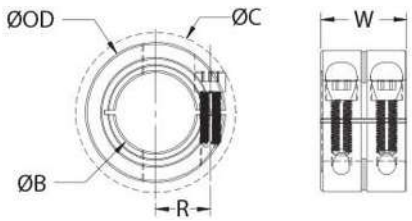
MWCL-12-A

Ruland MWCL-12-A, 12mm Double Wide Shaft Collar, Aluminum, One-Piece Clamp Style, 28mm OD, 23.6mm Width









Description

Ruland MWCL-12-A is a one-piece double wide shaft collar with a 12mm bore, 28mm OD, and 23.6mm 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. MWCL-12-A is stamped with the Ruland name and bore size for ease of identification. This double wide shaft collar has 25% higher axial holding power than a round bore of equivalent size. It can also be used as a short rigid coupling for applications where a traditional rigid coupling is too long. Forged screws test beyond DIN 912 12.9 standards to ensure maximum holding power. MWCL-12-A 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 for increased screw seating torque. MWCL-12-A is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	12 mm	**Small Bore (B2)**	12 mm
Outer Diameter (OD)	28 mm	**Bore Tolerance**	+0.050 mm / +0.012 mm
Width (W)	23.6 mm	**Width Tolerance**	+0.076 mm / -0.254 mm
Clearance Diameter (C) MAX	32.0 mm	**Recommended Shaft Tolerance**	+0.000 mm / -0.013 mm
Forged Clamp Screw	M4	**Screw Material**	Alloy Steel
Hex Wrench Size	3.0 mm	**Screw Finish**	Black Oxide
Seating Torque	4.6 Nm	**Screw Location (R)**	10.01 mm
Number of Screws	2 ea	**Material Specification**	2024-T351 Aluminum Bar
Temperature	-40°F to 225°F (-40°C to 107°C)	**Finish Specification**	Bright, No Plating
Manufacturer	Ruland Manufacturing	**Country of Origin**	USA
Moment of Inertia	3.818 x 10^{-6} kg-m^2	**Weight (lbs)**	0.070600
UPC	634529126745	**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 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. Use the MWCL-12-A double wide shaft collar as it is received.
2. Wipe the bore clean.
3. Apply a thin coat of light oil to the shaft.
4. Tighten the screws in two stages, starting with the inside screws. Using a torque wrench with 3.0 mm bit, tighten the inside screws to 2.3 Nm which is half the recommended seating torque. Repeat for the outside screws, again tightening to half of the recommended seating torque.
5. Tighten the screws to the full recommended seating torque of 4.6 Nm following the same pattern, starting with the inside screws first.