



## SCX-18-18-SS

Ruland SCX-18-18-SS, 1-1/8" x 1-1/8" Rigid Coupling, 303 Stainless Steel, Set Screw Style, 1 7/8" OD, 3 1/8" Length




### Description

Ruland SCX-18-18-SS is a set screw rigid coupling with 1.1250" x 1.1250" bores, 1 7/8" OD, and 3 1/8" 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 applications 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-18-18-SS is made from 303 stainless steel with hardware of like material for consistent corrosion resistance. It is machined from solid bar stock that is sourced exclusively from North American mills and is RoHS3 and REACH compliant. SCX-18-18-SS is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

### Product Specifications

<b>Bore (B1)</b>	1.1250 in	<b>Small Bore (B2)</b>	1.1250 in
<b>B1 Max Shaft Penetration</b>	1.562 in	<b>B2 Max Shaft Penetration</b>	1.562 in
<b>Outer Diameter (OD)</b>	1 7/8 in	<b>Bore Tolerance</b>	+0.0020 in / +0.0005 in
<b>Length (L)</b>	3 1/8 in	<b>Recommended Shaft Tolerance</b>	+0.0000 in / -0.0005 in
<b>Forged Set Screw</b>	3/8-16	<b>Screw Material</b>	18-8 300 Series Stainless Steel
<b>Hex Wrench Size</b>	3/16 in	<b>Screw Finish</b>	Bright
<b>Seating Torque</b>	230 lb-in	<b>Number of Screws</b>	4 ea
<b>Rated Torque</b>	Rating Coming Soon	<b>Moment of Inertia</b>	0.9459 lb-in <sup>2</sup>
<b>Maximum Speed</b>	4,000 RPM	<b>Full Bearing Support Required?</b>	No
<b>Precision Honed Bores?</b>	Yes	<b>Zero-Backlash?</b>	Yes
<b>Material Specification</b>	Type 303 Austenitic, Non-Magnetic Bar	<b>Temperature</b>	-40°F to 350°F (-40°C to 176°C)
<b>Finish Specification</b>	Bright, No Plating	<b>Manufacturer</b>	Ruland Manufacturing
<b>Country of Origin</b>	USA	<b>Weight (lbs)</b>	1.577600
<b>UPC</b>	634529076651	<b>Tariff Code</b>	8483.60.8000
<b>UNSPC</b>	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 Nickel (metallic), known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### Installation Instructions

1. Align the SCX-18-18-SS 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 3/16 in torque wrench, tighten the inside set screws to 115 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 230 lb-in following the same pattern, starting with the inside set screws first.