

PRODUCT OVERVIEW



The seriesOne™ shaft seal was designed for smaller, single-engine vessels with stainless steel propeller shafts. This shaft seal fits shaft diameters from 7/8" through 1 1/4" in 1/8" increments. It can also be used on metric stainless shafting from 25mm through 30mm. **The seriesOne™ shaft seal is covered by a one year warranty.**

Tides Marine suggests that all twin-engine applications use the Tides SureSeal®.

Housing

The seriesOne™ housing is produced in the same manner as the SureSeal® shaft seals. However, in order to produce a shaft seal for our more cost-conscious customers, the front cap design of the seriesOne™ has been modified.

As a result, the lip seal in the seriesOne™ is NOT replaceable.

When the lip seal in the seriesOne™ is worn to the point of leaking, the entire shaft seal must be replaced.

Bearing

The seriesOne™ bearing is machined from PTFE® to precise tolerances.

Hose

The seriesOne™ shaft seal is available with two hose options. For vessels like ski boats with shorter shafts (approximately 3' in length), higher operating RPMs (3500 RPM+) and more rigid engine mounts, a single-convolution articulating hose is recommended.

For vessels powered by smaller diesel engines (1-3 cylinders) using softer engine mounts, the multi-convolution articulating hose is recommended. This extra flexibility compensates for increased lateral engine movement during operation.

Hose Clamps

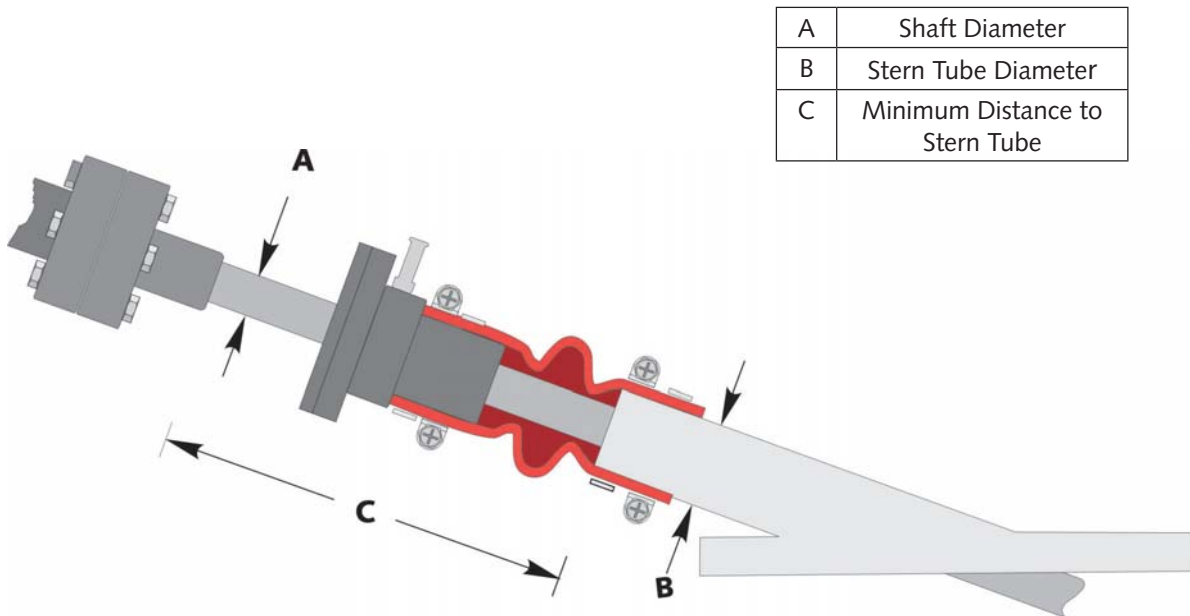
Four 316 SS clamps are provided with each seriesOne™ shaft seal.

seriesOne™

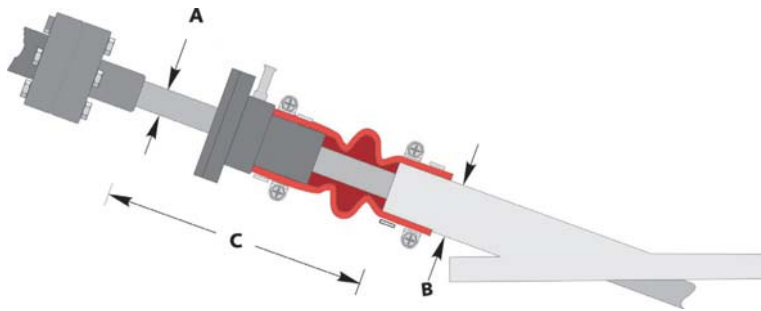
BEFORE ORDERING

seriesOne™ shaft seals come complete with application-specific articulating hose and clamps. To determine which seriesOne™ to order, simply measure your propeller shaft OD and find the corresponding shaft size in Column A of the table on pages 27 or 28. Next, measure the OD of your stern tube and find the corresponding size in Column B of the table on pages 27 or 28. Match these two measurements with the corresponding part number in the same table.

