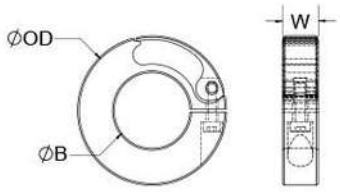
MQCL-45-A

Ruland MQCL-45-A, 45mm Quick Clamping Shaft Collar, Aluminum, Quick Release, 100mm OD, 19mm Width







Description

Ruland MQCL-45-A is a quick clamping shaft collar with cam lever with a 45mm bore, 100mm OD, and 19mm width. The patented design requires no tools to install or remove allowing for quick installations and adjustments while reducing downtime. It is designed for light duty stationary or low rotating applications where frequent change outs of items including media, guide rails, or other setup fixturing is required. MQCL-45-A has an cam lever that can be actuated using finger power only for easy postioning adjustments. The screw can be adjusted to be compatible with wider shaft tolerances and provide a range of axial holding power. Hardware is metric and tests beyond DIN 912 12.9 standards for maximum torque capabilities. MQCL-45-A is stamped with the Ruland name and bore size for ease of identification. It is manufactured from solid bar stock sourced from select North American mills and machined to a fine burr free finish. MQCL-45-A is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	45 mm	**Bore Tolerance**	+0.050 mm / +0.012 mm
Width (W)	19 mm	**Outer Diameter (OD)**	100 mm
Width Tolerance	+0.076 mm / -0.254 mm	**Recommended Shaft Tolerance**	+0.000 mm / -0.013 mm
Cap Screw	M6	**Screw Material**	18-8 300 Series Stainless Steel
Hex Wrench Size	5.0 mm	**Screw Finish**	Bright
Seating Torque	Factory Preset	**Number of Screws**	1 ea
Axial Load	Min: 556 N, Max: 867 N	**Material Specification**	Body: 6061-T651 Aluminum Bar, Handle: 6063-T651 Aluminum
Temperature	-40°F to 200°F (-40°C to 93°C)	**Finish Specification**	Body: Sulfuric Anodized MIL-A-8625 Type II, Class 2 and ASTM B580 Type B Black Anodize, Handle: Sulfuric Anodized MIL-A-8625 Type II, Class 2 Gold Anodize with Teflon
Manufacturer	Ruland Manufacturing	**Country of Origin**	USA
Weight (lbs)	0.645100	**UPC**	634529135655
Tariff Code	8483.60.8000	**UNSPC**	31162811
Note 1	Increasing or decreasing screw seating torque increases or decreases the axial load. Increasing torque will make it more difficult to open the handle.		
Note 2	The minimum and maximum axial load data are typical values under certain test conditions and are not a guarantee of average values nor a guarantee of maximum or minimum values under all conditions. Thrust values shown are FAILURE MODE. They are shown solely for the reader to utilize appropriate testing equipment to make his/her own evaluation, and are not intended by Ruland Manufacturing Company, Inc., as warranties, either express or implied, of fitness for a given purpose.		
Note 3	U.S. Patent No. USD629016S1		
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. The MQCL-45-A quick clamping shaft collar is shipped from the factory with a pre-set screw seating torque that allows it to be used out of the box with no additional tools needed for installation.
2. Use collars as they are received.
3. Wipe the bore clean.
4. Apply a thin coat of light oil to the shaft.
5. Place the collar onto the desired shaft location with the groove side as the work surface and close the cam lever by hand. Resistance should be felt on the cam as it closes.
6. Should your specific application call for fine adjustments please follow the steps to properly seat the screw.

    1. Open the cam lever and place the collar on the shaft at the desired location.
    2. Turn the M6 tensioning screw clockwise by a fractional amount (less than 1/8-turn) using a torque wrench with a 5.0 mm bit.
    3. Close the cam lever completely observing increased resistance as it is closed.
    4. Repeat tensioning screw adjustment until desired performance is achieved.
    5. CAUTION - Do not over-tighten the cap screw as the cam may lock in the closed position or damage to the cam mechanism may occur.
7. In the event the cam lever encounters excessive resistance due to the shaft being oversized, follow the noted re-adjustment steps turning the tensioning screw counter-clockwise in this case.