



## **MOST33-10-SS**

Ruland MOST33-10-SS, 10mm Oldham Coupling Hub, 303 Stainless Steel, Set Screw Style, 33.3mm OD, 15.0mm Length

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## Description

Ruland MOST33-10-SS is a set screw oldham coupling hub with a 10mm bore, 33.3mm OD, and 15.0mm length. It is a component of a threepiece design consisiting of two stainless steel 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. MOST33-10-SS 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. MOST33-10-SS 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**

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Bore (B1)	10 mm	Outer Diameter (OD)	33.3 mm
B1 Max Shaft Penetration	15.0 mm	Bore Tolerance	+0.03 mm / -0.00 mm
Hub Width (LH)	15.00 mm	Length (L)	47.6 mm
Recommended Shaft Tolerance	+0.000 mm / -0.013 mm	Forged Set Screw	M4
Number of Screws	2 ea 90° apart	Screw Material	18-8 300 Series Stainless Steel
Screw Finish	Bright	Seating Torque	1.76 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	0.131 in (3.33 mm)	Axial Motion	0.006 in (0.15 mm)
Moment of Inertia	1.623 x 10 <sup>-5</sup> kg-m <sup>2</sup>	Maximum Speed	4,500 RPM
Recommended Inserts	<u>OD21/33-AT, OD21/33-NL,</u> <u>OD21/33-PEK</u>	Full Bearing Support Required?	Yes
Zero-Backlash?	Yes	Balanced Design	Yes
Mechanical Fuse?	Yes	UPC	634529239339
Country of Origin	USA	Material Specification	Type 303 Austenitic, Non-Magnetic Bar
Finish	Bright	Finish Specification	Bright, No Plating
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 (Ibs)	0.232800	Tariff Code	8483.60.8000
UNSPC	31163015		
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"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."

**AWARNING** This product can expose you to the chemical Nickel (metallic), known to the State of California to cause cancer. For more information go to <u>www.P65Warnings.ca.gov</u>.

Installation Instructions

- Align the bores of the MOST33-10-SS 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:* 0.008 in (0.20 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 1.76 Nm using a 2.0 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.