

## Vertical in-line centrifugal pumps



PVLN - NSL - DSL

### DESMI Pumps

DESMI's remaining product range comprises among others:



**DESMI dry-mounted sewage pumps, type D** are reliable solutions for the transportation of sewage water. The pumps are equipped with 80-600 mm flange connections.

Capacity up to 4000 m<sup>3</sup>/h  
Pressure up to 70 mWC

**DESMI submersible sewage pumps**, are reliable solutions for the transportation of raw sewage water with particles up to 145 mm. The pumps are equipped with 80-800 mm flange connections.

Capacity up to 2500 l/sec  
Pressure up to 40 mWC

Also available as grinder pump.



**DESMI super-primer**, latest design for super fast and secure priming. The standard pumps are equipped with a priming star wheel.



### MODULAR S pumps

A complete family of self-priming pumps built to fulfil the needs of our customers.

With electric or hydraulic motor, petrol or diesel engine or V-belt drive.

Capacity from 1 to 400 m<sup>3</sup>/h  
Pressure from 1 to 150 mWC

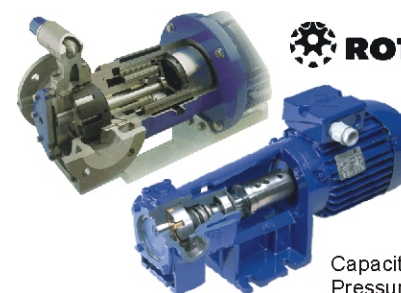


### DESMI hydrophore systems

Our company has great experience in making hydrophore systems according to our customers' wishes. Hydrophore systems are used when a higher water pressure than available locally is required.

Typical areas of application are: Water works, high-rise buildings, butcheries, dairies, and building sites.

Three standard series are available. Each single system is designed in accordance with individual customer and technical requirements.



**ROTAN**

### DESMI ROTAN internal gear pumps

are available in many different versions: monobloc, heavy duty, for petrochemical and other chemical tasks, 100% leakage-free with magnetic coupling.

Capacity from 1 to 170 m<sup>3</sup>/h  
Pressure up to 16 bar

DESMI is a dynamic company with many years of experience and a product range, recognized by businesses all over the world. DESMI has subsidiaries in a number of countries and a world wide distributor network. DESMI develops, manufactures and sells centrifugal pumps, internal gear pumps, sewage pumps and environmental equipment for the recovery of oil spills. Our customers rely on our quality. DESMI's quality system is in accordance with the requirements of ISO 9001.

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DESMI's range of vertical in-line centrifugal pumps represents the latest developments, based on more than 100 years' experience within the pump business.

The pumps are characterized by high efficiencies and low NPSH values.

The pumps are installation and service friendly, and the series comprises three basic types:

- **PVLN** for low capacities and heads
- **NSL** for medium to high capacities and high heads
- **DSL** for the highest capacities and moderate heads

### Construction

All pumps are single-stage centrifugal pumps with connecting flanges according to international standards. Further the pumps can be fitted with electric motors with flange dimensions also according to all international standards.

The pumps have been constructed in such a way that access to all rotating parts takes place without having to remove the pump from the piping.

The NSL and the DSL types are also available in a spacer version which makes service possible without removing the electric motor.

The minor pumps are normally carried by the piping system. The larger types are supplied with base plates and the biggest ones with feet. All pumps are equipped with mechanical shaft seal for maximum life and minimum friction loss. The impellers, of which most are with double curved blades, ensure high efficiencies and low NPSH-values.

### Application areas

With the high efficiencies the pumps are particularly suitable for district heating, and the standard range offers solutions for high system pressures and temperatures.

The pumps are also available in materials suitable for the marine industry.

In short, this range is for the demanding, professional customer.

### Temperature range

With standard mechanical shaft seal max. 80°C, with special mechanical shaft seal max. 140°C.

### Pressure range

Up to PN25 dependent on type and model.

### Pump optimization

In order to reduce operating costs it is necessary to evaluate and optimize the pump/control choice compared to the pump's actual operating conditions. So please contact us for professional consultancy in optimizing variable speed control, i.e. frequency converters, correct choice of materials, foundations etc. An active co-operation with our customers thus guarantees the optimum solution of every single job.

DESMI's supplies often include pumps with matching optimized controls.

