



## MCLX-25-20-SS

Ruland MCLX-25-20-SS, 25mm x 20mm Rigid Coupling, 303 Stainless Steel, One-Piece Clamp Style, 45mm OD, 75mm Length



### Description

Ruland MCLX-25-20-SS is a one-piece rigid coupling with 25mm x 20mm bores, 45mm OD, and 75mm 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. 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 DIN 912 12.9 standards to ensure maximum holding power. Tightly controlled bore tolerance of  $\pm 0.050\text{mm}/\pm 0.012\text{mm}$  is maintained. MCLX-25-20-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. MCLX-25-20-SS is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

### Product Specifications

<b>Bore (B1)</b>	25 mm	<b>Small Bore (B2)</b>	20 mm
<b>B1 Max Shaft Penetration</b>	37.5 mm	<b>B2 Max Shaft Penetration</b>	37.5 mm
<b>Outer Diameter (OD)</b>	45 mm	<b>Bore Tolerance</b>	+0.050 mm / +0.012 mm
<b>Length (L)</b>	75 mm	<b>Recommended Shaft Tolerance</b>	+0.000 mm / -0.013 mm
<b>Forged Clamp Screw</b>	M6	<b>Screw Material</b>	18-8 300 Series Stainless Steel with <a href="#">Nypatch®</a>
<b>Hex Wrench Size</b>	5.0 mm	<b>Screw Finish</b>	Bright
<b>Seating Torque</b>	9.6 Nm	<b>Number of Screws</b>	4 ea
<b>Rated Torque</b>	120 Nm	<b>Moment of Inertia</b>	$2.118 \times 10^{-4} \text{ kg-m}^2$
<b>Maximum Speed</b>	4,000 RPM	<b>Full Bearing Support Required?</b>	No
<b>Nypatch® Anti-Vibration Hardware?</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>	1.470500
<b>UPC</b>	634529122129	<b>Tariff Code</b>	8483.60.8000
<b>UNSPC</b>	31163009		
<b>Note 1</b>	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
<b>Prop 65</b>	⚠️ <b>WARNING</b> This product can expose you to the chemical Nickel (metallic), known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .		

### Installation Instructions

1. Align the MCLX-25-20-SS one-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 5.0 mm torque wrench, tighten the inside screws to 4.8 Nm which is half the recommended seating torque. Repeat for the outside screws, again tightening to half of the recommended seating torque.
3. Tighten the screws to the full recommended seating torque of 9.6 Nm following the same pattern, starting with the inside screws first.