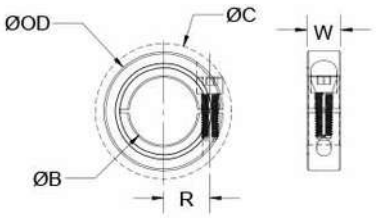
MCL-21-AN

Ruland MCL-21-AN, 21mm One-Piece Shaft Collar, Anodized Aluminum, Clamp Style, 42mm OD, 15mm Width







Description

Ruland MCL-21-AN is a one-piece shaft collar with a 21mm bore, 42mm OD, and 15mm width. The clamp style design does not mar the shaft, is easy to remove, and is indefinitely adjustable. It 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-21-AN 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-21-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 and added corrosion resistance. MCL-21-AN is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	21 mm	**Bore Tolerance**	+0.050 mm / +0.012 mm
Outer Diameter (OD)	42 mm	**Clearance Diameter (C) MAX**	49.5 mm
Width (W)	15 mm	**Width Tolerance**	+0.076 mm / -0.254 mm
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**	9.6 Nm
Screw Location (R)	16.00 mm	**Number of Screws**	1 ea
Material Specification	2024-T351 Aluminum Bar	**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
Temperature	-40°F to 200°F (-40°C to 93°C)	**Weight (lbs)**	0.099200
UPC	634529114094	**Tariff Code**	8483.60.8000
UNSPC	31162811		
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. Use the MCL-21-AN one-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 with the groove side as the work surface. Tighten the collar using a 5.0 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 9.6 Nm using a 5.0 mm torque wrench.