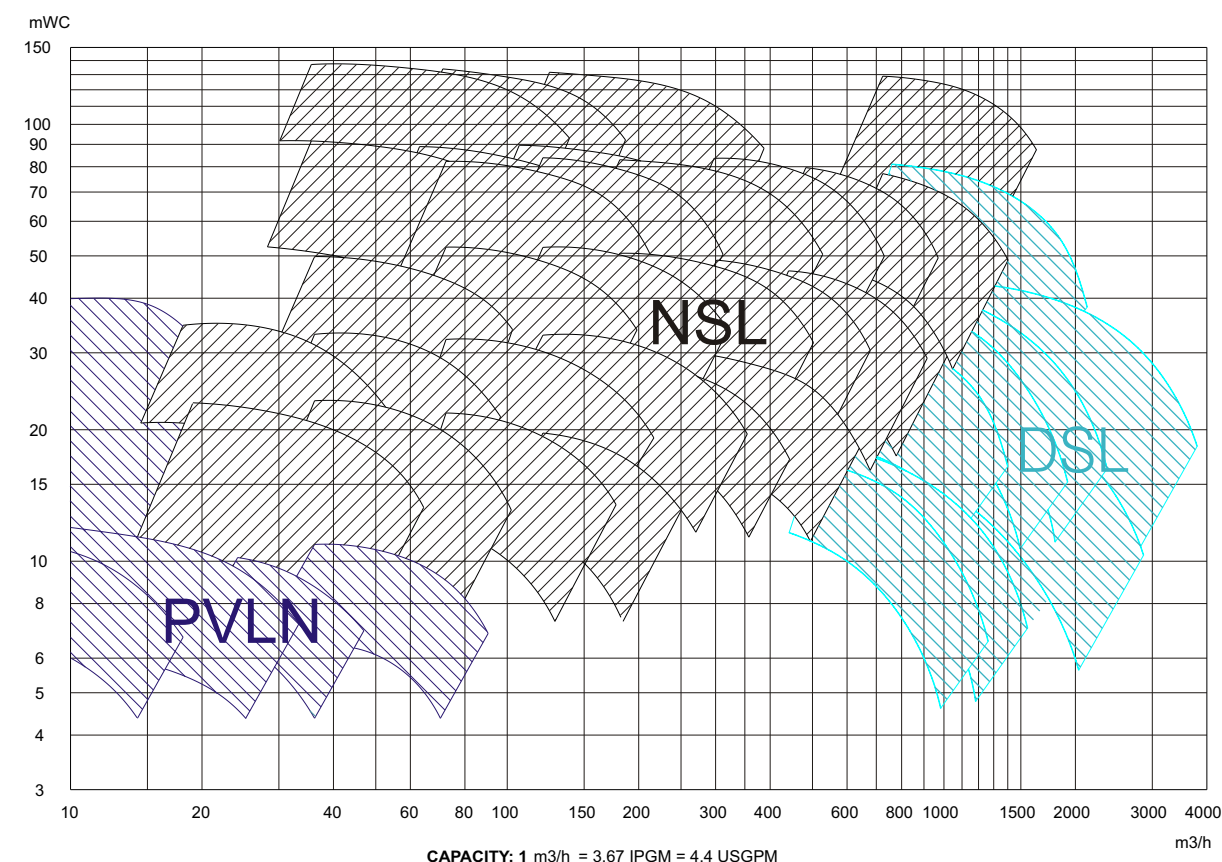
### Material specification

Materials	A		D
Pump casing	Cast iron	Ductile iron	Bronze
Impeller	Bronze	Bronze	NiAl-Bronze
Sealing ring	Bronze	Bronze	NiAl-Bronze
Rear cover	Cast iron	Ductile iron	Bronze
Shaft	St. steel	St. steel	St. Steel
Shaft seal	Mechanical	Mechanical	Mechanical

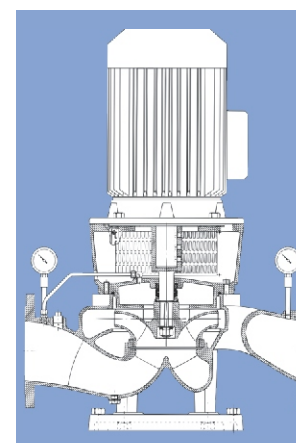
The pumps are also available in other materials such as e.g. impeller in ductile iron and various bronze alloys.



Installation example



## Combination possibilities NSL/PVLN

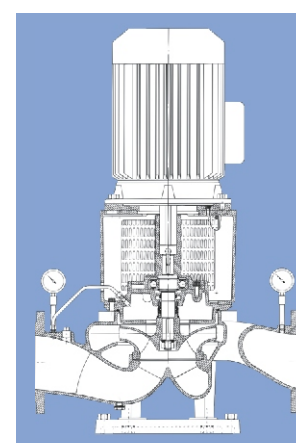


### Monobloc without bearings:

The sturdy standard pump for pure liquids where limited space is available.

The rear cover is part of the motor bracket.

Dismantling of rotating parts is possible without removing the pump casing from the piping.

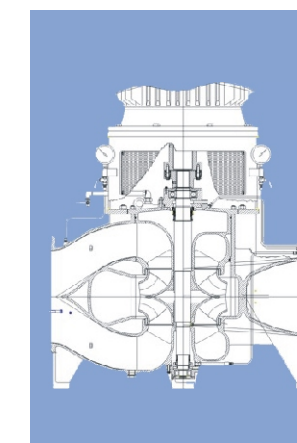


### Monobloc with bearing:

The pump for heavy loads where the positioning causes extra impact to the pump.

The pump is equipped with a separate rear cover with a ball bearing and a separate motor bracket.

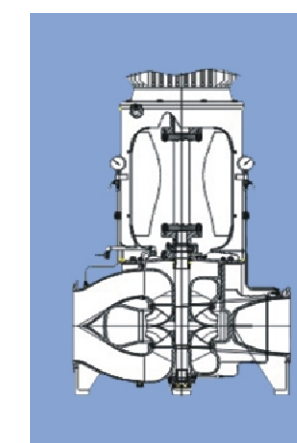
## DSL



### Monobloc with bearing:

The pump for high capacities. The pump is designed with an advanced double-suction impeller which gives high efficiency and low NPSH-values.

Further the pump is equipped with separate rear cover with ball bearing and separate motor bracket.



### Spacer:

NSL and DSL are both available in spacer design.

This construction makes it possible to service the rotating parts of the pump without dismantling pump casing and electric motor.