

# Simplex Basic (ZW-P), SC3 – water-lubricated fwd seal

## General description

- 2-ring forward sterntube sealing system for water-lubricated sterntubes
- Equipped with an additional inflatable static seal (Pneumostop)
- Available as a split and not-split version
- Certified by all major classification societies

## Advantages

### Design

Market approved seals → reliable equipment covering the whole range of shaft diameters

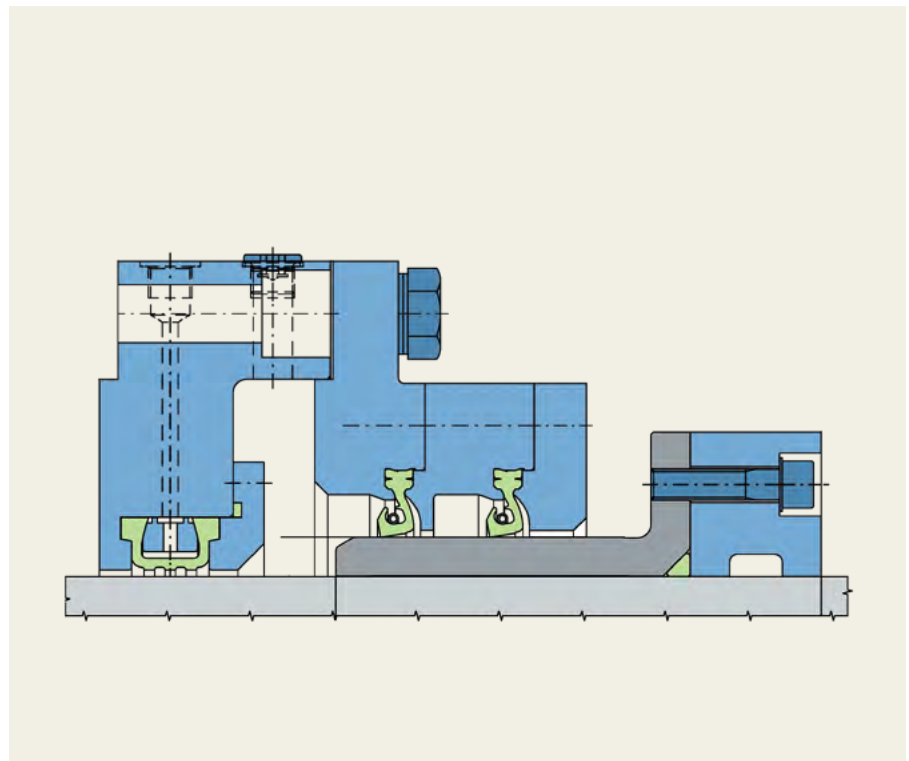
Reliable lubrication by water circulation → increased service life of sealing rings and liner without external components

Customized solution → meets new build and retrofit requirements

Pneumostop made of NBR with excellent mechanical properties → reliable operation at very low water temperatures, exact recovery when vented for no shaft contact

### Installation

Delivered fully assembled and tested → easy installation by the shipyard



### Operation

Easy handling → reduced risk of operating failure

Constant pressure setting by forward seal tank. Optional automatic re-filling of the seal tank → reliable operating system

### Services

Designed for in-situ overhaul as per certified and approved Simplex repair standards

Worldwide service network and availability of spares

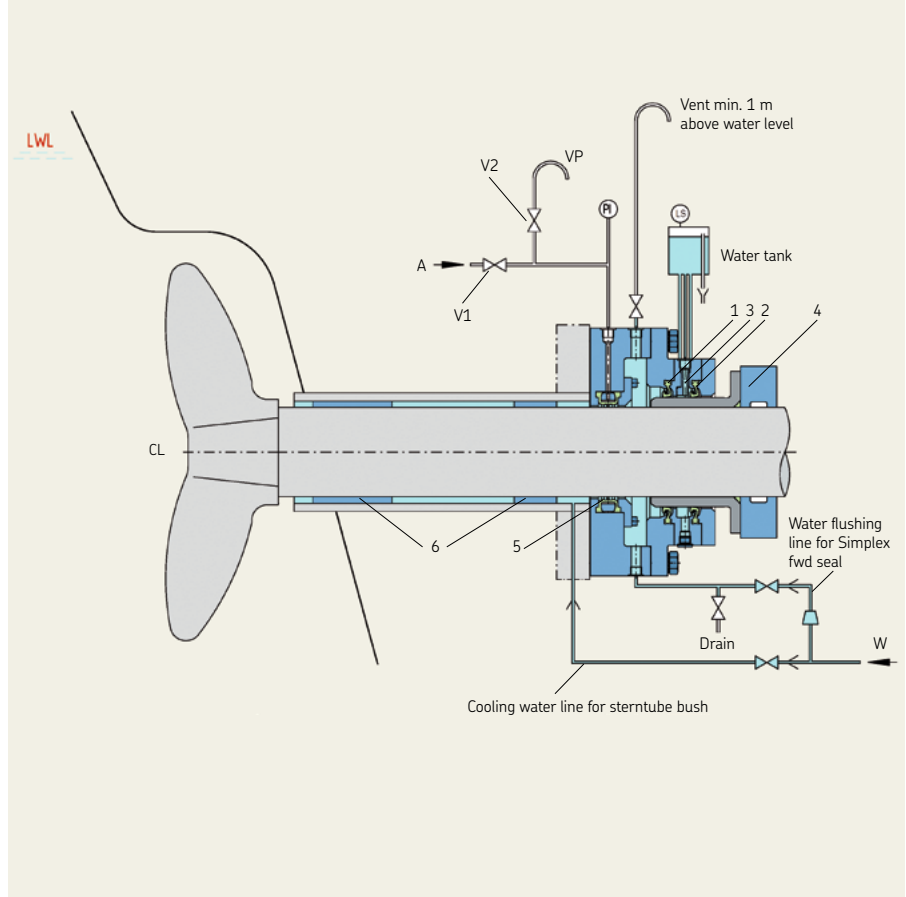


The Original

# Function

- The Simplex fwd seal consists of the stationary housing, fixed at the forward sterntube boss, and the liner on the rotating propeller shaft, fixed by a clamp ring (4).
- The housing contains two sealing rings (1 and 2).
- The sealing rings face the sterntube. The chamber in-between is lubricated by a header water tank.
- The water in the chamber cools and lubricates both sealing rings (1 and 2). When the shaft is rotating, the circulator (3), located between the two sealing rings (1 and 2), ensures consistent water circulation through the seal header tank for cooling.
- The seal is equipped with a pneumatically actuated standstill seal (Pneumostop) (5) to assist during inspection (no docking of the vessel required) and as an emergency seal with the shaft at standstill.
- The Pneumostop can be inflated using an air supply line (V1 open, V2 shut).
- During operation, the Pneumostop is always vented (V1 shut, V2 open).
- A water supply line provides the sterntube bushes (6) with a constant supply of fresh water.
- A small amount of fresh water is needed for flushing the permanently vented seal chamber.

- PI = Pressure indicator
- VP = Vent for Pneumostop
- LS = Level switch
- CL = Shaft centre line
- A = Air supply for Pneumostop
- W = Water supply line



## SKF Marine GmbH

Hermann-Blohm-Straße 5  
20457 Hamburg, Germany  
sales@skf-marine.com

skf.com | skf-marine.com

© SKF and Simplex are registered trademarks of the SKF Group.

© SKF Group 2018

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB 43/P8 18008 EN · August 2018

Certain image(s) used under license from Shutterstock.com.