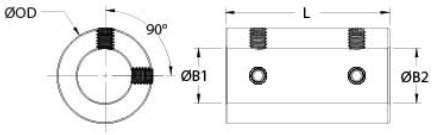
# MSCX-12-12-SS

Ruland MSCX-12-12-SS, 12mm x 12mm Rigid Coupling, 303 Stainless Steel, Set Screw Style, 29mm OD, 45mm Length






## Description

Ruland MSCX-12-12-SS is a set screw rigid coupling with 12mm x 12mm bores, 29mm OD, and 45mm 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 DIN 912 12.9 standards to ensure maximum holding power. Tightly controlled bore tolerance of +.050mm/+.012mm is maintained. MSCX-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. MSCX-12-12-SS is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

## Product Specifications

| | | | |
|---|---|---|---|
| **Bore (B1)** | 12 mm | **Small Bore (B2)** | 12 mm |
| **B1 Max Shaft Penetration** | 22.5 mm | **B2 Max Shaft Penetration** | 22.5 mm |
| **Outer Diameter (OD)** | 29 mm | **Bore Tolerance** | +0.050 mm / +0.012 mm |
| **Length (L)** | 45 mm | **Recommended Shaft Tolerance** | +0.000 mm / -0.013 mm |
| **Forged Set Screw** | M6 | **Screw Material** | 18-8 300 Series Stainless Steel |
| **Hex Wrench Size** | 3.0 mm | **Screw Finish** | Bright |
| **Seating Torque** | 5.76 Nm | **Number of Screws** | 4 ea |
| **Rated Torque** | Rating Coming Soon | **Moment of Inertia** | 2.398 x $10^{-5}$ kg-$m^2$ |
| **Maximum Speed** | 4,000 RPM | **Full Bearing Support Required?** | No |
| **Precision Honed Bores?** | Yes | **Zero-Backlash?** | 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)** | 0.429600 |
| **UPC** | 634529076781 | **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 MSCX-12-12-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 3.0 mm torque wrench, tighten the inside set screws to 2.88 Nm 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 5.76 Nm following the same pattern, starting with the inside set screws first.

# Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

## Ruland Manufacturing:

ENCL20-6MM-A ENSP20-10MM-A MRSC13-5-5-A MSPC-16-16-F MWC30-10-10-SS FHD-MCL-25-F LV-MSP-25-SS MTCL-12-1.75-F FHD-MCL-30-SS MCL-4-F MSP-12-P MSP-22-F MSPX-16-16-F MJS25-8-A MOCT57-25-A MSPX-8-8-F OF-MSP-20-F FSMR32-13-12-A MRLC16-8-8-A FHD-MCL-35-AN MOCT19-5-A MRSC25-5-5-A OD36/57-AT MJC57-25-A MQCL-8-A MSP-6-SS OCT12-4-A ENSP30-12MM-A MJS33-12-A MSPX-12-12-F