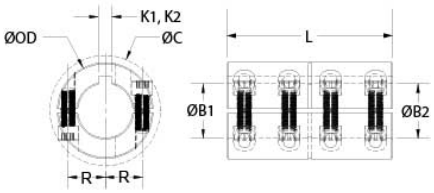
SPC-12-12-SS

Ruland SPC-12-12-SS, 3/4" x 3/4" Rigid Coupling, 303 Stainless Steel, Two-Piece Clamp Style With Keyway, 1 1/2" OD, 2 1/4" Length





Description

Ruland SPC-12-12-SS is a two-piece rigid coupling with 0.7500" x 0.7500" bores, 1 1/2" OD, 2 1/4" length, and 3/16" x 3/16" keyways. 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. SPC-12-12-SS has opposing hardware for a balanced design. Proprietary Nypatch® anti-vibration coating on hardware allows for even seating of the screw, repeated screw installations, prevents galling, and maintains high holding power. It eliminates the need to treat screws upon receipt greatly reducing installation time. Forged screws test beyond ANSI standards to ensure maximum holding power. Tightly controlled bore tolerance of +.002"/+.0005" is maintained. SPC-12-12-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. SPC-12-12-SS 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
Keyway (K1)	3/16 in	**Keyway (K2)**	3/16 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	**Clearance Diameter (C) MAX**	1.842 in
Recommended Gap	0.094 in	**Recommended Shaft Tolerance**	+0.0000 in / -0.0005 in
Forged Clamp Screw	1/4-28	**Screw Material**	18-8 300 Series Stainless Steel with Nypatch®
Hex Wrench Size	3/16 in	**Screw Finish**	Bright
Seating Torque	110 lb-in	**Screw Location (R)**	0.545 in
Number of Screws	8 ea	**Rated Torque**	950 in-lb
Moment of Inertia	0.2778 lb-in^2	**Maximum Speed**	4,000 RPM
Full Bearing Support Required?	No	**Nypatch® Anti-Vibration Hardware?**	Yes
Precision Honed Bores?	Yes	**Zero-Backlash?**	Yes
Balanced Design	Yes	**Material Specification**	Type 303 Austenitic, Non-Magnetic Bar
Temperature	-40°F to 350°F (-40°C to 176°C)	**Finish Specification**	Bright, No Plating
Manufacturer	Ruland Manufacturing	**Country of Origin**	USA
Weight (lbs)	0.772100	**UPC**	634529022276
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 Nickel (metallic), known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.		

Installation Instructions

1. Align the SPC-12-12-SS two-piece rigid coupling on the two shafts to be connected. There should be no misalignment.
2. Tighten the Nypatch® screws in two stages, starting with the inside screws. Using a 3/16 in torque wrench, tighten the inside screws to 55 lb-in which is half the recommended seating torque. Repeat the process for the outside screws, tightening to half the recommended seating torque.

3. Be sure to maintain the gap of 0.094 in between the two halves during installation.
4. Tighten the screws to the full recommended seating torque of 110 lb-in following the same pattern, starting with the inside screws first.
5. For optimum results do not exceed the shaft penetration length of 1.125 in.