

PUMP TECHNOLOGY

L3NB screw pump series



L3NB PUMP

The new compact screw pump for lube-oil/fuel-oil skid suppliers, as well as compressor- and diesel engine manufacturers.

THE CHALLENGE

- Reduced viscosities for fuel oils, down to 1,4 cst, due to: reduced sulfur content in ECAS areas since 2015 to 0,1% global sulfur reduction in fuel oils from 2020 to 0,5% worldwide
- Increasing pressure for fuel oil system in order to improve engines efficiency

Combination of both creates critical operating conditions for triple screw pumps!

THE SOLUTION

New Leistritz L3NB pump series allowing viscosity of 1,4cSt up to 10 bar, with:

- new and innovative balancing system
- ↗ optimized material combination
- ↗ simple design
- ↗ increased efficiency for less power draw

FURTHER DESIGN BENEFITS

- Easy to change pumping cartridge (casing insert design)
- Cartridge design allows use of different pump casings with possibility to customized flange arrangements and different materials
- 100% Interchangeable by flange to flange dimensions to previous L3NG pump type
- Because of the versatility of the housing also pumps from other manufacturers may be replaced
- No negative suction pressure limitation (limited only by available NPSH)
- Reliable and cost optimized





L3N

>> The future is bringing up new challenges. The new L3NB pump series makes you ready for them!



The pump is designed to cover most of the available installations. This means:

- ↗ Flow direction from left to right or right to left by easily turning the pump casing
- Vertical or horizontal installation
- ↗ Foot or flange mounted, or as pedestal execution

ADDITIONAL HIGHLIGHT: REPLACEABLE PUMPING CARTRIDGE

The cartridge includes all internal rotating parts, sealing, bearing and cover. Such cartridge units can also be provided fully tested acc. to the operating conditions as a major spare part. The benefit is the quick and easy replacement of the internal parts to reduce the down-time during the maintenance cycle.

The use of a completely tested pumping unit of a cartridge design also allows an adaptation of different flange locations of the pump casing (as a re-engineered pump) in order to fit the pump into existing piping arrangements.



L3NB DATA

PERFORMANCE CHARATERISTICS*

	Min.	Max.
Viscosity	1,4 mm²/s	1000 mm²/s
Operating temperature	-10 °C	150 °C
Flow rate	7 l/min	550 l/min
Suction pressure	-0.4 barg	8 barg
Differential pressure	1 bar	10 bar at 1,4 cSt/16 at > 10 cSt
Casing pressure	design 16 bar	
Speed	1450 1/min	3600 1/min
Ambient temperature	-10 °C	60 °C

* Fluid: Marine destillate/residual fuel oil (acc. ISO 8217), lube oil

MATERIAL	
Casing	nodular cast iron, fabricated steel, bronze or as requested by customer
Rotors	16MnCrS5 (1.7139) nitrided
Liner	Aluminum