



# CENTRIFUGAL PUMPS PRODUCT OVERVIEW

Energy-Efficient Pump Solutions

PROVEN TECHNOLOGY

**DESMI**

# DESMI Centrifugal Pumps

DESMI is co-operating with the customers to develop innovations in pump technology. Whether it is solving individual application problems or developing new industry leading ideas, we are always looking for ways of doing things better.

DESMI's range of centrifugal pumps represents the latest developments, based on more than 150 years of experience in the pump industry.

The pumps are characterised by high levels of efficiency and low NPSH values.

DESMI vertical pumps require minimal space and provide easy access for maintenance of the pump's rotating parts.

# DESMI Centrifugal Pumps



DESMI ESL



DESMI ESLH



DESMI DSL



DESMI DSL Horizontal

## Single-stage, End-suction

ESL/ESLH In-line and end-suction single-stage centrifugal pump	
Nominal diameter (DN)	25 to 100
Flow rate	Up to 200 m <sup>3</sup> /h (880 US gpm)
Head	Up to 65 m (210 ft)
Pressure	Up to 30 bar (435 psi)
Temperature	Up to 150°C (302°F)
Motor	Standard and EX motors
VFD	Direct or wall-mounted
Applications: Water, water with additives, seawater and oils up to 500 cSt.	

## Double Suction, In-line

DSL Vertical and horizontal inline double suction centrifugal pump	
Nominal diameter (DN)	150 to 500
Flow rate	Up to 5400 m <sup>3</sup> /h (23800 US gpm)
Head	Up to 90 m (295 ft.)
Pressure	Up to 25 bar (363 psi)
Temperature	Up to 150°C (302°F)
Motor	Standard and EX motors
VFD	Wall-mounted
ATEX approved.	
Applications: Water with additives and seawater.	



DESMI NSL Horizontal



DESMI NSL

## In-line, Vertical & Horizontal

NSL Vertical and horizontal in-line centrifugal pump	
Nominal diameter (DN)	65 to 400
Flow rate	Up to 3800 m <sup>3</sup> /h (16700 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.	



DESMI NSLH



DESMI NSLV

## End-suction

NSLH/V Vertical and horizontal end-suction centrifugal pump	
Nominal diameter (DN)	80 to 400
Flow rate	Up to 3800 m <sup>3</sup> /h (16700 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.	

# DESMI Centrifugal Pumps



DESMI Modular S

## Self-priming

Self-priming centrifugal pump Modular S	
Nominal diameter (DN)	32 to 125
Flow rate	Up to 400 m <sup>3</sup> /h (1760 US gpm)
Head	Up to 150 m (490 ft)
Temperature	Up to 120° C (248° 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.	



DESMI SA

## Self-priming

Horizontal self-priming centrifugal pump SA / SAEN	
Nominal diameter (DN)	20 to 200
Flow rate	Up to 650 m <sup>3</sup> /h (2900 US gpm)
Head	Up to 110 m (360 ft)
Temperature	Up to 120° C (248° F)
Motor	Standard and EX motors
VFD	Direct or wall-mounted
Applications: Water, water with additives, seawater and oils up to 500 cSt.	

# Submerged Lubrication Oil Pump



## Deep Well Pump

Submerged deep well pump	
Nominal diameter (DN)	32 to 125
Flow rate	Up to 1440 m <sup>3</sup> /h (6300 US gpm)
Head	Up to 250 m (800 ft)
Motor	Standard and EX motors
VFD	Direct or wall-mounted

# DESMI Vertical Centrifugal Multi-stage Pumps

## Multi-stage

Vertical DPV	
2-pol	2, 4, 6, 10, 15, 25, 40, 60,85 125
4-pol	15, 25, 40, 60, 85, 125
Capacity range (m <sup>3</sup> /h)/(gpm)	0.5-193/2-849
Maximum pump pressure (m)/(ft)	5/16 to 400/1312
Temperature range medium	-20 - +140° C / -4 - 284° F
Applications: Water, sprinkler, industry, cleaning systems and boiler feeds.	



