



WCL-18-F


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



Description

Ruland WCL-18-F is a one-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 ? .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. WCL-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. WCL-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. WCL-18-F is RoHS3 and REACH compliant and manufactured in our Marlborough, MA factory under strict controls using proprietary processes.

Product Specifications

Bore (B)	1.1250 in	Bore Tolerance	+0.0020 in / +0.0005 in
Outer Diameter (OD)	1 7/8 in	Clearance Diameter (C) MAX	2.140 in
Width (W)	1 1/16 in	Width Tolerance	+0.003 in / -0.010 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	2 ea
Moment of Inertia	0.2916 lb-in ²	Material Specification	1215 Carbon Steel Bar
Finish Specification	Hot Process Black Oxide, Impregnated with Naphthenic Oil, Centrifugally Dried	Manufacturer	Ruland Manufacturing
Country of Origin	USA	Temperature	-40°F to 350°F (-40°C to 176°C)
Weight (lbs)	0.488100	UPC	634529136652
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 WCL-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. Tighten the screws in two stages, starting with the inside screws. Using a torque wrench with 3/16" bit, tighten the inside screws to 85 lb-in which is half the recommended seating torque. Repeat for the outside screws, again tightening to half of the recommended seating torque.
5. Tighten the screws to the full recommended seating torque of 170 lb-in following the same pattern, starting with the inside screws first.