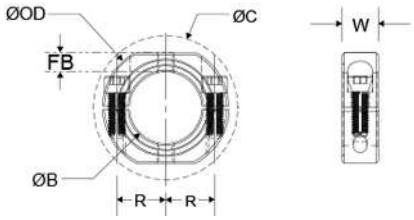
# OF-MSP-20-AN

Ruland OF-MSP-20-AN, 20mm Shaft Collar With OD Flats And Holes, Black Anodized Aluminum, Two-Piece Clamp Style, 40mm OD, 15mm Width








## Description

Ruland OF-MSP-20-AN is a two-piece shaft collar with a 20mm bore, 40mm OD, and 15mm width. It has OD flats and tapped holes for mounting shaft collars to each other or adjacent components. The clamp style design does not mar the shaft, is easy to remove, and is indefinitely adjustable. OF-MSP-20-AN 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. OF-MSP-20-AN is stamped with the Ruland name and bore size for ease of identification. Halves are mated throughout the manufacturing process for proper fit and alignment. Forged screws test beyond DIN 912 12.9 standards to ensure maximum holding power. OF-MSP-20-AN is manufactured from solid bar stock sourced from select North American mills and machined to a fine burr free finish. Ruland uses high grade 2024 aluminum with an anodized finish for increased screw seating torque. OF-MSP-20-AN is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

## Product Specifications

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|---|---|---|---|
| **Bore (B1)** | 20 mm | **Bore Tolerance** | +0.050 mm / +0.012 mm |
| **Outer Diameter (OD)** | 40 mm | **Clearance Diameter (C) MAX** | 47.4 mm |
| **Width (W)** | 15 mm | **Width Tolerance** | +0.076 mm / -0.254 mm |
| **Threaded Mounting Hole** | M6 | **Distance Across Flats (F)** | 36 mm |
| **Flat to Bore FB** | 8 mm | **Recommended Gap** | 1.590 in |
| **Recommended Shaft Tolerance** | +0.000 mm / -0.013 mm | **Forged Clamp Screw** | M6 x 16 |
| **Screw Material** | 18-8 300 Series Stainless Steel | **Hex Wrench Size** | 5.0 mm |
| **Screw Finish** | Bright | **Seating Torque** | 16 Nm |
| **Screw Location (R)** | 14.73 mm | **Number of Screws** | 2 ea |
| **Material Specification** | 2024-T351 Aluminum Bar | **Temperature** | -40°F to 200°F (-40°C to 93°C) |
| **Finish Specification** | Sulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize | **Manufacturer** | Ruland Manufacturing |
| **Country of Origin** | USA | **Weight (lbs)** | 0.088800 |
| **UPC** | 634529306345 | **Tariff Code** | 8483.60.8000 |
| **UNSPC** | 31162811 | | |
| **Note 1** | Additional mounting hardware not included. | | |
| **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. Use the OF-MSP-20-AN two-piece 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 5.0 mm hex wrench until a slight resistance is felt.

5. Be sure to maintain the gap of 1.590 in between the two halves of the collar during installation.
6. Wring collar into its final position and tighten the screw to the full recommended seating torque of 16 Nm using a 5.0 mm torque wrench.