



## OST21-6-A

Ruland OST21-6-A, 3/8" Oldham Coupling Hub, Aluminum, Set Screw Style, 1.313" OD, 0.590" Length

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## Description

Ruland OST21-6-A is a set screw oldham coupling hub with a 0.3750" bore, 1.313" OD, and 0.590" 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. OST21-6-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. OST21-6-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.

Product	<b>Specifications</b>
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Product Specifications			
Bore (B1)	0.3750 in	Outer Diameter (OD)	1.313 in (33.3 mm)
B1 Max Shaft Penetration	0.590 in	Bore Tolerance	+0.001 in / -0.000 in
Hub Width (LH)	0.590 in	Length (L)	1.875 in (47.6 mm)
Recommended Shaft Tolerance	+0.0000 in / -0.0005 in	Forged Set Screw	M4
Number of Screws	2 ea 90° apart	Screw Material	Alloy Steel
Screw Finish	Black Oxide	Seating Torque	2.2 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	0.0197 lb-in <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	634529062159
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 (Ibs)	0.081400	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 hub	are based on the physical limitations/fa as are capable of holding up to the rate andard bores are used or where shafts a	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

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	the shaft/hub connection when required. Please consult technical support for more assistance."	
Prop 65	<b>WARNING</b> 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="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .	
Installation Instructions		
	<ol> <li>Align the bores of the OST21-6-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. (<i>Angular Misalignment:</i> 0.5° <i>Parallel Misalignment:</i> 0.008 in (0.20 mm), <i>Axial Motion:</i> 0.006 in (0.15 mm))</li> <li>Rotate the hubs on the shaft so the drive tenons are located 90° from each other.</li> <li>Place a torque disk so one groove fits over the drive tenons of a hub and center the disk by hand.</li> <li>Insert a shim with the thickness of the coupling's axial motion rating into the groove of the torque disk.</li> <li>Slide the tenons of the second hub into the mating groove in the disk until it touches the shim stock.</li> <li>Fully tighten the M4 screw(s) on each hub to the recommended seating torque of 2.2 Nm using a 2.0 mm hex torque wrench.</li> </ol>	

to allow for axial movement.

7. Remove the shim stock to leave a small gap between the top of the drive tenons and the torque disk