



## SURESEAL

### OPERATING PRINCIPLE

The Sureseal consists of a bellows to be mounted on the sterntube and fixed by two clamps. An inner bearing allows the lineage of the seal on the shaft. The bearing is lubricated with a water injection and grooves in the bore. The seal on the propeller shaft is made by a lip seal.

### PRODUCT OVERVIEW

Key components/features of the SureSeal include:

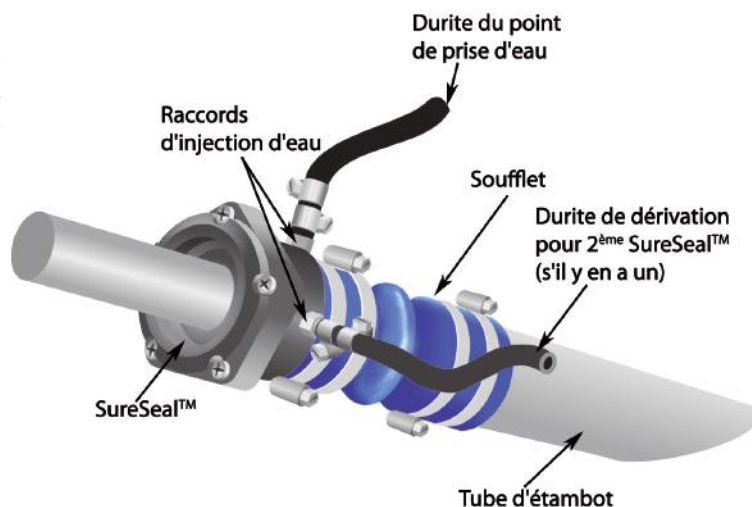
- **Housing:** Made from fiber-reinforced composite material, the housing is stronger, smaller and more durable. Dimensionally unaffected by temperature changes, the SureSeal will not absorb water.

- **Bearing:** The integral PTFE bearing extends the useful operating life of the SureSeal under normal operating conditions. Should the water injection system fail to provide lubrication to the lip seal and bearing surface, the integrity of the SureSeal PTFE bearing and fiber-reinforced housing is unaffected. This feature allows the vessel operator to simply replace the worn lip seal, restoring the "100% watertight" characteristic of the SureSeal.

- **Hose:** Connecting the SureSeal to the boat has been made easier via an «articulating» hose. Matched to each housing size, the hose design positions the unit relative to the stern tube so that the required operating clearance is achieved without measurement (simplifying installation). This greatly reduces the side loads to the SureSeal when shaft misalignment occurs (as much as 1/4» in any direction), extending lip seal and bearing life.

- **Hose Clamps:** The hose clamps themselves are an improved design which won't tear or mar the hose surface, require less tightening force and adjust to the changes in the hose diameter caused by variations in temperature and pressure.

- **Seal Replacement:** The new design incorporates a removable front cap which allows access to the lip seal making it easier to remove and replace, especially in «cramped quarters».





## BEFORE ORDERING

SureSeals™ are sold with their corresponding hoses only. To determine which parts to order and whether or not you have sufficient space for their installation, you need to measure «A» the shaft diameter and «B» the O.D. of the stern tube (which corresponds to the hose I.D.).

Find the combination of these two dimensions in the following table and the corresponding part numbers. For each model SureSeal™, find dimension "C" and confirm that there is AT LEAST this much CLEAN, SMOOTH shaft before the stern tube available for locating the unit.

Next, the diameter «D» should be noted. Confirm that a minimum distance of 1/4 inch can be maintained between the body of the unit and any other part of the boat (hull, stringers, etc.) to allow for any lateral shaft movement.

In twin-engine applications, SureSeals™ may be ordered with an optional second injection fitting to accommodate a crossover line between SureSeals™.

If you want your unit to have one injection fitting, please make the last digit of the part number «0». For two injection fittings @ 90° please make the last digit «1».

### Builders Note:

SureSeals are sold as complete kits which include Seal, Articulated Hose, and ABA/ AWAB Clamps. Call us for kit pricing and part numbers.

For two injection fittings @ 45° make the last digit "2".

For two injection fittings @ 120° make the last digit "3".

(Seals 3" and larger all have two fittings @ 90°)

Examples:

