Short description

Common Rail High Pressure Pump LP11.5/LP11.6



The LP11.5 and LP11.6 oil-lubricated high-pressure pumps have been developed for large-scale diesel applications, which are used especially in the mining, railway, maritime and power generation segments. Maximum reliability under the harshest conditions with regard to vibrations during impact loads of up to 10 g, dust pollution and extreme working temperatures from -30 °C to +125 °C, is absolutely necessary due to the far-reaching consequences of a device standstill. Oil lubrication in combination with the eccentric drive enable extended service life of up to 15,000 hours. Compared to cam drives, both the loadings of the pump drive and the sound development of the pump are reduced in the torque consumption, which is in turn reduced by the eccentric drive. The small difference between the mean and the peak torque of up to 200 Nm favours the design of the wheels and has a positive effect on the levels of noise emission.

For optimal integration in the widest variety of applications, different types of drive flanges are available.

Features

- Oil-lubricated
- Robust eccentric drive
- Extremely robust against aggressive fuels (compatible with EN590, Jet A1 fuels, B10 S10 / B30, SS 155435, ASTM, BS 2863, GB 19147, NATO F, MGO)
- Mechanical G-rotor booster pump
- High flexibility and efficiency thanks to specially adapted electronically steered volume control valves
- High adaptability, with up to four connector possibilities for high/low pressure lines
- Individual engine interfaces
- Direction of rotation: clockwise / counter clockwise
- Robust and reliable in the harshest environments according to VDI 3838 and ISO 10816-6
- TA Luft, US EPA Tier 4f, IMO III compatible



Technical Data

Common Rail High Pressure Pump LP11.5/LP11.6

Technical Information	LP11.5	LP11.6
System pressure	100 - 2,200 bar	100 - 2,200 bar
Flow rate	810 l/h	970 l/h
Rated pump speed	4,500 rpm @ 2,200 bar	4,500 rpm @ 2,200 bar
Max. speed	5,000 rpm @ 1,800 bar	5,000 rpm @ 1,800 bar
Drive concept	Eccentric shaft	Eccentric shaft
No. of plungers	5	6
Lubrication	Engine oil	Engine oil
Weight	~ 55 kg	~60 kg
Service life off-highway	15,000 h	15,000 h
Oil in fuel	< 0,02 g / kWh	< 0,02 g / kWh
PCV	Electrically controlled with mechanical overpressure safety	Electrically controlled with mechanical overpressure safety
VCV	Volume control valve currentless open	Volume control valve currentless open
Feed pump	Mechanical (G-rotor)	Mechanical (G-rotor)
Mean torque	135 Nm @ 2,200 bar and max. flow rate	160 Nm @ 2,200 bar and max. flow rate
Peak torque	200 Nm	200 Nm
Environmental temperature	-30°C to +125°C	-30°C to +125°C
Vibration specification	VDI 3838/ISO 10816-6	VDI 3838/ISO 10816-6
Fuel specification	Purity class 12/9/6 (ISO 4406)	Purity class 12/9/6 (ISO 4406)
Filtration specification	Min. 99,2 % efficiency @ 4 μm (ISO 19438) - along service life	Min. 99,2 % efficiency @ 4 μm (ISO 19438) - along service life

Applications: Mining, Marine, Power Generation









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