Next, note the minimum distance number associated with your part number in Column C of the table. Confirm there is at least this much clean, smooth propeller shaft between the coupling and the stern tube.



A	Shaft Diameter
B	Stern Tube Diameter
C	Minimum Distance to Stern Tube



Note: The following sizes are currently available. Call Tides if the size you need is not listed.

Single-Convolution Hose Specifications (dimensions in inches)

Shaft Size A	Stern Tube OD B	Minimum Distance C	seriesOne™ Part Number with Single Convolution Hose
7/8	1 3/4	7	ONE-0875-1750-S
	2		ONE-0875-2000-S
	2 1/4		ONE-0875-2250-S
	2 1/2		ONE-0875-2500-S
	2 3/4		ONE-0875-2750-S
	3		ONE-0875-3000-S
1	1 3/4	7	ONE-1000-1750-S
	2		ONE-1000-2000-S
	2 1/4		ONE-1000-2250-S
	2 1/2		ONE-1000-2500-S
	2 3/4		ONE-1000-2750-S
	3		ONE-1000-3000-S
1 1/8	1 3/4	7	ONE-1125-1750-S
	2		ONE-1125-2000-S
	2 1/4		ONE-1125-2250-S
	2 1/2		ONE-1125-2500-S
	2 3/4		ONE-1125-2750-S
	3		ONE-1125-3000-S
1 1/4	1 3/4	7	ONE-1250-1750-S
	2		ONE-1250-2000-S
	2 1/4		ONE-1250-2250-S
	2 1/2		ONE-1250-2500-S
	2 3/4		ONE-1250-2750-S
	3		ONE-1250-3000-S

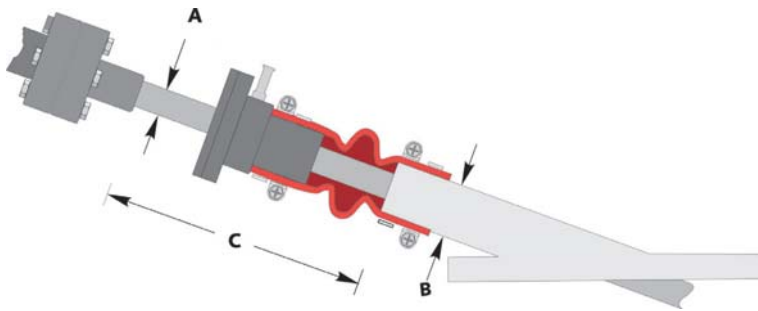
Single-Convolution Hose Specifications (dimensions in millimeters)

Shaft Size A	Stern Tube OD B	Minimum Distance C	seriesOne™ Part Number with Single Convolution Hose
25mm	45	178mm	ONE-25M-45M-S
	51		ONE-25M-51M-S
	57		ONE-25M-57M-S
	63		ONE-25M-63M-S
	70		ONE-25M-70M-S
	76		ONE-25M-76M-S
30mm	45	178mm	ONE-30M-45M-S
	51		ONE-30M-51M-S
	57		ONE-30M-57M-S
	63		ONE-30M-63M-S
	70		ONE-30M-70M-S
	76		ONE-30M-76M-S

These products are available in custom sizes. Contact Tides Marine for more information.

seriesOne™

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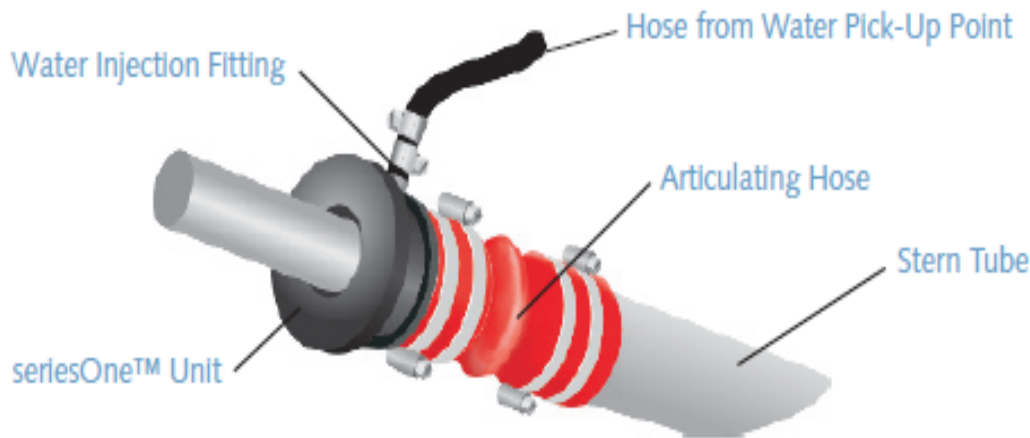
Multi-Convolution Hose Specifications (dimensions in inches)

