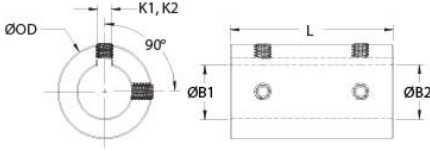




MSCC-40-40-F


Ruland MSCC-40-40-F, 40mm x 40mm Rigid Coupling, Black Oxide Steel, Set Screw Style with Keyway, 77mm OD, 108mm Length



Description

Ruland MSCC-40-40-F is a set screw rigid coupling with 40mm x 40mm bores, 77mm OD, 108mm length, and 12mm x 12mm 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 applications 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 $\pm 0.050\text{mm}/\pm 0.012\text{mm}$ is maintained. MSCC-40-40-F is made from 1215 lead-free steel with a proprietary black oxide finish that produces a fine glossy finish while increasing holding power and resisting corrosion. It is machined from solid bar stock that is sourced exclusively from North American mills and is RoHS3 and REACH compliant. MSCC-40-40-F is manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	40 mm	Small Bore (B2)	40 mm
Keyway (K1)	12 mm	Keyway (K2)	12 mm
B1 Max Shaft Penetration	54.0 mm	B2 Max Shaft Penetration	54.0 mm
Bore Tolerance	$+0.050\text{ mm} / +0.012\text{ mm}$	Outer Diameter (OD)	77 mm
Length (L)	108 mm	Recommended Shaft Tolerance	$+0.000\text{ mm} / -0.013\text{ mm}$
Forged Set Screw	M10	Screw Material	Alloy Steel
Hex Wrench Size	5.0 mm	Screw Finish	Black Oxide
Seating Torque	33 Nm	Number of Screws	4 ea
Rated Torque	Rating Coming Soon	Moment of Inertia	$2.670 \times 10^{-3}\text{ kg}\cdot\text{m}^2$
Maximum Speed	4,000 RPM	Full Bearing Support Required?	No
Precision Honed Bores?	Yes	Zero-Backlash?	Yes
Material Specification	1215 Carbon Steel Bar	Temperature	-40°F to 350°F (-40°C to 176°C)
Finish Specification	Hot Process Black Oxide, Impregnated with Naphthenic Oil, Centrifugally Dried	Manufacturer	Ruland Manufacturing
Country of Origin	USA	Weight (lbs)	6.198800
UPC	634529107898	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 Ethylene Thiourea, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov .		

Installation Instructions

1. Align the MSCC-40-40-F 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 5.0 mm torque wrench, tighten the inside set screws to 16.5 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 33 Nm following the same pattern, starting with the inside set screws first.