

# Volute Casing Pumps Vogel Series LN/L

**ACCORDING TO EN 733** 





# **Technical Data**

#### Performance:

600m<sup>3</sup>/h (2640USgpm) O Capacity up to o Head up to 100m (330feet)

o Speed up to 2950 rpm

#### Pump Sizes:

O DN 32 up to DN 150 (1 1/4" up to 6") discharge,

o sizes DN 125 up to DN 600 (5" up to 24"), refer to design LS

### Temperature of pumped liquid:

o max. 140°C (284°F)

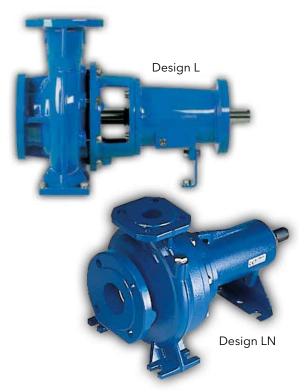
#### Casing Pressure:

o Design LN: up to 16bar/120°C or 13bar/140°C

o Design L: up to 12bar/120°C or 10bar/140°C Pumps in other materials or for higher casing pressures refer to design LSN or ICP.

#### Liquids:

- O Clean and slightly contaminated fluids (without bigger solids)
- O Cold and hot water
- o Condensate
- O Water-Glycol mixtures, oil emulsions, etc.



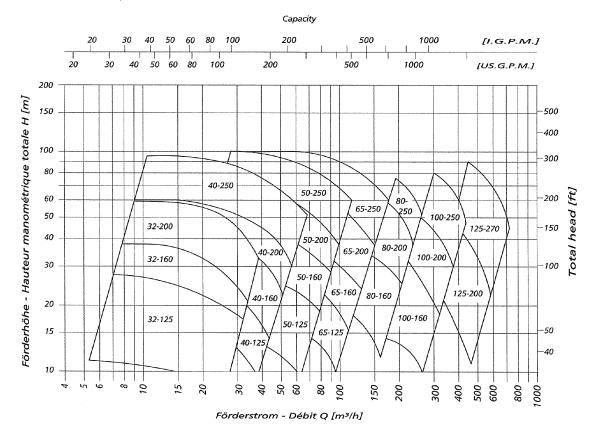
## Applications:

- O Water supply and water treatment
- O Cooling and hot water supply in industries and building services
- o Filter systems, etc.

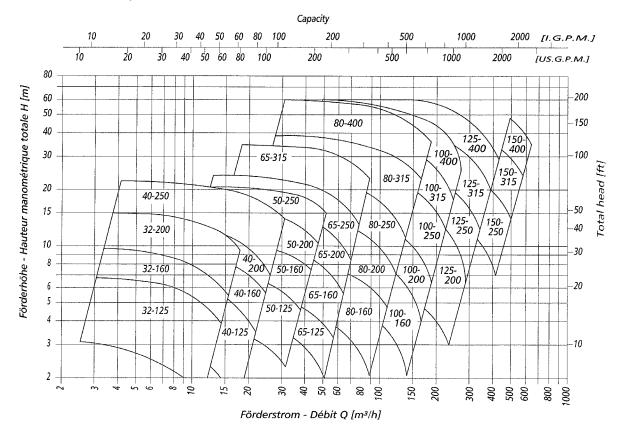
#### Material:

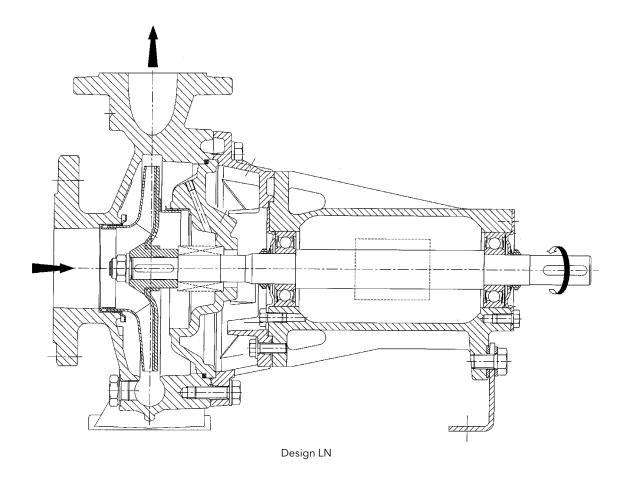
Design	Code	Size	Impeller	Casing, Seal chamber	Wear rings	Bearing frame	Motor adapter	Shaft
LN	VN	32-125 to 65-125	1.4404	0.4020	1.4402	0.6020 1)	0.6020	1.4401
	NN	65-160	0.6020	0.6020	2)			
	SN	to 80-250	CC 480K					
L	NN	65-315 80-315 80-400 100-160 to 150-400	0.6020	- 0.6025	2)	0.6020	0.6020	1.4021
	SN		CC 480 K					

