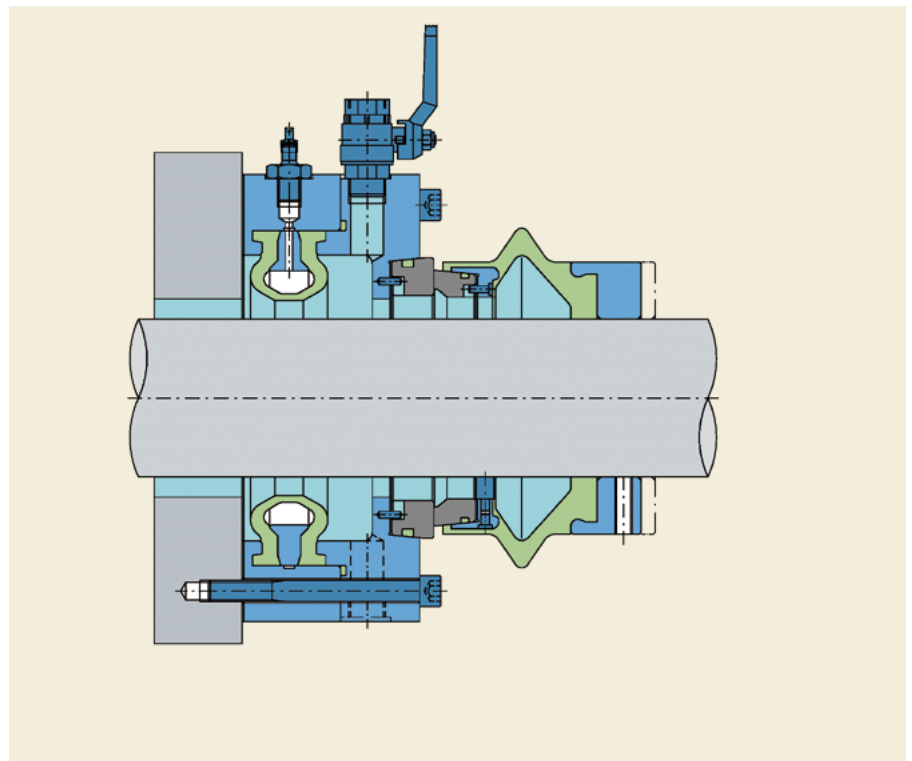


# Simplan – fwd seal

## General description

- Mechanical face seal for water-lubricated stern tubes
- Silicon carbide sealing ring material: corrosion- and wear-resistant
- Equipped with an additional inflatable static seal (Pneumostop)
- No wear to the shaft
- State-of-the-art environmentally friendly sealing solution
- Certified by all major classification societies



## Advantages

### Design

- Sealing rings made of silicon carbide (SiC)
  - harder than sand
  - extremely wear-resistant
- Pneumostop from neoprene
  - excellent mechanical properties

### Installation

- Delivered fully assembled and tested
  - easy installation by the shipyard

### Operation

- No wear to the shaft
  - practically maintenance-free
- Easy handling
  - reduced risk of operating failure
- Constant sealing pressure by pressure body
  - absorbs radial and axial shaft movements
- Proven long product life

### Service

- Designed for in-situ overhaul as per certified and approved Simplex repair standards
- Worldwide service network and availability of spares

### Design Options

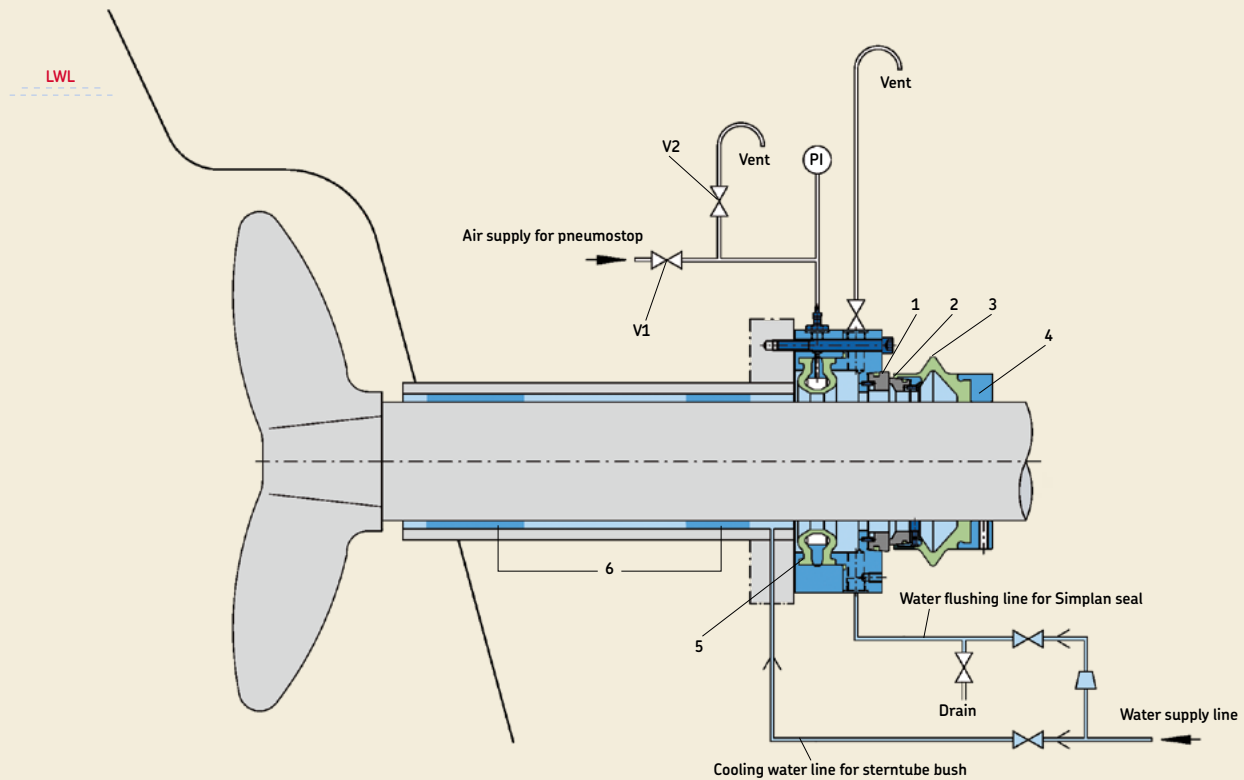
- Standard design: bronze housing
- Composite material design: up to 50 % lighter than the bronze version



The Original

## Functional principle

LWL = Load water line  
PI = Pressure indicator



## Function

- A stationary ring (1) and a rotating sealing ring (2) form the axial seal.
- The rotating sealing ring is fixed to a rubber pressure body (3).
- This pressure body is held on the shaft by a clamp ring (4) and is pre-loaded to ensure the necessary contact pressure between the stationary ring (1) and the rotating sealing ring (2).
- The Pneumostop is an inflatable tube ring (5) and operates as a static seal only.
- This Pneumostop can be inflated by an air supply line (V1 open, V2 shut).
- A supply line provides the stern tube bushes (6) with a constant supply of seawater.
- A small amount of seawater is needed for flushing the permanently vented seal chamber.
- During operation, the Pneumostop is always vented (V1 shut, V2 open).

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