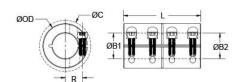




MCLX-12-10-SS

Ruland MCLX-12-10-SS, 12mm x 10mm Rigid Coupling, 303 Stainless Steel, One-Piece Clamp Style, 29mm OD, 45mm Length





Description

Ruland MCLX-12-10-SS is a one-piece rigid coupling with 12mm x 10mm bores, 29mm OD, and 45mm length. 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 +.050mm/+.012mm is maintained. MCLX-12-10-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-12-10-SS is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

B1 Max Shaft Penetration 22.5 mm B2 Max Shaft Penetration 22.5 mm Duter Diameter (OD) 29 mm Bore Tolerance +0.050 mm / +0.012 mm Recommended Shaft Tolerance +0.000 mm / -0.013 mm Bright B	i roduct opecifications			
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 Clamp Screw M4 Screw Material 18-8 300 Series Stainless Steel win Nypatch® Hex Wrench Size 3.0 mm Screw Finish Bright Seating Torque 2.5 Nm Number of Screws 4 ea Rated Torque 32 Nm Moment of Inertia 2.291 x 10-5 kg-m² Maximum Speed 4,000 RPM Full Bearing Support Required? No Vypatch® Anti-Vibration Yes Zero-Backlash? Yes Hardware? Waterial 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) 0.416900 UPC 634529070000 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	Bore (B1)	12 mm	Small Bore (B2)	10 mm
Length (L) 45 mm Recommended Shaft Tolerance M4 Screw Material 18-8 300 Series Stainless Steel with Nypatch® Hex Wrench Size 3.0 mm Screw Finish Bright Seating Torque 2.5 Nm Number of Screws 4 ea Rated Torque 32 Nm Moment of Inertia 2.291 x 10⁻⁵ kg-m² Maximum Speed 4,000 RPM Full Bearing Support Required? No Nypatch® Anti-Vibration Yes Zero-Backlash? Waterial Specification Type 303 Austenitic, Non-Magnetic Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (lbs) 0.416900 UNSPC 31163009 Note 1 Performance ratings are for guidance only. The user must determine suitability for a particular application. Prop 65	B1 Max Shaft Penetration	22.5 mm	B2 Max Shaft Penetration	22.5 mm
Forged Clamp Screw M4 Screw Material 18-8 300 Series Stainless Steel win Nypatch® Bright Bright Seating Torque 2.5 Nm Number of Screws 4 ea Rated Torque 32 Nm Moment of Inertia 2.291 x 10 ⁻⁵ kg-m² Maximum Speed 4,000 RPM Full Bearing Support Required? No Nypatch® Anti-Vibration Hardware? Material Specification Type 303 Austenitic, Non-Magnetic Bar Finish Specification Bright, No Plating Manufacturer Weight (Ibs) 0.416900 UPC 634529070000 Tariff Code Manufacturine suitability for a particular application. Prop 65 WARNING This product can expose you to the chemical Nickel (metallic), known to the State of California.	Outer Diameter (OD)	29 mm	Bore Tolerance	+0.050 mm / +0.012 mm
Hex Wrench Size 3.0 mm Screw Finish Bright Seating Torque 2.5 Nm Number of Screws 4 ea Rated Torque 32 Nm Moment of Inertia 2.291 x 10⁻⁵ kg-m² Maximum Speed 4,000 RPM Full Bearing Support Required? No Nypatch® Anti-Vibration Hardware? Material Specification Type 303 Austenitic, Non-Magnetic Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (Ibs) 0.416900 UPC 634529070000 Tariff Code 8483.60.8000 UNSPC 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.	Length (L)	45 mm	Recommended Shaft Tolerance	+0.000 mm / -0.013 mm
Seating Torque2.5 NmNumber of Screws4 eaRated Torque32 NmMoment of Inertia2.291 x 10⁻⁵ kg-m²Maximum Speed4,000 RPMFull Bearing Support Required?NoNypatch® Anti-Vibration Hardware?YesZero-Backlash?YesMaterial SpecificationType 303 Austenitic, Non-Magnetic BarTemperature Finish Specification-40°F to 350°F (-40°C to 176°C)Finish SpecificationBright, No PlatingManufacturerRuland ManufacturingCountry of OriginUSAWeight (lbs)0.416900UPC634529070000Tariff Code8483.60.8000UNSPC31163009Note 1Performance 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	Forged Clamp Screw	M4	Screw Material	18-8 300 Series Stainless Steel with Nypatch.org/
Rated Torque 32 Nm Moment of Inertia 2.291 x 10 ⁻⁵ kg-m² Maximum Speed 4,000 RPM Full Bearing Support Required? No Nypatch® Anti-Vibration Yes Zero-Backlash? Yes Hardware? 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) 0.416900 UPC 634529070000 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 Californic	Hex Wrench Size	3.0 mm	Screw Finish	Bright
Maximum Speed4,000 RPMFull Bearing Support Required?NoNypatch® Anti-Vibration Hardware?YesZero-Backlash?YesMaterial SpecificationType 303 Austenitic, Non-Magnetic BarTemperature-40°F to 350°F (-40°C to 176°C)Finish SpecificationBright, No PlatingManufacturerRuland ManufacturingCountry of OriginUSAWeight (lbs)0.416900UPC634529070000Tariff Code8483.60.8000UNSPC31163009Note 1Performance 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 Californic	Seating Torque	2.5 Nm	Number of Screws	4 ea
Nypatch® Anti-Vibration Hardware? 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) 0.416900 UPC 634529070000 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 ARNING This product can expose you to the chemical Nickel (metallic), known to the State of Californic	Rated Torque	32 Nm	Moment of Inertia	2.291 x 10 ⁻⁵ kg-m ²
Hardware? Material Specification Type 303 Austenitic, Non-Magnetic Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (Ibs) 0.416900 UPC 634529070000 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 Californic	Maximum Speed	4,000 RPM	Full Bearing Support Required?	No
Bar Finish Specification Bright, No Plating Manufacturer Ruland Manufacturing Country of Origin USA Weight (lbs) 0.416900 UPC 634529070000 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 Californical Country of Origin USA Warning This product can expose you to the chemical Nickel (metallic), known to the State of Californical Country of Origin USA Warning This product can expose you to the chemical Nickel (metallic), known to the State of Californical Country of Origin USA Warning This product can expose you to the chemical Nickel (metallic), known to the State of Californical Country of Origin USA Weight (lbs) 0.416900 Prop 65	Nypatch® Anti-Vibration Hardware?	Yes	Zero-Backlash?	Yes
Country of Origin USA Weight (lbs) 0.416900 UNSPC 31163009 Note 1 Prop 65 WARNING This product can expose you to the chemical Nickel (metallic), known to the State of California.	Material Specification		Temperature	-40°F to 350°F (-40°C to 176°C)
UPC 634529070000 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 Californic	Finish Specification	Bright, No Plating	Manufacturer	Ruland Manufacturing
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 Californic	Country of Origin	USA	Weight (lbs)	0.416900
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 Californi	UPC	634529070000	Tariff Code	8483.60.8000
Prop 65WARNING This product can expose you to the chemical Nickel (metallic), known to the State of Californi	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 MCLX-12-10-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 3.0 mm torque wrench, tighten the inside screws to 1.25 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 2.5 Nm following the same pattern, starting with the inside screws first.