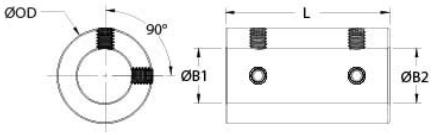
SCX-12-12-F

Ruland SCX-12-12-F, 3/4" x 3/4" Rigid Coupling, Black Oxide Steel, Set Screw Style, 1 1/2" OD, 2 1/4" Length





Description

Ruland SCX-12-12-F is a set screw rigid coupling with 0.7500" x 0.7500" bores, 1 1/2" OD, and 2 1/4" length. It has precision honed bores to ensure they are collinear and do not introduce misalignment or vibration into the system making it suitable for high precision servo appliactions as well as shaft to shaft connections. Forged screws test beyond ANSI standards to ensure maximum holding power. Tightly controlled bore tolerance of +.002"/+.0005" is maintained. SCX-12-12-F is made from 1215 lead-free steel with a proprietary black oxide finish that produces a fine glossy finish while increasing holding power and resisting corrosion. It is machined from solid bar stock that is sourced exclusively from North American mills and is RoHS3 and REACH compliant. SCX-12-12-F is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	0.7500 in	**Small Bore (B2)**	0.7500 in
B1 Max Shaft Penetration	1.125 in	**B2 Max Shaft Penetration**	1.125 in
Outer Diameter (OD)	1 1/2 in	**Bore Tolerance**	+0.0020 in / +0.0005 in
Length (L)	2 1/4 in	**Recommended Shaft Tolerance**	+0.0000 in / -0.0005 in
Forged Set Screw	5/16-18	**Screw Material**	Alloy Steel
Hex Wrench Size	5/32 in	**Screw Finish**	Black Oxide
Seating Torque	165 lb-in	**Number of Screws**	4 ea
Rated Torque	Rating Coming Soon	**Moment of Inertia**	0.2920 lb-in^2
Maximum Speed	4,000 RPM	**Full Bearing Support Required?**	No
Precision Honed Bores?	Yes	**Zero-Backlash?**	Yes
Material Specification	1215 Carbon Steel Bar	**Temperature**	-40°F to 350°F (-40°C to 176°C)
Finish Specification	Hot Process Black Oxide, Impregnated with Naphthenic Oil, Centrifugally Dried	**Manufacturer**	Ruland Manufacturing
Country of Origin	USA	**Weight (lbs)**	0.833000
UPC	634529076286	**Tariff Code**	8483.60.8000
UNSPC	31163009		
Note 1	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
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 www.P65Warnings.ca.gov.		

Installation Instructions

1. Align the SCX-12-12-F set screw rigid coupling on the two shafts to be connected. There should be no misalignment.
2. Tighten the set screws in two stages, starting with the inside set screws. Using a 5/32 in torque wrench, tighten the inside set screws to 82.5 lb-in which is half the recommended seating torque. Repeat for the outside set screws, again tightening to half of the recommended seating torque.
3. Tighten the screws to the full recommended seating torque of 165 lb-in following the same pattern, starting with the inside set screws first.