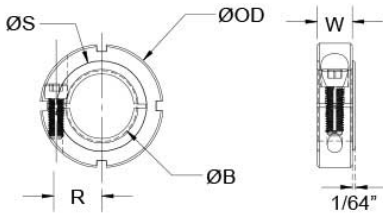




## TCN-03-F

Ruland TCN-03-F, N-03 (0.664" - 32 TPI) Bearing Locknut, Black Oxide Steel, One-Piece Clamp Style, 1 1/2" OD, 0.438" Width



### Description

Ruland TCN-03-F is a clamp type bearing locknut with a 0.664" - 32 TPI bore, 1 1/2" OD, and 0.438" width. It is manufactured to AFBMA standards and designed for use on high precision spindle bearings. Ruland double taps threads to ensure a precise and burr-free finish allowing for easy installation and removal, proper fit, and extended shaft life. The clamp style design will not mar the shaft. 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 ? .0005"). 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. TCN-03-F is stamped with the Ruland name and locknut size for ease of identification. Forged screws test beyond DIN 912 12.9 standards to ensure maximum holding power. It is manufactured from solid bar stock sourced from select North American mills and machined to a fine burr free finish. Ruland uses 1215 lead-free steel with a proprietary black oxide finish that produces a fine glossy finish while increasing holding power and resisting corrosion. TCN-03-F is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

### Product Specifications

<b>Locknut Industry Standard</b>	N-03	<b>Threaded Bore (B)</b>	0.664 in - 32 TPI
<b>Thread Class</b>	AFBMA	<b>Bearing Face Diameter (S)</b>	15/16 in
<b>Bearing Face Max TIR</b>	0.0005 in	<b>Outer Diameter (OD)</b>	1 1/2 in
<b>Width (W)</b>	0.438 in	<b>Forged Clamp Screw</b>	M5 x 16
<b>Screw Material</b>	Alloy Steel	<b>Hex Wrench Size</b>	4.0 mm
<b>Screw Finish</b>	Black Oxide	<b>Seating Torque</b>	9.5 Nm
<b>Screw Location (R)</b>	0.500 in	<b>Number of Screws</b>	1 ea
<b>Recommended Spanner Wrench</b>	<a href="#">SWR:M35-60-F</a> , <a href="#">SWR:M35-60-SS</a>	<b>Material Specification</b>	1215 Carbon Steel Bar
<b>Temperature</b>	-40°F to 350°F (-40°C to 176°C)	<b>Finish Specification</b>	Hot Process Black Oxide, Impregnated with Naphthenic Oil, Centrifugally Dried
<b>Manufacturer</b>	Ruland Manufacturing	<b>Country of Origin</b>	USA
<b>Weight (lbs)</b>	0.161600	<b>Recommended Shaft Tolerance</b>	+0.0000 in / -0.0005 in
<b>UPC</b>	634529028889	<b>Tariff Code</b>	8483.60.8000
<b>UNSPC</b>	31161716		
<b>Note 1</b>	Performance ratings are for guidance only. The user must determine suitability for a particular application.		
<b>Prop 65</b>	<b>⚠WARNING</b> 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .		

### Installation Instructions

1. Use the TCN-03-F bearing locknut as it is received.
2. Wipe the bore clean.
3. Apply a thin coat of light oil to the shaft.
4. Place the bearing locknut onto the desired shaft location using a spanner wrench. Tighten it using a 4.0 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 9.5 Nm using a 4.0 mm torque wrench.