DEEP SEA SEALS **MARINE SEALS**

ManeBar E series
sterntube seals for small to medium size shafts

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ManeBar E-Series sterntube seals for small to medium shafts

ManeBar E-series seals are designed for robust and reliable service in small to medium sized vessels such as trawlers, coasters, dredgers, tugs and offshore supply vessels. The seals can be supplied for either oil or water lubricated systems.

In water lubricated systems, the seals replace traditional packed stern glands, eliminating leaking gland plates, continual maintenance and worn shafts or shaft liners, thus giving a considerable cost saving to the ship owner.

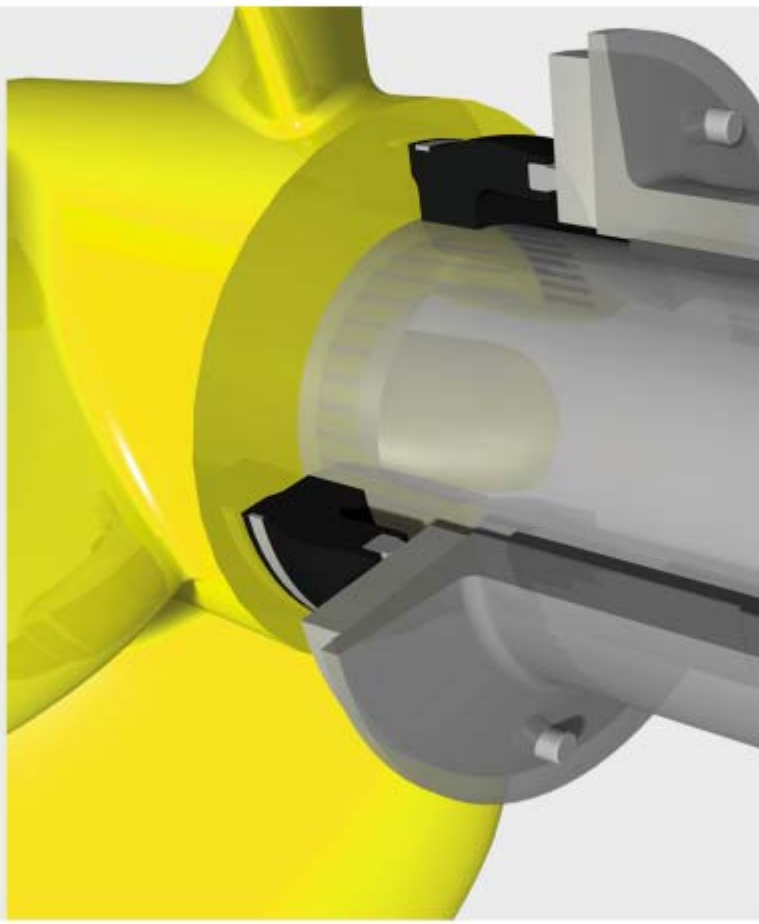
In oil lubricated systems the seal offers a robust, reliable and cost effective alternative to traditional lip type seals.

EL Type – partially split inboard seal

The ManeBar EL seal can be supplied for either water or oil lubricated systems. It's split, removable face and optional split seat, means that maintenance can be easily and quickly conducted, without shaft removal. For water lubricated systems an inflatable seal is included. This simple and effective device allows seal overhauls to be conducted with the vessel afloat. The standard combination of Manetex fibre face and Ni-resist iron seat can be replaced with hard wearing Silicon Carbide for water lubricated systems running in abrasive "brown water" conditions.

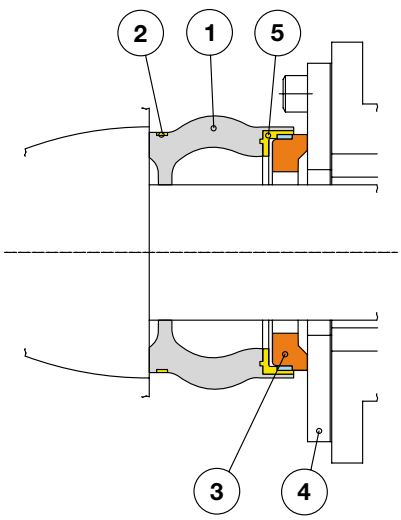
EN Type – partially split outboard seal

The ManeBar EN seal is used outboard on oil lubricated systems. Like the EL seal the split face and optional split seat can be removed with the shaft in situ, making maintenance quicker and less costly. Silicon Carbide face options are available for vessels such as dredgers working in abrasive conditions.



