

Pumps and Valves for Marine Engineering

Lubricating oil Gear Pumps KF for marine gearboxes
KF main lubrication and pre-lubrication
pumps for ship diesel engines

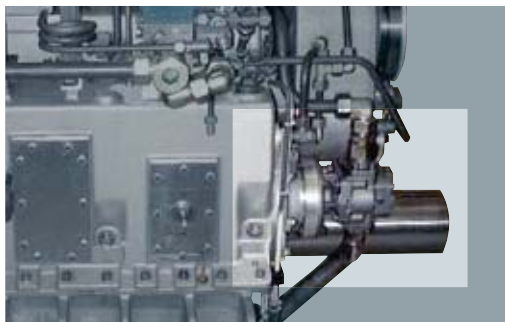


Fig. 1

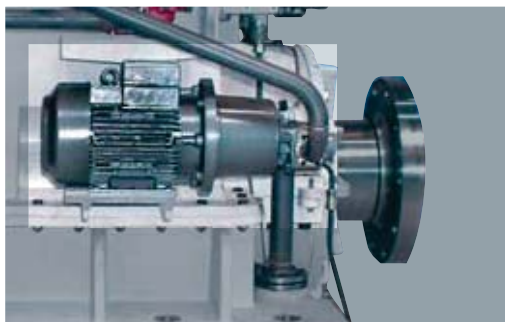


Fig. 2

- noise optimized for air containing oils
- very robust construction for a long life
- high efficiency over large ranges of speed
- version with outboard bearing for direct mounting on the gearbox (Fig. 1)
- pump assembly version with electric motor for standby operation (Fig. 2)
- version in EN-GJL-250 (grey cast iron) or EN-GJS-400-15 (spheroidal cast iron)
- with inspection certificate EN10204-3.2 from all classification authorities upon request
- Utilizing the latest 3D-CAD modeling software to meet customer specific placement solutions
- optionally comes with a flanged pressure relief valve



Pre-lubrication pump
KF 112



Main lubrication oil pump
KF 6/730

Characteristics

Displacement	0.5... 730 cm ³ /r
Working pressure	max. 25 bar / 363 psi
Speed	... 3000 1/min
Viscosity	12... 20 000 cSt (standard pumps)
Option	integrated safety valve



Pre-lubrication pump
KF 80 with pressure relief valve (motor-pump assembly)

Customised Solutions

We are able to provide client specific individual solutions up to supply volumes of 1300 cm³/r. Give us a call.

Gear pumps KF-F for marine fuels

- for marine diesel (MDO), heavy fuel oil (HFO) and marine gas oil (MGO)
- optional with magnetic coupling for a high level of operational security and a long life
- with inspection certificate EN 10204-3.2 from all classification authorities upon request
- special design configurations for low viscous and low sulphur fuels



Marine fuel pump
KF-F with magnetic coupling (motor-pump assembly)

Characteristics

Material	Housing and Cover: Spheroidal cast iron EN-GJS-400-15
Displacement	2.5... 112 cm ³ /r
Working pressure	p max = 6 bar / 87 psi at 1.2 cSt p max = 25 bar / 363 psi at 12 cSt
Speed	200... 3600 1/min
Shaft end seals	Rotary shaft lip-type seal FKM Mechanical seal FKM Magnetic coupling

Properties of fuels

Viscosity	1.2... 20 000 cSt (dependent on pressure, speed and lubricity)
Lubricity HFRR-test * (according to ISO 12156)	WSD ≤ 520 µm (meet the requirements of ISO 8217 for marine fuels)

* The HFRR test acc. ISO 12156 is a recognized method for measuring the lubricity of diesel fuels. The characteristic value determined using this method is referred to as Wear Scar Diameter (WSD) and increases with decreasing lubricity. This characteristic value is stated by the fuel manufacturers and can be included when assessing the stability of components.

Pressure relief valves SPV/SPVF for pressure setting for the protection of lubricating oil and fuel circuits

Characteristics

Materials	Grey cast iron (EN-GJL-250) Spheroidal cast iron (EN-GJS-400-15)
Valve cone material	Steel
Connection type	SAE flange (3000 psi) Whitworth thread G ½"
Max. flow rate	40... 800 l/min / 11... 211 gal/min
Working pressure	... 30 bar / 435 psi



Pressure relief valve
SPV / SPVF