DESMI DPV Pumps

# DESMI Electric Borehole Pumps

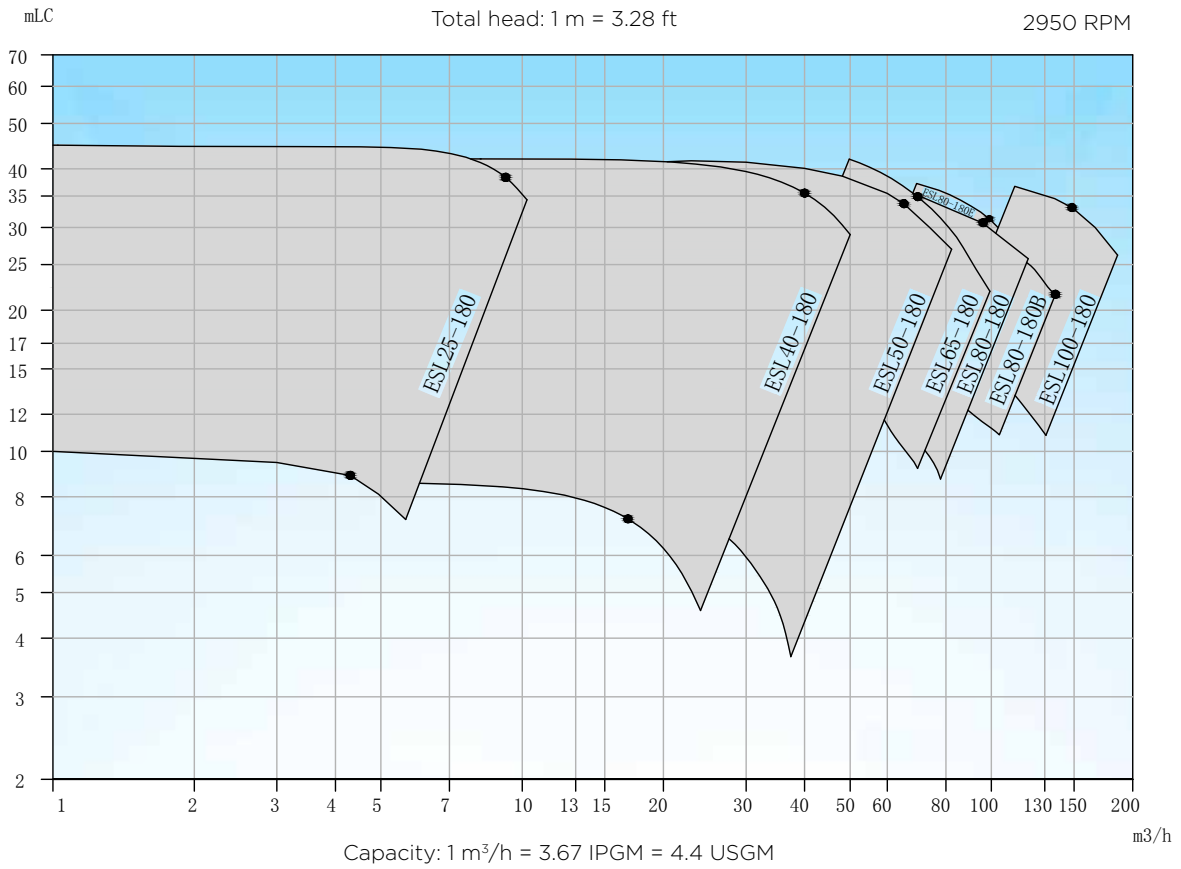
## Multi-stage

Submersible, high-efficiency multi-stage borehole pumps More than 9,000 combinations	
Nominal diameter (DN)	4" to 10"
Flow rate	Up to 180 m <sup>3</sup> /h (1160 US gpm)
Head	Up to 850 m (2800 ft)
Motor	2 and 4 pole, 2900 / 1450 rpm
Applications: Drinking water, DM174, WRAS, ACS, KTW-W270.	

