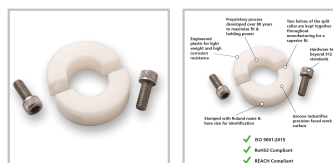
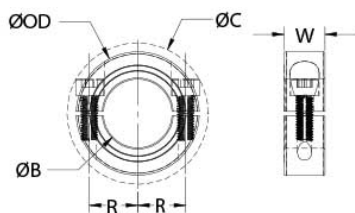


Ruland MSP-9-P, 9mm Two-Piece Shaft Collar, Plastic, Clamp Style, 24mm OD, 9mm Width



Ruland MSP-9-P is a two-piece shaft collar with a 9mm bore, 24mm OD, and 9mm 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 of Ruland shaft collars, TIR of $\pm 0.05\text{mm}$. 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. MSP-9-P 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. MSP-9-P is manufactured from solid bar stock sourced from select North American mills and machined to a fine burr free finish. Ruland uses engineered acetal plastic for a consistent finish.

Bore (B1)	9 mm	Bore Tolerance	+0.050 mm / +0.012 mm
Outer Diameter (OD)	24 mm	Clearance Diameter (C) MAX	26.3 mm
Width (W)	9 mm	Width Tolerance	+0.076 mm / -0.254 mm
Recommended Gap	1.59 mm	Recommended Shaft Tolerance	+0.000 mm / -0.013 mm
Forged Clamp Screw	M3 x 10	Screw Material	18-8 300 Series Stainless Steel
Hex Wrench Size	2.5 mm	Screw Finish	Bright
Seating Torque	0.5 Nm	Screw Location (R)	8.51 mm
Number of Screws	2 ea	Material Specification	Acetal Bar
Finish Specification	Plain	Manufacturer	Ruland Manufacturing
Country of Origin	USA	Temperature	-10°F to 185°F (-23°C to 85°C)
Weight (lbs)	0.012600	UPC	634529314890
Tariff Code	8483.60.8000	UNSPC	31162811

Prop 65  **WARNING** This product can expose you to chemicals including Nickel (metallic) and Formaldehyde, known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

1. Use the MSP-9-P 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 with the groove side as the work surface. Tighten the collar using a 2.5 mm hex wrench until a slight resistance is felt.
5. Be sure to maintain the gap of 1.59 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 0.5 Nm using a 2.5 mm torque wrench.