**SURK-1500-3000-0**

1"1/2 Shaft OD

3" Stern Tube OD

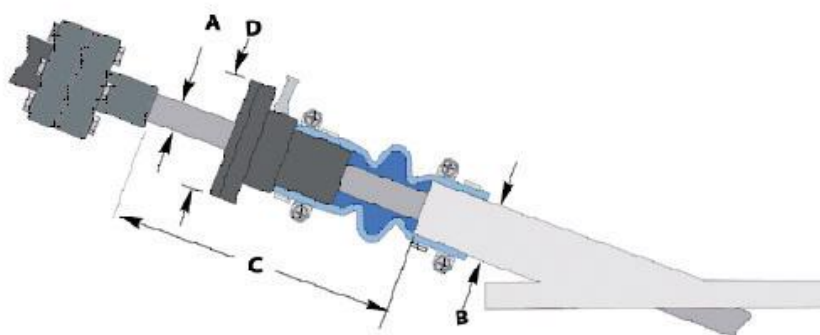
1 injection fitting

**SURKM-040-060-1**

40 mm Shaft OD

60 mm Stern Tube OD

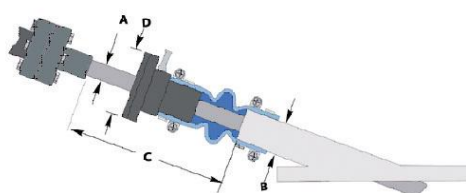
2 injection fitting @ 90°



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



SHAFT Ø (Inch)	HOSE ID +/- 2 mm	Minimum Distance (Inch)	Part Ø (Inch)	Code Complete Sureseal® Hose & Clamp included
A	B	C	D	
1 3/8	2	7	4 1/8	SURK13752000X
1 3/8	2 1/4	7	4 1/8	SURK13752250X
1 3/8	2 3/8	7	4 1/8	SURK13752375X
1 3/8	2 1/2	7	4 1/8	SURK13752500X
1 3/8	2 5/8	7	4 1/8	SURK13752625X
1 1/2	2 1/4	7	4 3/8	SURK15002375X
1 1/2	2 1/2	7	4 3/8	SURK15002500X
1 1/2	2 5/8	7	4 3/8	SURK15002625X
1 1/2	3	7	4 3/8	SURK15003000X
1 1/2	3 1/2	7	4 3/8	SURK15003500X
1 3/4	2 1/2	7	4 3/8	SURK17502500X
1 3/4	2 3/4	7	4 3/8	SURK17502750X
1 3/4	3	7	4 3/8	SURK17503000X
1 3/4	3 1/2	7	4 3/8	SURK17503500X
1 3/4	4	7	4 3/8	SURK17504000X
2	3	7	4 7/8	SURK20003000X
2	3 1/4	7	4 7/8	SURK20003250X
2	3 1/2	7	4 7/8	SURK20003500X
2	4	7	4 7/8	SURK20004000X
2	4 1/2	7	4 7/8	SURK20004500X
2 1/4	3	7	4 7/8	SURK22503000X
2 1/4	3 1/2	7	4 7/8	SURK22503500X
2 1/4	3 3/4	7	4 7/8	SURK22503750X
2 1/4	4	7	4 7/8	SURK22504000X
2 1/4	4 1/2	7	4 7/8	SURK22504500X
2 1/2	3 1/2	7	5 3/8	SURK25003500X
2 1/2	4	7	5 3/8	SURK25004000X
2 1/2	4 1/4	7	5 3/8	SURK25004250X
2 1/2	4 1/2	7	5 3/8	SURK25004500X
2 1/2	5	7	5 3/8	SURK25005000X
2 3/4	4	7	5 3/8	SURK27504000X
2 3/4	4 1/2	7	5 3/8	SURK27504500X
2 3/4	5	7	5 3/8	SURK27505000X
3	4	7 3/4	5 7/8	SURK30004000X
3	4 1/2	7 3/4	5 7/8	SURK30004500X
3	5	7 3/4	5 7/8	SURK30005000X
3 1/2	4 1/2	8 1/4	6 3/8	SURK35004500X
3 1/2	5	8 1/4	6 3/8	SURK35005000X
3 1/2	5 1/2	8 1/4	6 3/8	SURK35005500X
3 1/2	6	8 1/4	6 7/8	SURK35006000X





SHAFT Ø (Inch)	HOSE ID +/- 2 mm	Minimum Distance (Inch)	Part Ø (Inch)	Code Complete Sureseal® Hose & Clamp included
A	B	C	D	
4	5 1/2	8 3/4	9 3/8	SURK40005500X
4	6	8 3/4	6 7/8	SURK40006000X
4	7	8	9 3/8	SURK40007000X
4	7 1/2	8	9 3/8	SURK40007500X
4 1/2	5 1/2	9 1/4	9 3/8	SURK45005500X
4 1/2	6 1/2	9 1/4	7 3/8	SURK45006500X
4 1/2	6 5/8	9 1/4	7 3/8	SURK45006625X
4 1/2	7	9	9 3/8	SURK45007000X
4 1/2	8	9 3/4	9 3/8	SURK45008000X
5	6 1/2	9 3/4	9 3/8	SURK50006500X
5	7	9	9 3/8	SURK50007000X
5	8	9 3/4	9 3/8	SURK50008000X