Shaft Size A	Stern Tube OD B	Minimum Distance C	seriesOne™ Part Number with Multi Convolution Hose
7/8	1 3/4	7	ONE-0875-1750-M
	2		ONE-0875-2000-M
	2 1/4		ONE-0875-2250-M
	2 1/2		ONE-0875-2500-M
	2 3/4		ONE-0875-2750-M
	3		ONE-0875-3000-M
1	1 3/4	7	ONE-1000-1750-M
	2		ONE-1000-2000-M
	2 1/4		ONE-1000-2250-M
	2 1/2		ONE-1000-2500-M
	2 3/4		ONE-1000-2750-M
	3		ONE-1000-3000-M
1 1/8	1 3/4	7	ONE-1125-1750-M
	2		ONE-1125-2000-M
	2 1/4		ONE-1125-2250-M
	2 1/2		ONE-1125-2500-M
	2 3/4		ONE-1125-2750-M
	3		ONE-1125-3000-M
1 1/4	1 3/4	7	ONE-1250-1750-M
	2		ONE-1250-2000-M
	2 1/4		ONE-1250-2250-M
	2 1/2		ONE-1250-2500-M
	2 3/4		ONE-1250-2750-M
	3		ONE-1250-3000-M

Multi-Convolution Hose Specifications (dimensions in millimeters)

Shaft Size A	Stern Tube OD B	Minimum Distance C	seriesOne™ Part Number with Multi Convolution Hose
25mm	45	178mm	ONE-25M-45M-M
	51		ONE-25M-51M-M
	57		ONE-25M-57M-M
	63		ONE-25M-63M-M
	70		ONE-25M-70M-M
	76		ONE-25M-76M-M
30mm	45	178mm	ONE-30M-45M-M
	51		ONE-30M-51M-M
	57		ONE-30M-57M-M
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	76		ONE-30M-76M-M

These products are available in custom sizes. Contact Tides Marine for more information.



Installation overview

The following is a description of a typical seriesOne™ installation. Instructions are included with each product and should be followed closely.

1. Remove shaft from transmission coupling.
2. Disassemble and remove existing shaft sealing system.
3. Remove the hose clamps and old hose from the shaft log / stern tube. Discard them. **DO NOT RE-USE THESE COMPONENTS** with the seriesOne™.
4. Draw the shaft back up against the coupling. This will expose that portion of the shaft that was located under the old hose and sealing assembly.
5. Insert the end of the seriesOne™ into the articulating hose as far as it will go.
6. Position the hose next to the stern tube to determine approximately where the lip seal will be riding on the shaft.
7. Examine this area carefully. Be sure that it is free of pitting, nicks or surface imperfections which could affect lip seal performance. Clean this area thoroughly. Polish the shaft using 300 grit wet/dry sandpaper or emery cloth working around the shaft. Fore-and-aft motion could put flats or grooves in the shaft. During actual installation, the seriesOne™ / hose assembly may be shifted forward slightly on the shaft to position the lip seal on the cleanest part of the shaft. Reminder: Both hose clamps holding the hose onto the stern tube must engage the stern tube.
8. Carefully press the red installation hat into the front of the seriesOne™. Make certain it covers the "lip" portion of the seal.
9. Back the shaft away from the coupling to provide enough room to install the seriesOne™ assembly.
10. Carefully slide the assembly (hose-end first) onto the shaft so that the shaft passes through the red installation hat. **DO NOT USE GREASE**
11. Slide the assembly down the shaft and onto the stern tube. Make certain both hose clamps engage the stern tube.
12. Reconnect the shaft to the coupling. Make certain the coupling is firmly secured to the transmission.
13. Space the two hose clamps evenly over the stern tube and "snug". Hose clamp screws should be on opposite sides of the hose to distribute pressure evenly. Space the two clamps (in similar fashion) over the seriesOne™ end of the hose and "snug". Confirm that both sets of clamps are fully engaged. Tighten hose clamps.
14. Pull the red installation hat out of the seriesOne™. Separate the tabs to split the hat and remove from the shaft.
15. Connect the seriesOne™ to a pressurized water supply source (a point in the engine's raw water cooling system). Please refer to Section 1.2 of the catalog – Water Pick-Up Kits. At idle speed, water should be flowing 1 gallon / 4 liters per minute. Check rate by timing flow into an empty container.

CHECK WATER SUPPLY TO EACH seriesOne™ BEFORE OPERATING VESSEL.

⚠ CAUTION:

WHEN THE ENGINE(S) ARE INSTALLED BELOW THE WATERLINE (OR WATER-LIFT MUFFLERS ARE USED), A VENTED LOOP MAY BE REQUIRED TO PREVENT BACK FLOODING OF WATER THROUGH THE EXHAUST SYSTEM INTO THE ENGINE. ABYC GUIDELINES REGARDING MATERIALS AND INSTALLATION PRACTICES SHOULD BE FOLLOWED.

The water pick-up fitting should be installed in the "pressure side" of the vented loop "T". This vented loop should be as far above the waterline as is practical (a minimum distance of 12" is required).

Vented loops and check valves should be checked for proper function at least seasonally.