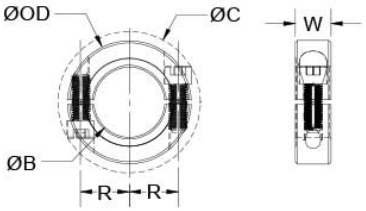
ENSP45-20MM-A

Ruland ENSP45-20MM-A, 20mm Thin Line Shaft Collar, Aluminum, Two-Piece Clamp Style, 45mm OD, 10mm Width





Description

Ruland ENSP45-20MM-A is a two-piece thin line shaft collar with a 20mm bore, 45mm OD, and 10mm width. The narrow profile reduces weight and allows for use in confined spaces. It has the clamp style benefits of not marring the shaft, easy removability, and indefinite adjustability while commonly being 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. ENSP45-20MM-A is stamped with the Ruland name for ease of identification. Two-piece styles 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. ENSP45-20MM-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. ENSP45-20MM-A is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B1)	20 mm	**Bore Tolerance**	+0.050 mm / +0.012 mm
Outer Diameter (OD)	45 mm	**Clearance Diameter (C) MAX**	48.00 mm
Width (W)	10 mm	**Width Tolerance**	+0.076 mm / -0.254 mm
Recommended Gap	1.60 mm	**Recommended Shaft Tolerance**	+0.000 mm / -0.013 mm
Forged Clamp Screw	M4 x 12	**Screw Material**	Alloy Steel
Hex Wrench Size	3.0 mm	**Screw Finish**	Black Oxide
Seating Torque	4.6 Nm	**Screw Location (R)**	19.00 mm
Number of Screws	2 ea	**Material Specification**	2024-T351 Aluminum Bar
Finish Specification	Bright, No Plating	**Manufacturer**	Ruland Manufacturing
Country of Origin	USA	**Temperature**	-40°F to 225°F (-40°C to 107°C)
Weight (lbs)	0.078000	**UPC**	634529139677
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 ENSP45-20MM-A thin line 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 3.0 mm hex wrench until a slight resistance is felt.
5. Be sure to maintain the gap of 1.60 mm 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 4.6 Nm using a 3.0 mm torque wrench.