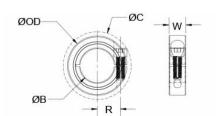




## MCL-48E-F

Ruland MCL-48E-F, 3" International Shaft Collar, Black Oxide Steel, One-Piece Clamp Style, 108mm OD, 19mm Width





## **Description**

Ruland MCL-48E-F is a one-piece shaft collar with a 3.0000" bore, 108mm OD, and 19mm width. It is an international series shaft collar that has metric hardware and dimensions with inch bores. The clamp style design does not mar the shaft, is easy to remove, and is indefinitely adjustable. MCL-48E-F is commonly used for guiding, spacing, stopping, mounting, and component alignment. Equipment manufacturers benefit from the tightly controlled face to bore perpendicularity (TIR of ? .05mm). Perpendicularity is critical for alignment when the shaft collar is used as a load bearing face, mechanical stop, or for mounting components such as gears or bearings. Proprietary processes have been developed by Ruland to maintain superior fit, finish, and holding power. MCL-48E-F is stamped with the Ruland name and bore size for ease of identification. Forged screws test beyond DIN 912 12.9 standards to ensure maximum holding power. MCL-48E-F is manufactured from solid bar stock sourced from select North American mills and machined to a fine burr free finish. Ruland uses 1215 lead-free steel with a proprietary black oxide finish that produces a fine glossy finish while increasing holding power and resisting corrosion. MCL-48E-F is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

**Product Specifications** 

Product Specifications			
Bore (B)	3.0000 in	Bore Tolerance	+0.0020 in / +0.0005 in
Outer Diameter (OD)	108 mm	Clearance Diameter (C) MAX	113.8 mm
Width (W)	19 mm	Width Tolerance	+0.076 mm / -0.254 mm
Recommended Shaft Tolerance	+0.0000 in / -0.0010 in	Forged Clamp Screw	M8
Screw Material	Alloy Steel	Hex Wrench Size	6.0 mm
Screw Finish	Black Oxide	Seating Torque	39 Nm
Screw Location (R)	46.99 mm	Number of Screws	1 ea
Material Specification	1215 Carbon Steel Bar	Finish Specification	Hot Process Black Oxide, Impregnated with Naphthenic Oil, Centrifugally Dried
Manufacturer	Ruland Manufacturing	Country of Origin	USA
Temperature	-40°F to 350°F (-40°C to 176°C)	Weight (lbs)	1.436300
UPC	634529241516	Tariff Code	8483.60.8000
UNSPC	31162811		
Note 1	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
Note 2	No backslot		
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 <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .		

## **Installation Instructions**

- 1. Use the MCL-48E-F international series shaft collar as it is received.
- 2. Wipe the bore clean.
- 3. Apply a thin coat of light oil to the shaft.
- 4. Place the collar onto the desired shaft location and tighten it using a 6.0 mm hex wrench until a slight resistance is felt.
- 5. Wring collar into its final position and tighten the screw to the full recommended seating torque of 39 Nm using a 6.0 mm torque wrench.