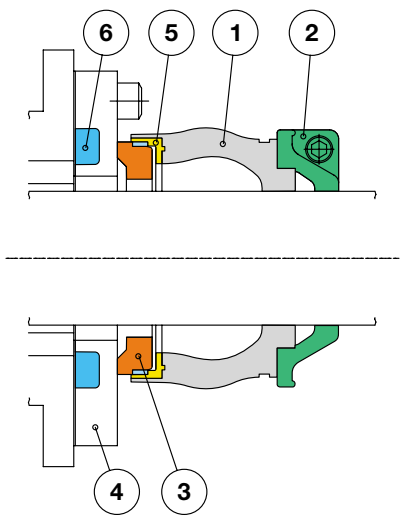
EN seal

1) Body
2) Shroud ring
3) Face
4) Seat
5) Carrier



EL seal

1) Body
2) Clamp
3) Face
4) Seat
5) Carrier
6) Cooling anulus

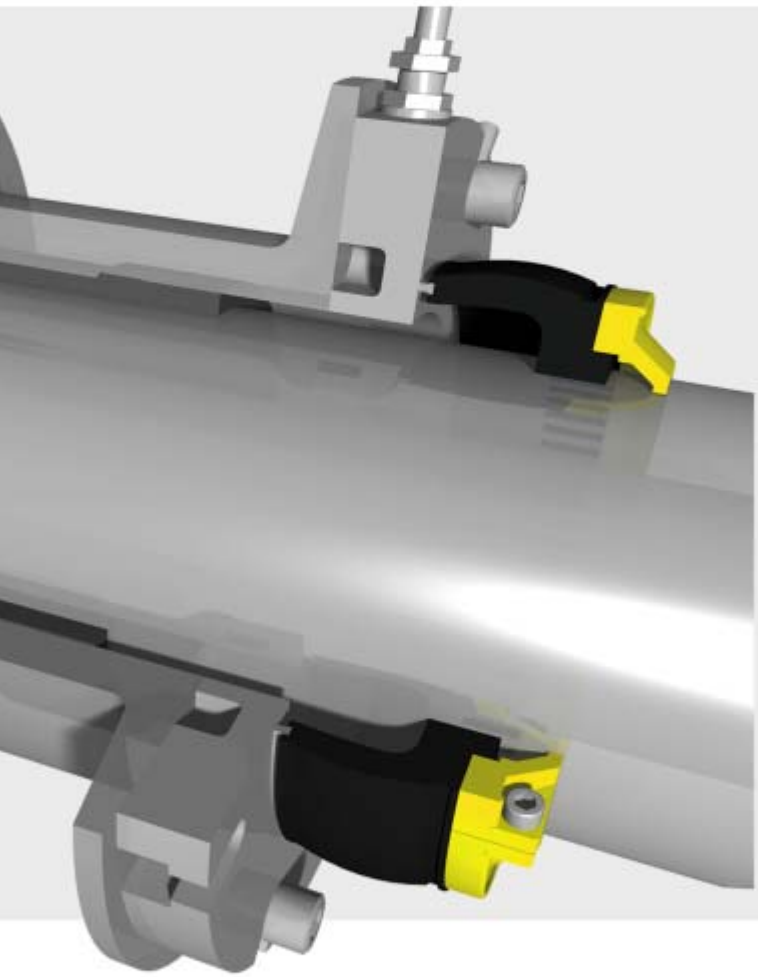


EJ Type – non-split inboard seal

The ManeBar EJ seal can be supplied for either oil or water lubricated sterntubes. For water systems an inflatable seal is included.

EK Type – non-split outboard seal

The ManeBar EK seal is used outboard on oil lubricated systems. The standard material combination is Manetex fibre face and Ni-resist iron seat, however face/seat options of Manetex/Silicon Carbide and Carbon/Silicon Carbide are available for abrasive conditions.

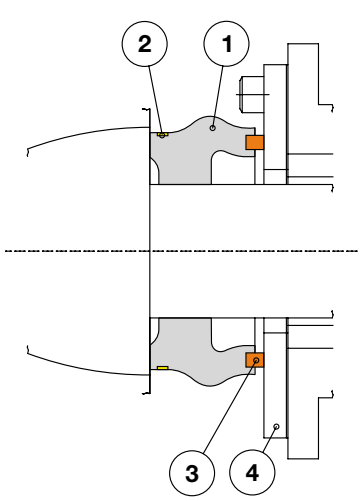


Features & Benefits

- ManeBar seals are simple, robust and reliable.
- They are cost effective having lower through life cost than other sealing systems.
- ManeBar seals can absorb high and low frequency vibrations and also axial and radial shaft movements well beyond the range of other seal types.
- Shaft and shaft liner wear is eliminated, thus removing the necessity of costly shaft removal and component refurbishment or replacement.
- Seals are easy to install, inboard seals simply clamp to the shaft, compression tools required for fitting are supplied. Outboard seals are compressed and driven by the propeller.
- ManeBar seals are easy to maintain. EL and EN seals can have the wearing components quickly and easily changed with the shaft in place, with no special bonding equipment required.
- ManeBar water lubricated seals are supplied with an inflatable seal, which can be actuated by air or fluid pressure.
- The emergency inflatable seal also allows inspection and maintenance of the inboard seal with the vessel afloat, thus avoiding dry docking.
- Outboard seals are very robust and therefore more resistant to damage caused by ropes, nets etc. than standard lip type seals.
- The seals can be used on CP and FP propeller systems, and give excellent performance on both oil and water lubrication.
- ManeBar seals also have many years successful experience on all types of Thrusters and are used as standard fit by the leading manufactures of this equipment.
- ManeBar seals are approved by all the major classification societies.

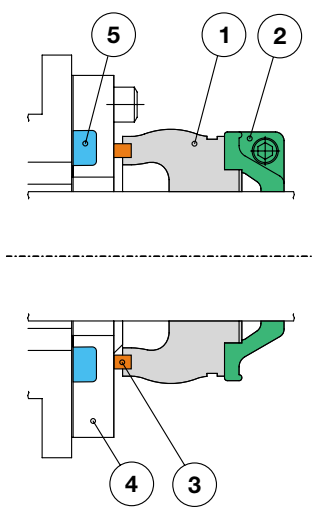
EK seal

1) Body
2) Shroud ring
3) Face
4) Seat



EJ seal

1) Body
2) Clamp
3) Face
4) Seat
5) Cooling anulus



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Wärtsilä Corporation is the leading global ship power supplier and a major provider of solutions for decentralized power generation and of supporting services.

In addition Wärtsilä operates a Nordic engineering steel company Imatra Steel and manages a substantial shareholding to support the development of its core business.

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