

SIMPLAN® Shaft Seals for Water Lubricated Sterntubes Simplex-Turbulo-Systems

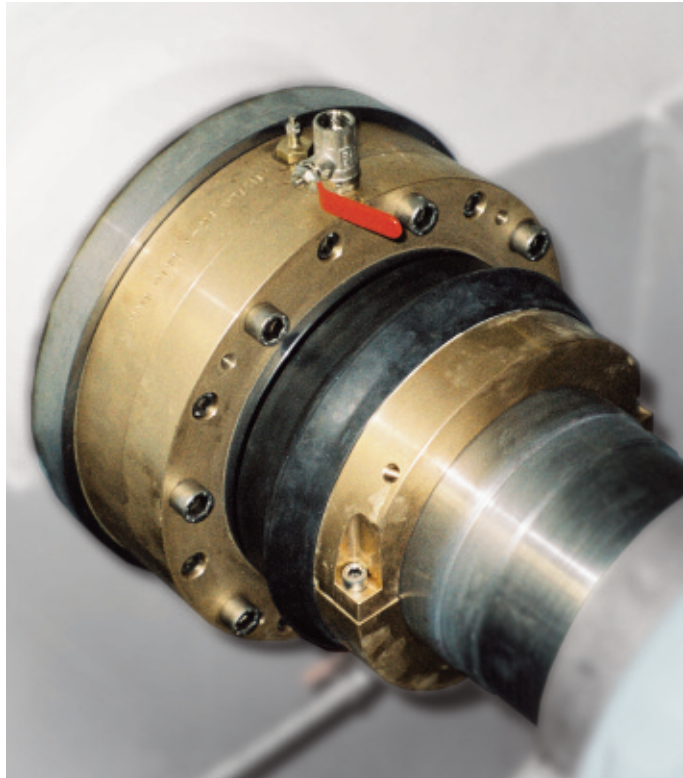
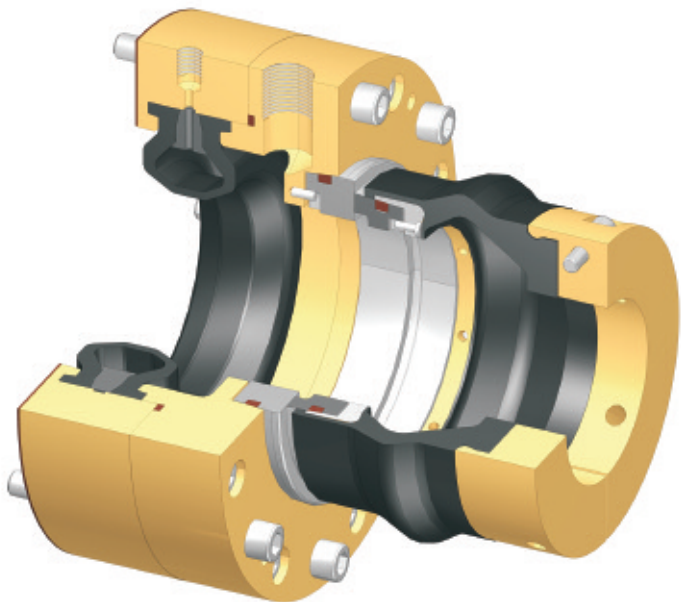


B+V Industrietechnik

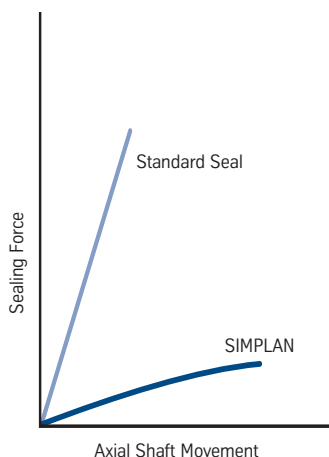


ThyssenKrupp

SIMPLAN® Shaft Seals for Water Lubricated Sterntubes



At Simplex-Turbulo-Systems, we have developed the ultimate seal for water-lubricated sterntubes. The utilisation of unique, state-of-the-art material combinations and the expertise gained through over 50 years of experience has resulted in the SIMPLAN shaft seal, available for shaft diameters from 60 - 240 mm. Our extensive testing procedures and dedication to the highest quality



control standards have ensured the ultimate quality product on the market at the best possible price. SIMPLAN is the only alternative to stuffing boxes for your new-building and conversion projects.

