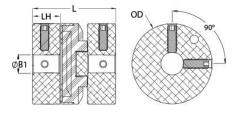




## OST16-8-SS

Ruland OST16-8-SS, 1/2" Oldham Coupling Hub, 303 Stainless Steel, Set Screw Style, 1.000" OD, 0.467" Length





## Description

Ruland OST16-8-SS is a set screw oldham coupling hub with a 0.5000" bore, 1.000" OD, and 0.390" length. It is a component of a three-piece 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. OST16-8-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. OST16-8-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**

0.5000 in	Outer Diameter (OD)	1.000 in (25.4 mm)
9.9 mm	Bore Tolerance	+0.001 in / -0.000 in
9.91 mm	Length (L)	1.250 in (31.8 mm)
+0.0000 in / -0.0005 in	Forged Set Screw	M4
2 ea 90° apart	Screw Material	18-8 300 Series Stainless Steel
Bright	Seating Torque	1.76 Nm
2.0 mm	Torque Specifications	Torque ratings vary with insert selection
0.5°	Parallel Misalignment	0.008 in (0.20 mm)
0.100 in (2.54 mm)	Axial Motion	0.004 in (0.10 mm)
0.0113 lb-in <sup>2</sup>	Maximum Speed	4,500 RPM
<u>OD16/25-AT, OD16/25-NL,</u> <u>OD16/25-PEK</u>	Full Bearing Support Required?	Yes
Yes	Balanced Design	Yes
Yes	UPC	634529239803
USA	Material Specification	Type 303 Austenitic, Non-Magnetic Bar
Bright	Finish Specification	Bright, No Plating
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)
0.072600	Tariff Code	8483.60.8000
31163015		
"Performance ratings are for guida	ance only. The user must determine s	uitability for a particular application."
"Torque ratings for the couplings are based on the physical limitations/failure point of the torque disks. Under		
	9.9 mm 9.9 mm 9.91 mm +0.0000 in / -0.0005 in 2 ea 90° apart Bright 2.0 mm 0.5° 0.100 in (2.54 mm) 0.0113 lb-in <sup>2</sup> OD16/25-AT, OD16/25-NL, OD16/25-PEK Yes Ves Ves USA Bright Ruland Manufacturing 0.072600 31163015 "Performance ratings are for guidation of the second sec	9.9 mmBore Tolerance9.91 mmLength (L)+0.0000 in / -0.0005 inForged Set Screw2 ea 90° apartScrew MaterialBrightSeating Torque2.0 mmTorque Specifications0.5°Parallel Misalignment0.100 in (2.54 mm)Axial Motion0.0113 lb-in²Maximum SpeedQD16/25-AT, QD16/25-NL, OD16/25-PEKFull Bearing Support Required?YesBalanced DesignYesUPCUSAMaterial SpecificationBrightFinish SpecificationRuland ManufacturingTemperature0.072600Tariff Code31163015"Performance ratings are for guidance only. The user must determine stress

"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 OST16-8-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:* 0.004 in (0.10 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.