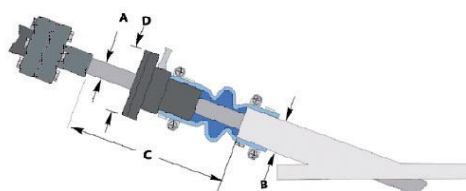


Other dimensions on request

SHAFT Ø (mm)	HOSE ID +/- 2 mm	Minimum Distance (mm)	Part Ø (mm)	Code Complete Sureseal® Hose & Clamp included
A	B	C	D	
40	60	178	111	SURKM040060X
40	76	178	111	SURKM040076X
45	64	178	111	SURKM045064X
45	76	178	111	SURKM045076X
45	89	178	111	SURKM045089X
50	76	178	111	SURKM050076X
50	89	178	124	SURKM050089X
50	102	178	124	SURKM050102X
55	76	178	137	SURKM055076X
55	89	178	137	SURKM055089X
60	89	178	137	SURKM060089X
65	89	178	137	SURKM065089X
65	102	178	137	SURKM065102X
65	114	178	137	SURKM065114X
70	127	210	137	SURKM070127X
75	114	210	149	SURKM075114X
80	114	210	149	SURKM080114X
80	127	210	162	SURKM080127X
85	127	210	162	SURKM085127X
90	152	210	162	SURKM090152X
100	152	222	175	SURKM100152X
110	152	222	187	SURKM110152X



Other dimensions on request





## SPARE SEAL CARRIERS

Spare Seal Carriers were developed as a convenient place to store spare lip seals. Installed at the same time as the SureSeal, these units allow lip seal replacement to be performed without uncoupling the shaft from the transmission and, if necessary; while the vessel is in the water (a haul-out may not be necessary).

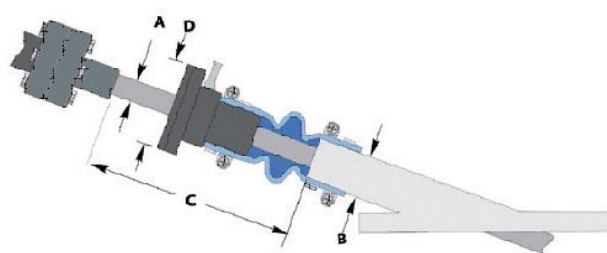
The unit is a lightweight, two-piece fiber-filled nylon housing which is clamped to the shaft between the SureSeal and transmission coupling. Available in both English and Metric sizes, units up to 1 3/4" (44mm) include one spare seal, 2" (51mm) and larger have two.



### BEFORE ORDERING

To determine which part to order, look up your shaft diameter "A" in the table below, and find the corresponding part number. Confirm that there is sufficient clean smooth shaft space for locating the unit

"B" and that there will be a minimum of 1/4 inch clearance between the carrier "C" and any other part of the boat. Contact us for custom or larger units.



SHAFT Ø (inch)	Distance (Inch)	Spare seal car- rier Ø (inch)	Reference
A	B	C	
1 3/8	3	3	<b>SURPJ1375</b>
1 1/2	3	3 1/2	<b>SURPJ1500</b>
1 3/4	3	3 1/2	<b>SURPJ1750</b>
2	4	4	<b>SURPJ2000</b>
2 1/4	4	4 1/2	<b>SURPJ2250</b>
2 1/2	4	5	<b>SURPJ2500</b>
2 3/4	4	5	<b>SURPJ2750</b>
3	4	5	<b>SURPJ3000</b>
3 1/4	4	5	<b>SURPJ3250</b>
3 1/2	4	5 1/2	<b>SURPJ3500</b>
3 3/4	4	5 1/2	<b>SURPJ3750</b>
4	4	6	<b>SURPJ4000</b>
4 1/2	4	6	<b>SURPJ4500</b>
5	4	7	<b>SURPJ5000</b>

SHAFT Ø (mm)	Distance (mm)	Spare seal carrier Ø (mm)	Reference
A	B	C	
40	76	89	<b>SURPJM40</b>
45	76	89	<b>SURPJM45</b>
50	76	102	<b>SURPJM50</b>
60	76	114	<b>SURPJM60</b>
65	76	114	<b>SURPJM65</b>
70	76	127	<b>SURPJM70</b>
75	102	127	<b>SURPJM75</b>
80	102	127	<b>SURPJM80</b>
90	102	140	<b>SURPJM90</b>
100	102	152	<b>SURPJM100</b>



Autres dimensions sur demande

## LIP SEALS

SHAFT Ø (mm)	Reference
40	<b>SURLSF040</b>
45	<b>SURLSF045</b>
50	<b>SURLSF050</b>
60	<b>SURLSF060</b>
65	<b>SURLSF065</b>
70	<b>SURLSF2750</b>
75	<b>SURLSF075</b>
80	<b>SURLSF080</b>
90	<b>SURLSF090</b>
100	<b>SURLSF100</b>

SHAFT Ø (inch)	Reference
1 3/8	<b>SURLSF1375</b>
1 1/2	<b>SURLSF1500</b>
1 3/4	<b>SURLSF1750</b>
2	<b>SURLSF2000</b>
2 1/4	<b>SURLSF2250</b>
2 1/2	<b>SURLSF2500</b>
2 3/4	<b>SURLSF2750</b>
3	<b>SURLSF3000</b>

SHAFT Ø (inch)	Reference
3 1/4	<b>SURLSF3250</b>
3 1/2	<b>SURLSF3500</b>
3 3/4	<b>SURLSF3750</b>
4	<b>SURLSF4000</b>
4 1/2	<b>SURLSF4500</b>
5	<b>SURLSF5000</b>

