NSLV & NSLH

Vertical (NSLV) & Horizontal (NSLH) End-suction Centrifugal Pump

DESMI has high quality and well established industrial pumps on the market, with focus on high energy efficiency and long life cycle.

The DESMI NSLV & NSLH pumps are suitable for water applications (raw, treated, hot or cold) and meet the special industrial market requirements for:

- High efficiency
- Low NPSH values
- Easy installation/service
- Specific materials
- Compact design
- Standardized to modular design
- Outstanding hydraulic design performance
- Spacer-coupling options for easy maintenance
- Robust shaft design
- High efficiency impeller with low NPSH values
- Self-priming ability with a separate built-on priming pump

DESMI NSLV

DESMI NSLH

Nominal diameter (DN)	80 to 400
Flow rate	Up to 1800 m³/h (7900 US gpm)
Head	Up to 220 m (720 ft)
Pressure	Up to 25 bar (363 psi)
Temperature	Up to 150°C (302°F)
Motor	Standard and EX motors
VFD	Direct or wall-mounted
ATEX approved.	
Applications: Water, water with additives, seawater and oils up to 500 cSt.	

Standard Material Specifications	
Pump casing	Cast iron
Impeller	NiAl-bronze
Sealing ring	NiAl-bronze
Rear cover	Cast iron
Shaft	Stainless steel
Shaft seal	Mechanical

Alternative material combinations are available

Design Features

The pump is an end-suction, radially split, single-stage centrifugal pump with connecting flanges according to international standards. The pump is designed for mounting with electric motors having different international flange dimensions.

The pump casing is equipped with a replaceable sealing ring.

The impeller is made with double-curved blades to ensure low NPSH values and high efficiency.

The bearing unit is equipped with sturdy ball bearings and the small types are fitted with lifetime-lubricated bearings. In the larger types the lower bearing is a double bearing for which a lubrication point is provided.

A shaft in stainless steel with mechanical shaft seal of an approved brand is standard.

Alternative Materials

Cast iron, ductile iron, bronze, NiAl-bronze, stainless steel, super duplex stainless steel

Applications

Within utility/district energy applications the pumps are suitable for district heating (please contact us regarding temperature levels), district cooling (if seawater, please consult with us), water circulation, cooling tower distribution, diesel transfer etc.

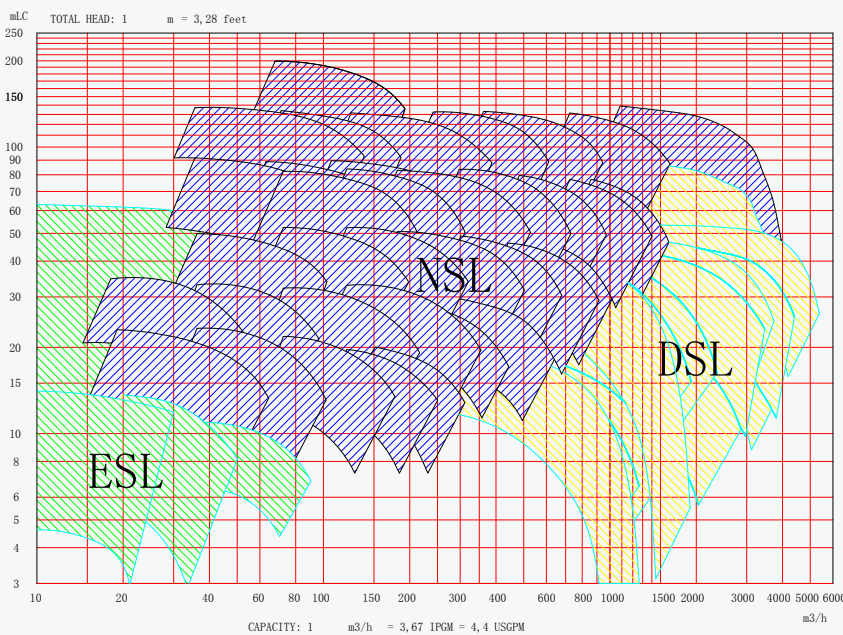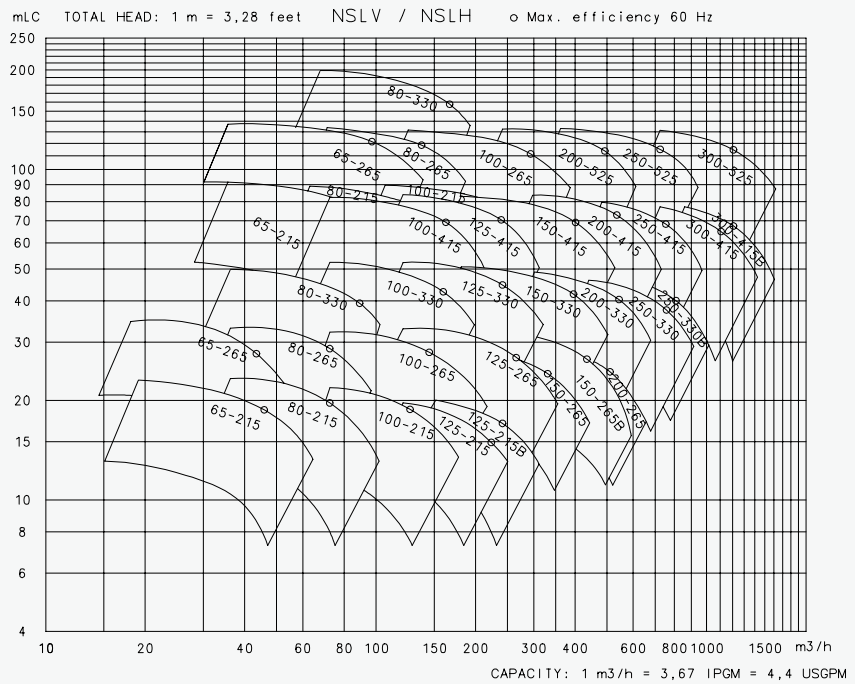All pump sizes are available as self-priming pumps with a separate built-on priming pump of the water ring type, complete with suction strainer and water feed tank.

