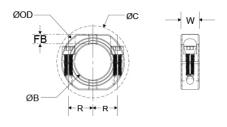




OF-MSP-20-AN

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

Finish SpecificationSulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black AnodizeRuland ManufacturingCountry of OriginUSAWeight (lbs)0.088800UPC634529306345Tariff Code8483.60.8000UNSPC31162811	· · · · · · · · · · · · · · · · · · ·			
Width (W)15 mmWidth Tolerance+0.076 mm / -0.254 mmThreaded Mounting HoleM6Distance Across Flats (F)36 mmFlat to Bore FB8 mmRecommended Gap1.590 inRecommended Shaft Tolerance+0.000 mm / -0.013 mmForged Clamp ScrewM6 x 16Screw Material18-8 300 Series Stainless SteelHex Wrench Size5.0 mmScrew FinishBrightSeating Torque16 NmScrew Location (R)14.73 mmNumber of Screws2 eaMaterial Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 Type Manufacturer II, Class 2 and ASTM B580 Type B Black AnodizeRuland ManufacturingUPC634529306345Tariff Code8483.60.8000UNSPC31162811	Bore (B)	20 mm	Bore Tolerance	+0.050 mm / +0.012 mm
Threaded Mounting HoleM6Distance Across Flats (F)36 mmFlat to Bore FB8 mmRecommended Gap1.590 inRecommended Shaft Tolerance+0.000 mm / -0.013 mmForged Clamp ScrewM6 x 16Screw Material18-8 300 Series Stainless SteelHex Wrench Size5.0 mmScrew FinishBrightSeating Torque16 NmScrew Location (R)14.73 mmNumber of Screws2 eaMaterial Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 Type Black AnodizeManufacturer Black AnodizeRuland ManufacturingUPC634529306345Tariff Code8483.60.80000.088800UPSPC31162811Note 1Additional mounting hardware not included.Forge 500°F (-to the State of CaliProp 65WARNING This product can expose you to the chemical Nickel (metallic), known to the State of Cali	Outer Diameter (OD)	40 mm	Clearance Diameter (C) MAX	47.4 mm
Flat to Bore FB8 mmRecommended Gap1.590 inRecommended Shaft Tolerance+0.000 mm / -0.013 mmForged Clamp ScrewM6 x 16Screw Material18-8 300 Series Stainless SteelHex Wrench Size5.0 mmScrew FinishBrightSeating Torque16 NmScrew Location (R)14.73 mmNumber of Screws2 eaMaterial Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 Type Manufacturer II, Class 2 and ASTM B580 Type B Black AnodizeRuland ManufacturingUPC634529306345Tariff Code8483.60.8000UNSPC31162811Note 1Additional mounting hardware not included.Prop 65MARNING This product can expose you to the chemical Nickel (metallic), known to the State of Cali	Width (W)	15 mm	Width Tolerance	+0.076 mm / -0.254 mm
Recommended Shaft Tolerance+0.000 mm / -0.013 mmForged Clamp ScrewM6 x 16Screw Material18-8 300 Series Stainless SteelHex Wrench Size5.0 mmScrew FinishBrightSeating Torque16 NmScrew Location (R)14.73 mmNumber of Screws2 eaMaterial Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 Type Manufacturer II, Class 2 and ASTM B580 Type B Black AnodizeRuland ManufacturingCountry of OriginUSAWeight (Ibs)0.088800UPC634529306345Tariff Code8483.60.8000UNSPC31162811Note 1Additional mounting hardware not included.Prop 65MWARNING This product can expose you to the chemical Nickel (metallic), known to the State of Cali	Threaded Mounting Hole	M6	Distance Across Flats (F)	36 mm
Screw Material18-8 300 Series Stainless SteelHex Wrench Size5.0 mmScrew FinishBrightSeating Torque16 NmScrew Location (R)14.73 mmNumber of Screws2 eaMaterial Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 Type Black AnodizeManufacturer Black AnodizeRuland ManufacturingCountry of OriginUSAWeight (lbs)0.088800UPC634529306345Tariff Code8483.60.8000UNSPC31162811Note 1Additional mounting hardware not included.Prop 65MARNING This product can expose you to the chemical Nickel (metallic), known to the State of Cali	Flat to Bore FB	8 mm	Recommended Gap	1.590 in
Screw FinishBrightSeating Torque16 NmScrew Location (R)14.73 mmNumber of Screws2 eaMaterial Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black AnodizeManufacturer Number of OriginRuland ManufacturingUPC634529306345Tariff Code8483.60.8000UNSPC31162811Veight (lbs)0.088800Note 1Additional mounting hardware not included.For 65	Recommended Shaft Tolerance	+0.000 mm / -0.013 mm	Forged Clamp Screw	M6 x 16
Screw Location (R)14.73 mmNumber of Screws2 eaMaterial Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 TypeManufacturer Black AnodizeRuland ManufacturingCountry of OriginUSAWeight (lbs)0.088800UPC634529306345Tariff Code8483.60.8000UNSPC31162811Note 1Additional mounting hardware not included.Prop 65Additional mounting hardware not expose you to the chemical Nickel (metallic), known to the State of Cali	Screw Material	18-8 300 Series Stainless Steel	Hex Wrench Size	5.0 mm
Material Specification2024-T351 Aluminum BarTemperature-40°F to 200°F (-40°C to 93°CFinish SpecificationSulfuric Anodized MIL-A-8625 TypeManufacturerRuland ManufacturingII, Class 2 and ASTM B580 Type B Black AnodizeBlack Anodize0.088800Country of OriginUSAWeight (lbs)0.088800UPC634529306345Tariff Code8483.60.8000UNSPC31162811Jif 2811Jif 2811Note 1Additional mounting hardware not included.For 65	Screw Finish	Bright	Seating Torque	16 Nm
Finish Specification Sulfuric Anodized MIL-A-8625 Type Manufacturer Ruland Manufacturing II, Class 2 and ASTM B580 Type B Black Anodize 0.088800 Country of Origin USA Weight (lbs) 0.088800 UPC 634529306345 Tariff Code 8483.60.8000 UNSPC 31162811	Screw Location (R)	14.73 mm	Number of Screws	2 ea
II, Class 2 and ASTM B580 Type B Black Anodize Country of Origin USA Weight (lbs) 0.088800 UPC 634529306345 Tariff Code 000000000000000000000000000000000000	Material Specification	2024-T351 Aluminum Bar	Temperature	-40°F to 200°F (-40°C to 93°C)
UPC 634529306345 Tariff Code 8483.60.8000 UNSPC 31162811 Note 1 Additional mounting hardware not included. Prop 65 MARNING This product can expose you to the chemical Nickel (metallic), known to the State of Cali	Finish Specification	II, Class 2 and ASTM B580 Type B	Manufacturer	Ruland Manufacturing
UNSPC 31162811 Note 1 Additional mounting hardware not included. Prop 65 MARNING This product can expose you to the chemical Nickel (metallic), known to the State of Cali	Country of Origin	USA	Weight (Ibs)	0.088800
Note 1Additional mounting hardware not included.Prop 65Additional mounting hardware not included.	UPC	634529306345	Tariff Code	8483.60.8000
Prop 65	UNSPC	31162811		
	Note 1	Additional mounting hardware not in	ncluded.	
	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 <u>www.P65Warnings.ca.gov</u> .		

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.