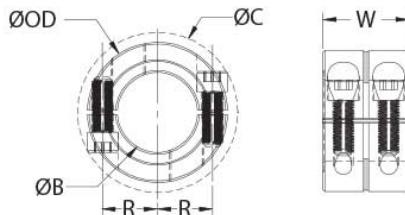




## WSP-18-F

Ruland WSP-18-F, 1 1/8" Double Wide Shaft Collar, Black Oxide Steel, Two-Piece Clamp Style, 1 7/8" OD, 1 1/16" Width



### Description

Ruland WSP-18-F is a two-piece double wide shaft collar with a 1.125" bore, 1 7/8" OD, and 1 1/16" 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  $\pm .002"$ ). 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. WSP-18-F 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. Halves are mated throughout the manufacturing process for proper fit and alignment. WSP-18-F 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. WSP-18-F is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

### Product Specifications

Bore (B1)	1.1250 in	Small Bore (B2)	1.1250 in
Outer Diameter (OD)	1 7/8 in	Bore Tolerance	+0.0020 in / +0.0005 in
Width (W)	1 1/16 in	Width Tolerance	+0.003 in / -0.010 in
Clearance Diameter (C) MAX	2.140 in	Recommended Gap	0.063 in
Recommended Shaft Tolerance	+0.0000 in / -0.0005 in	Forged Clamp Screw	1/4-28
Screw Material	Alloy Steel	Hex Wrench Size	3/16 in
Screw Finish	Black Oxide	Seating Torque	170 lb-in
Screw Location (R)	0.740 in	Number of Screws	4 ea
Material Specification	1215 Carbon Steel Bar	Temperature	-40°F to 350°F (-40°C to 176°C)
Finish Specification	Hot Process Black Oxide, Impregnated with Naphthenic Oil, Centrifugally Dried	Manufacturer	Ruland Manufacturing
Country of Origin	USA	Moment of Inertia	0.2834 lb-in <sup>2</sup>
Weight (lbs)	0.472600	UPC	634529136744
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	<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 WSP-18-F 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. Place the collar onto the desired shaft location and tighten it using a 3/16 in hex wrench until a slight resistance is felt.
5. Be sure to maintain the gap of 0.063 in 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 170 lb-in using a 3/16 in torque wrench.