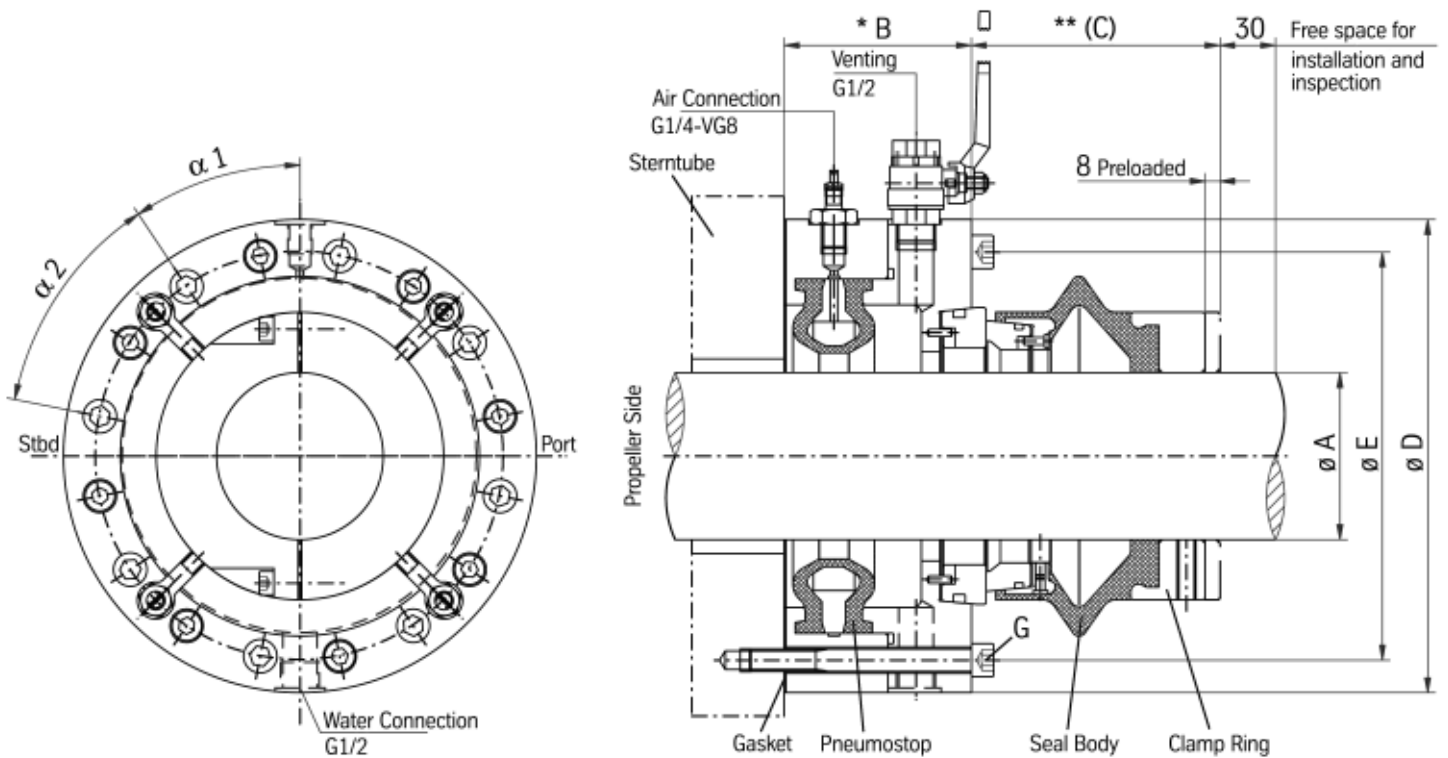
With SIMPLAN, we have put an end to the constant shaft-wear and damage caused by conventional standard systems. No more time-consuming and expensive shaft work is necessary, and therefore less time in dock. These cost savings, and the reduction in loss of earnings mean that the investment pays for itself. SIMPLAN unites efficiency and optimum environmental protection.

Our FEM designed neoprene seal body with optimised geometry ensures a constant pressure at the sealing face in the event of axial shaft movements (along with large radial tolerances). This is in contrast to all

other types of seal on the market, which show very large changes in sealing pressure, resulting in opening of the seal and/or excessive wear at the sealing faces.

With our SIMPLAN seals we offer a unique combination of SiC "hard against hard" sealing faces. We have developed materials for the seal which are unaffected by even the hardest sands or sediments. The durability of these sealing rings exceeds the operation lifetime of conventional sealing rings by far.

SIMPLAN seals are exactly fitted to the shaft diameter. They are supplied with our proven "Pneumostop" stand-still seal. This feature allows inspection of the seal and shaft without taking the ship out of the water.



Size	Shaft $\varnothing A$	*B	** (C)	$\varnothing D$	$\varnothing E$	G	$\alpha 1$	$\alpha 2$	Weight kg
60	60 - 69	101	114	225	190	6 x M12	45°	60°	26.5
70	70 - 79	101	114	235	200	6 x M12	45°	60°	28.5
80	80 - 89	101	114	245	210	6 x M12	45°	60°	30.0
90	90 - 104	101	134	255	220	8 x M12	33.75°	45°	31.5
105	105 - 119	101	134	270	235	8 x M12	33.75°	45°	35.0
120	120 - 134	101	134	285	250	8 x M12	33.75°	45°	38.0
135	135 - 149	101	134	300	265	8 x M12	33.75°	45°	40.5
150	150 - 164	101	134	315	280	8 x M12	33.75°	45°	44.5
165	165 - 179	101	134	330	295	8 x M12	33.75°	45°	49.0
180	180 - 194	101	134	345	310	8 x M12	33.75°	45°	53.5
195	195 - 209	101	146	370	335	8 x M16	33.75°	45°	58.5
210	210 - 224	101	146	385	350	8 x M16	33.75°	45°	63.0
225	225 - 240	101	146	400	365	8 x M16	33.75°	45°	66.5

* incl. 1 mm packing ** when sealing rings have contact

SIMPLAN seals meet the highest standards set by the "Central Commission for Rhine Shipping" (European Waterways). They are certified by Germanischer Lloyd, the American Bureau of Shipping, by Lloyd's Register, by ClassNK (Nippon Kaiji Kyokai) and the Russian Maritime Register of Shipping.

The Advantages:

- Constant sealing pressure
- Unique materials technology
- Practically maintenance-free
- Less dock-time – lower costs
- Fast investment return

A – Shaft Diameter in mm
 B – Total length of stationary seal incl. "Pneumostop"
 C – Total length of constant pressure seal body
 D – Outside diameter of SIMPLAN seal
 E – Bolt circle diameter
 G – Number and size of bolts
 Weight incl. "Pneumostop"

B+V Industrietechnik GmbH
P.O.Box 11 22 89
20422 Hamburg, Germany
Phone: +49 40 3011-2639
Fax: +49 40 3011-1950
E-Mail: salesMS@thyssenkrupp.com
www.simplex-turbulo.com