The priming pump is equipped with its own electric motor and is suitable for manual or automatic start/stop.

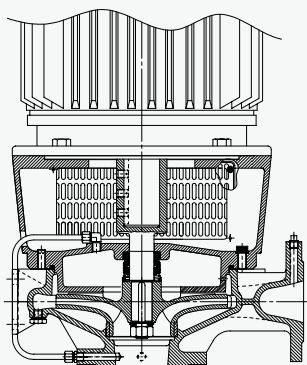The pump can also be equipped with an air-operated ejector priming unit.


DESMI NSLV

Design Details

Pumps with Ø 215 and Ø 265 Impeller
Dimension of the suction flange is one size larger than that of the discharge flange. The line through inlet and outlet is flush with the centre line of the shaft. The pumps are mounted with one impeller wear ring.

Pumps with Ø 330, Ø 415 and Ø525 Impeller
Dimension of the suction flange is one size larger than that of the discharge flange. The line through inlet and outlet is flush with the centre line of the shaft. The pumps are mounted with two impeller wear rings.
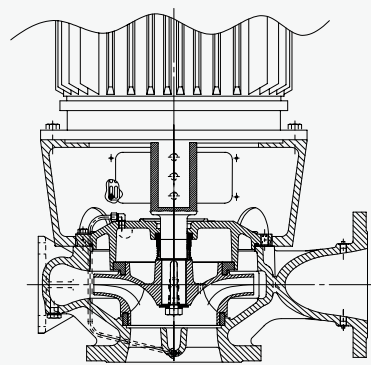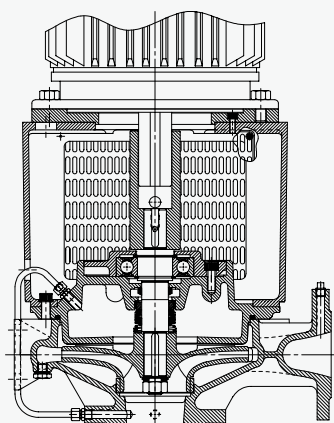
Monobloc Without Bearing

The pump is for small capacities and limited space. This version has no pump bearings, only the ball bearings in the standard electric motor. The power transmission is by rigid coupling. Dismantling of the pump parts is possible without removing the pump casing from the piping.
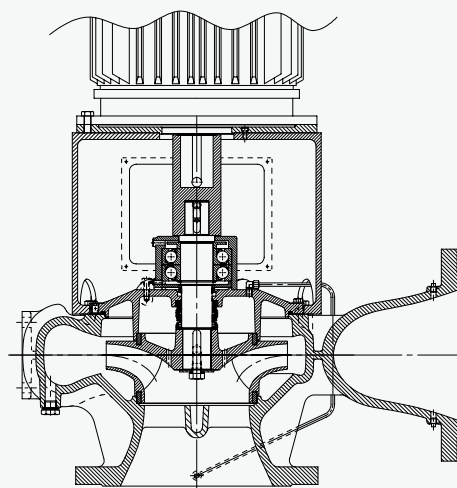
Monobloc With Bearing

The pump is for major capacities and heavy loads, especially recommended where the advantage of the spacer coupling is of no importance and where a small overall height is required.

The pump is equipped with a separate rear cover with a ball bearing and a separate motor bracket. Dismantling of the rotating pump parts is possible without removing the pump casing from the piping.

DESMI
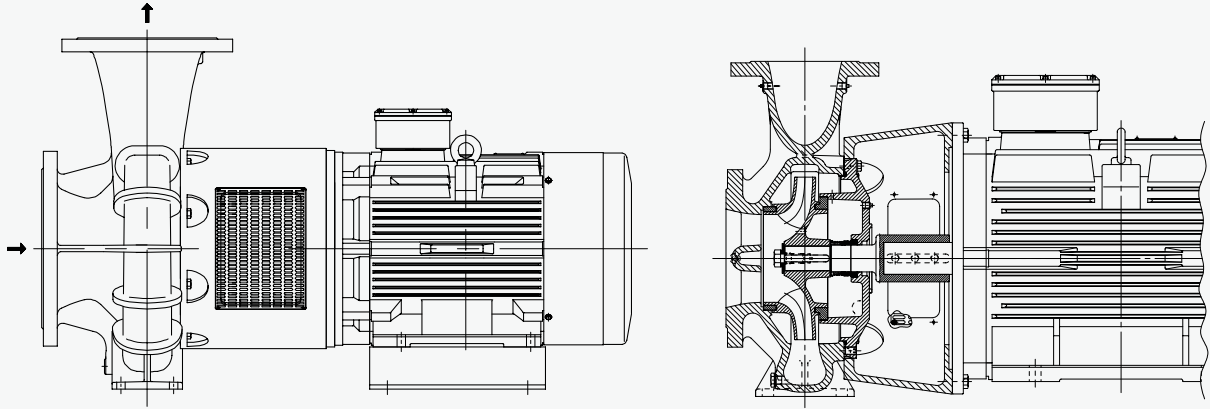
All the vertical NSLV pumps are also available in a horizontal version

DESMI