm	Bore Tolerance	+0.03 mm / -0.00 mm
Number of Screws 2 ea 90° apart Screw Material Alloy Steel Screw Finish Black Oxide 2.5 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) Max Parallel Misalignment 1.525 x 10°5 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 634529111581 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-862! II, Class 2 and ASTM B580 T Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 130°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 54°C) PEEK Disk -10°F to 130°F (-2 to 54°C) P	Hub Width (LH)	18.00 mm	Length (L)	50.8 mm
Screw Finish Black Oxide Seating Torque 4 Nm	Recommended Shaft Tolerance	+0.000 mm / -0.013 mm	Forged Set Screw	M5
Hex Wrench Size 2.5 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 1.525 x 10°5 kg·m² Maximum Speed 4,500 RPM Yes Recommended Inserts OD26/41-AT, OD26/41-NL, OD26/41-NL, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes UPC 634529111581 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-862: 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 300°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (Ibs) 0.131500 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 applica "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	Number of Screws	2 ea 90° apart	Screw Material	Alloy Steel
Angular Misalignment 0.5° Parallel Misalignment 0.163 in (4.13 mm) Axial Motion 0.006 in (0.15 mm) Max Parallel Misalignment 0.163 in (4.13 mm) Axial Motion 0.006 in (0.15 mm) Moment of Inertia 1.525 x 10°5 kg-m² Maximum Speed 4,500 RPM Recommended Inserts 0D26/41-AT, OD26/41-NL, OD26/41-PEK Zero-Backlash? Yes Balanced Design Yes Mechanical Fuse? Yes UPC 634529111581 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-862' 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 54°C) PEEK Disk -10°F to 45°C) PEEK Disk -10°F to 50°C) PEEK Disk -10°F to 45°C) PEEK Disk -10°C) PEEK Disk -10°F to 45°C) PEEK Disk -10°F to 45°C) PEEK Disk -10°	Screw Finish	Black Oxide	Seating Torque	4 Nm
Max Parallel Misalignment 0.163 in (4.13 mm) Moment of Inertia 1.525 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 Country of Origin USA Material Specification Black Anodized Finish Black Anodized Finish Specification Black Anodized Finish Specification Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (lbs) 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 applica "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	Hex Wrench Size	2.5 mm	Torque Specifications	Torque ratings vary with insert selection
Moment of Inertia 1.525 x 10 ⁻⁵ 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 634529111581 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-862e 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 300°F (-2 to 148°C) Weight (lbs) 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 applica Note 3 "Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. In some of	Angular Misalignment	0.5°	Parallel Misalignment	0.010 in (0.25 mm)
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 634529111581 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-862: II, Class 2 and ASTM B580 T 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 (lbs) 0.131500 Tariff Code 3483.60.8000 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 applica "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 634529111581 Country of Origin USA Material Specification 2024-T351 Aluminum Bar Finish Black Anodized Finish Specification Sulfuric Anodized MIL-A-8629 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 148°C) Weight (lbs) 0.131500 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 applica Note 3 "Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. In some of	Moment of Inertia	1.525 x 10 ⁻⁵ kg-m ²	Maximum Speed	4,500 RPM
Mechanical Fuse? Yes UPC 634529111581 Country of Origin USA Material Specification Sulfuric Anodized MIL-A-862! 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 300°F (-2 to 148°C) Weight (Ibs) 0.131500 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 applica "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	Recommended Inserts		Full Bearing Support Required?	Yes
Country of Origin USA Black Anodized Finish Specification Sulfuric Anodized MIL-A-8628 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 300°F (-2 to 148°C) Weight (lbs) 0.131500 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 applica "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	Zero-Backlash?	Yes	Balanced Design	Yes
Finish Black Anodized Finish Specification Sulfuric Anodized MIL-A-8628 II, Class 2 and ASTM B580 T Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 65°) Nylon Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (lbs) 0.131500 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 applica Note 3 "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	Mechanical Fuse?	Yes	UPC	634529111581
II, Class 2 and ASTM B580 T Black Anodize Manufacturer Ruland Manufacturing Temperature Acetal Disk -10°F to 150°F (-2 to 65°) Nylon Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (lbs) 0.131500 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 applica Note 3 "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	Country of Origin	USA	Material Specification	2024-T351 Aluminum Bar
to 65°) Nylon Disk -10°F to 130°F (-2 to 54°C) PEEK Disk -10°F to 300°F (-2 to 148°C) Weight (lbs) 0.131500 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 applica Note 3 "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	Finish	Black Anodized	Finish Specification	Sulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize
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 applica Note 3 "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	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
Note 1 "Now available in stainless steel!" Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applica Note 3 "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	Weight (lbs)	0.131500	Tariff Code	8483.60.8000
Note 2 "Performance ratings are for guidance only. The user must determine suitability for a particular applica Note 3 "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	UNSPC	31163015		
Note 3 "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 c	Note 1	"Now available in stainless steel!"		
normal/typical conditions the hubs are capable of holding up to the rated torque of the disks. In some c	Note 2	"Performance ratings are for guidance only. The user must determine suitability for a particular application."		
1 7	Note 3	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

MARNING 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 MOST41-18-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 M5 screw(s) on each hub to the recommended seating torque of 4 Nm using a 2.5 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.