

Technical Information

Bearing Housing

The housings are manufactured from cast iron EN-GJL-250 or 300, pedestal and joint faces have a finish ground. Other materials like nodular cast iron EN-GJS-400 or cast steel GS 45 may also be used. Housings can also be supplied with centre foot mounting.

Bearing Shells

The shells are spherically seated in the housing and are therefore self-aligning to the shaft inclination. The steel shell bodies are dimensionally stable and are lined with RENKmetal therm V6. A perfect bond steel/whitemetal is guaranteed and checked ultrasonically. Fit of shell bore „H7“ to ISO.

Oil Supply

Self-lubrication is by means of an oil ring, in halves. Inserted springs and washers acting on the shaft ensure rotation of the disc which allowing axial movement of the shaft. The adjustable oil scraper guides the oil via oil channels to the oil feed grooves in the shell. In addition, a circulating pump can be provided, if necessary, to draw the oil from the bearing sump and feed it to the shell. The bearing can also be connected to an external oil supply system delivering cooled oil to the bearing.

Heat Dissipation

The heat is dissipated by natural cooling; i.e. by radiation and convection. If required, seawater resistant cooling coils are incorporated into the oil sump. Alternatively, connection to an external oil supply system is provided. Tapped holes for 2 thermoprobes are provided, as a standard, in the load-carrying zone of the bottom shell of all bearings. The temperature measured at these spots should not exceed 90°C in order to prevent premature oxidation of the lubricant.

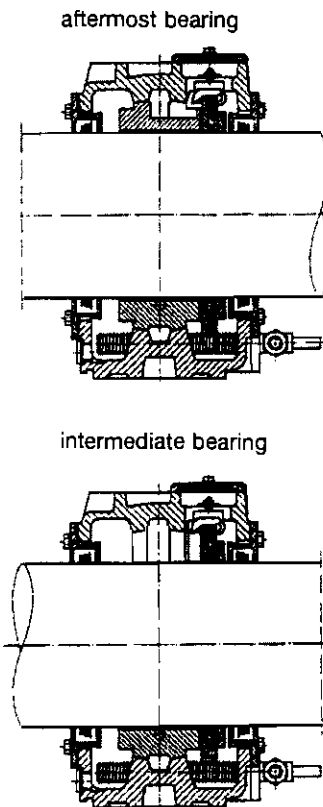
Seals

An oil sealing chamber is bolted to both ends of the bearing. The side walls of this chamber form oil baffles, and between these walls a removable flinger rotates with the shaft. The flinger (made of an oil resistant rubber material) is of the wrap-around design, held in place by a garter spring. This combination of flinger and baffles forms a very effective non-contact labyrinth seal. The axial clearances within the sealing chamber can accommodate normal shaft expansions.

For special sealing requirements (e.g. submerged bearings), please give full specification details to us with the enquiry.

Oil Selection

Generally, any branded oil of low foaming tendency can be used as a lubricant. The correct viscosity for each operating condition will be determined by EDP calculation. Such calculations are always carried out at the design stage. A print-out of the results can be provided on request.



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|--------------------|---|--|
| ① Type | S | propeller shaft bearing |
| ② Series | N | standard |
| ③ Heat dissipation | N | natural cooling |
| | W | water cooling (finned tubes in oil sump) |
| | Z | lubrication by oil circulation with external oil cooling |
| | U | circulating pump and natural cooling |
| ④ Application | T | aftermost bearing |
| | L | intermediate bearing |

Example
for the coding of a bearing

① ② ③ ④
S N N T 56 - 550

S propeller shaft bearing
N standard design
N natural cooling
T aftermost bearing
Size 56 - Shaft diameter 550 mm