

# NSLV & NSLH

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

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

The DESMI NSLV & NSLH pump is suitable for water applications (raw, treated, hot or cold) and meets the Utility 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



|  |  |
|--|--|
| 50 Hz:   | 60 Hz:   |
| Pressure range:<br>5-150 mLC - 15-500 ft   | Pressure range:<br>5-220 mLC - 15-720                          |
| Capacity range:<br>10-1500 m <sup>3</sup> /h<br>50-6600 US gpm   | Capacity range:<br>10-1800 m <sup>3</sup> /h<br>50-7900 US gpm |
| Temperature range:<br>With standard mech. shaft seal max. 80°C - 176°F<br>With special mech. shaft seal max. 140°C - 284°F |  |

| Material specification | A           | D           |
|------------------------|-------------|-------------|
| Pump casing            | Cast iron   | Bronze      |
| Impeller               | NiAl-bronze | NiAl-bronze |
| Wear ring              | NiAl-bronze | NiAl-bronze |
| Shaft seal cover       | Cast iron   | Bronze      |
| Shaft                  | Stainless   | Stainless   |
| Shaft seal             | Mechanical  | Mechanical  |

### 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.

For more information on Utility/District Energy solutions, please visit [www.desmi.com](http://www.desmi.com)



## Applications

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

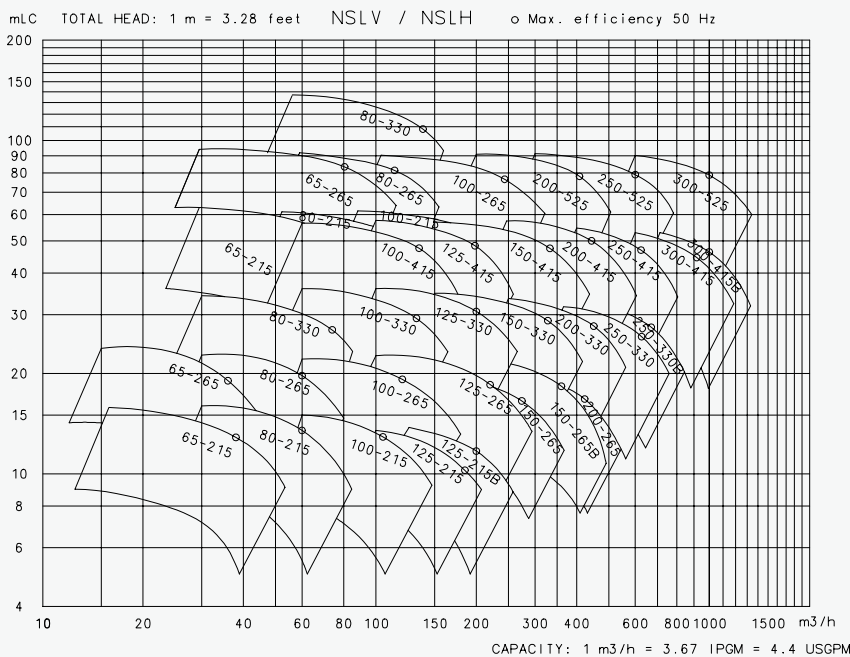
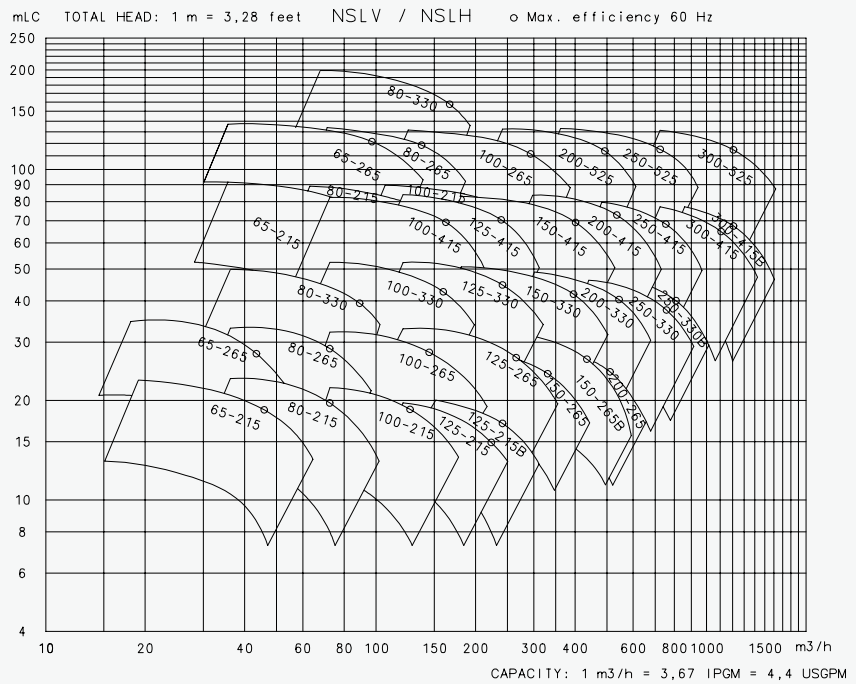
All pump sizes are available as self-priming pumps with a separate built-on priming pump of the water ring type, complete with suction strainer and water feed tank.