## Performance 2900 rpm



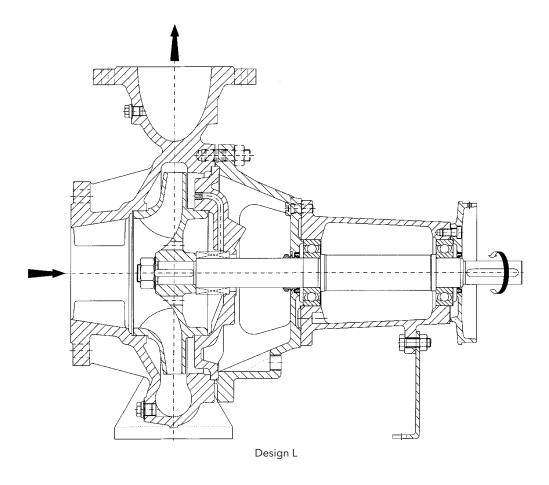
## Performance 1450 rpm





## Design Features: LN & L

- Horizontal single stage volute casing pump, designed in accordance with EN 733.
  The casings are identical with the former DIN 24255 and therefore interchangeable.
- o Meeting the requirements according to ISO 9908.
- O High efficiency enclosed impeller. Sizes 32-125 up to 65-125 standard made of stainless steel 1.4404, stamped and laser welded. Sizes 65-160 up to 150-400 standard cast iron, optional bronze.
- Casing in solid design to absorb the flange forces in accordance with ISO 9908. Suction horizontal, discharge top centerline. Flanges DN 32 up to DN 150 standard PN 10/16, except suction flange DN 200, standard PN 10, optional PN 16.
- O The back-pull-out system allows simple maintenance. Impeller, shaft sealing and bearings are easily removeable on the motor side without disassembling the casing from the piping.



## Design Features: LN & L

- O Seal chamber dimensioned according to EN 3096.
- Large open conical seal chamber, self venting with internal circulation for proper lubrication and cooling of the seal. Ribs in the seal chamber prevent the accumulation of air or gas in the area of the seal faces and reduce wear caused by solids in the fluid.
- O Shaft sealing by means of single, unbalanced mechanical seal according to EN 12756, design U, length k (former DIN 24 960, l1k).
- O Standard mechanical seal materials: Carbon Silicon Carbide (SiC) EPDM (BQ1EGG), optional elastomers in FPM (Viton®) (BQ1VGG). As option also available in SiC SiC FPM (Viton®) (Q1Q1VGG).
- O Solid bearing frame, increased distance of bearings in relation to impeller diameter reduces shaft deflection in the zone of the mechanical seal.

# Accessories:

- O Elastic coupling, at the sizes 65-315, 80-315, 80-400 and 100-160 up to 150-400 optional also with spacer coupling
- O Coupling guards completely closed, according to EN 809

O Steel base plates or steel base frame with level compensation for pump and motor



# **HYDROVAR**

- O HYDROVAR is a compact pump controller.
- O Simple mounting and installation.
- The integrated frequency converter comprises an automatic controller for pressure, differential pressure or flow.
- O Applications with several pumps allow to have an automatic change over in case of faults and to control the lead and lag pump according to demand by means of integrated interfaces.
- O HYDROVAR Smart for performance ranges above 45 kW. Hydrovar controller without integrated converter.





# **Programm Extension**

#### Blockpumps LMN / LM:

- Horizontal single stage block pump with direct mounted IEC-Standard motor
- O Sizes from DN 32 up to DN 150 (1 1/4" up to 6")
- o Capacities up to 500m3/h (660 USgpm)
- Head up to 95m (312 feet)
- O Motor sizes up to 55kW (75hp)



Design LM

#### Blockpumps, Baureihe LR / LMR & LRZ / LMZ:

- Inline design for direct installation into the piping with direct mounted IEC Norm-motor
- O Sizes from DN 40 up to DN 150 (1 1/2" up to 6")
- O Capacities up to 350m3/h (1540 USgpm)
- O Head up to 80m (262 feet)
- O Motor Sizes up to 22kW (30hp)
- O Design LRZ / LMZ: Twin Inline Pump



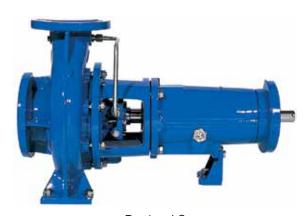
o Extended Performances up to 1000 m3/h (4403 USgpm)



Design LMR

### Volute Casing Pumps LS:

- O Extension of the performance range of model LN/L
- Horizontal design according to ISO 5199
- O Sizes from DN 125 up to DN 600 (5" up to 24")
- O Capacities up to 4600m3/h (20250 USgpm)
- Head up to 100m (328 feet)



Design LS

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're 12,500 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strom, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to xyleminc.com.



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