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.

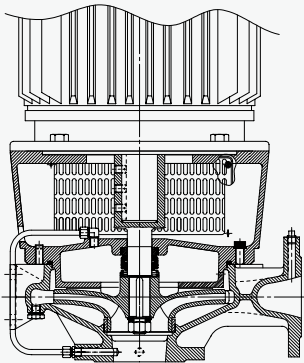


DESMI NSLV

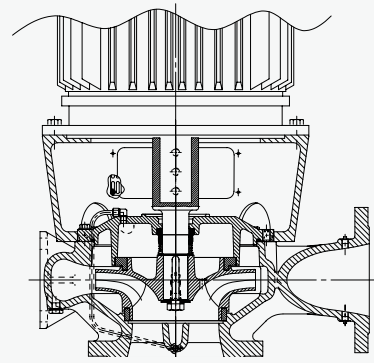


## Design Details

Pumps With  $\varnothing 215$  And  $\varnothing 265$  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.

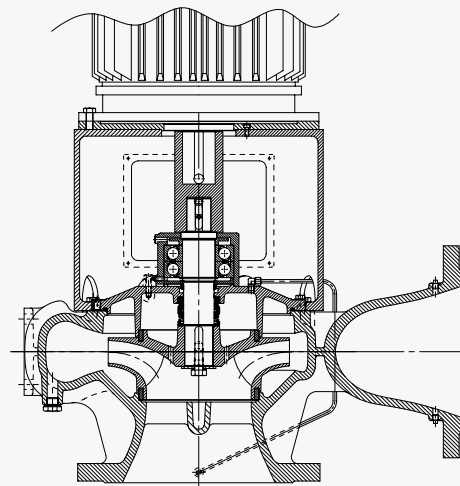
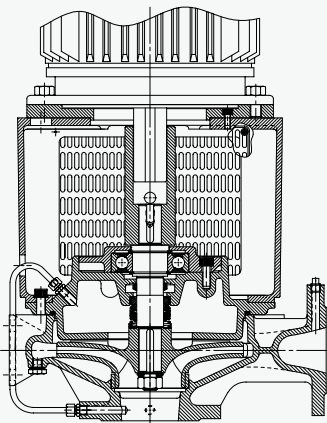


Pumps With  $\varnothing 330$ ,  $\varnothing 415$  and  $\varnothing 525$  Impeller  
Dimension of the suction flange is one size larger than that of the discharge flange. The line through inlet and outlet is flush with the centre line of the shaft. The pumps are mounted with two impeller wear rings.



### Monobloc Without Bearing

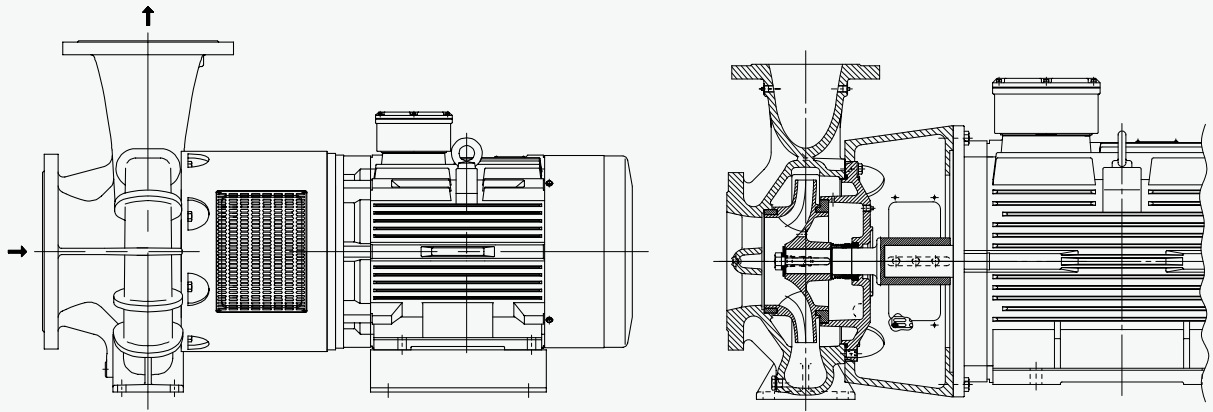
The pump is for small capacities and limited space. This version has no pump bearings, only the ball bearings in the standard electric motor. The power transmission is by rigid coupling. Dismantling of the pump parts is possible without removing the pump casing from the piping.



### 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.



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