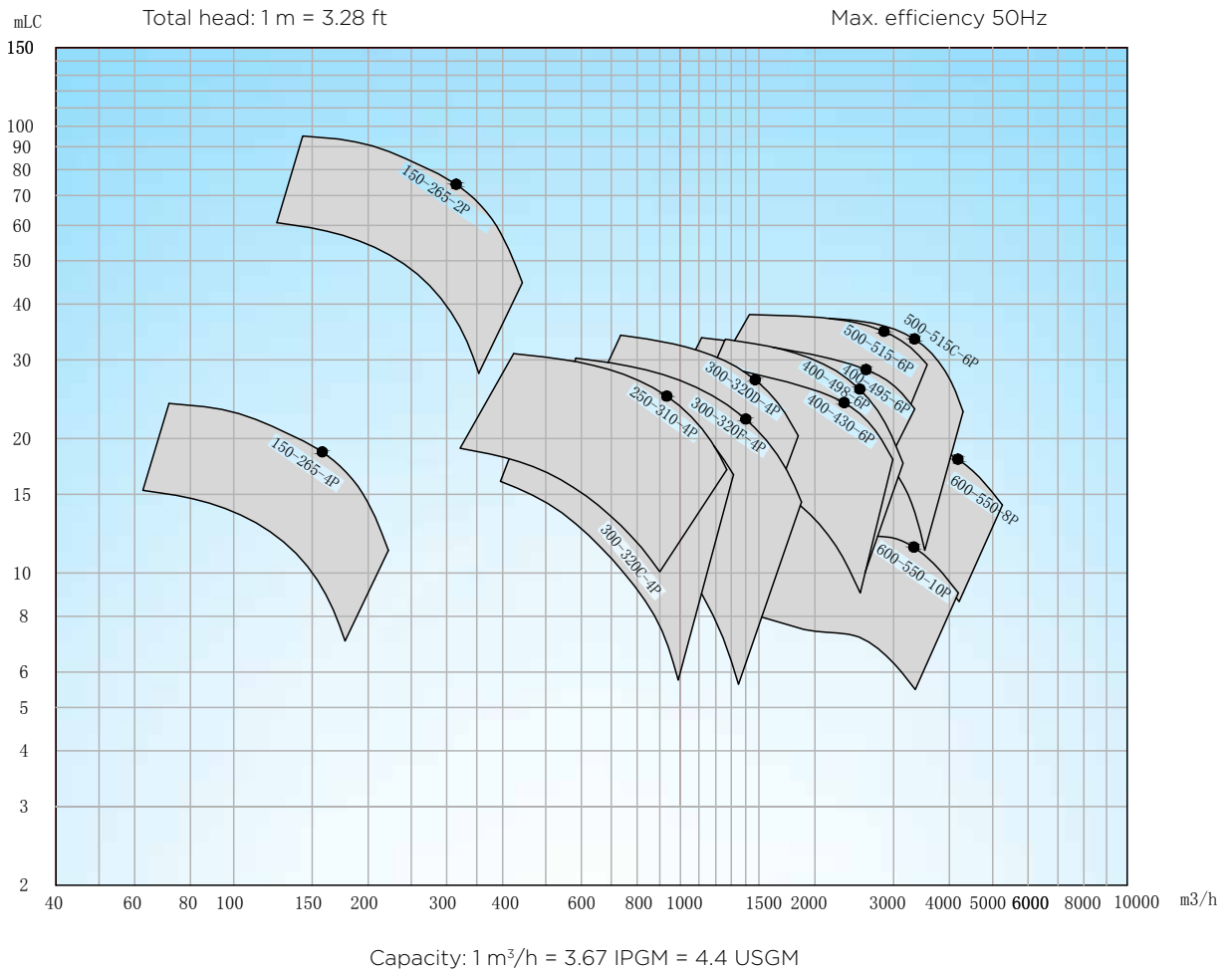


# DESMI Centrifugal Pumps

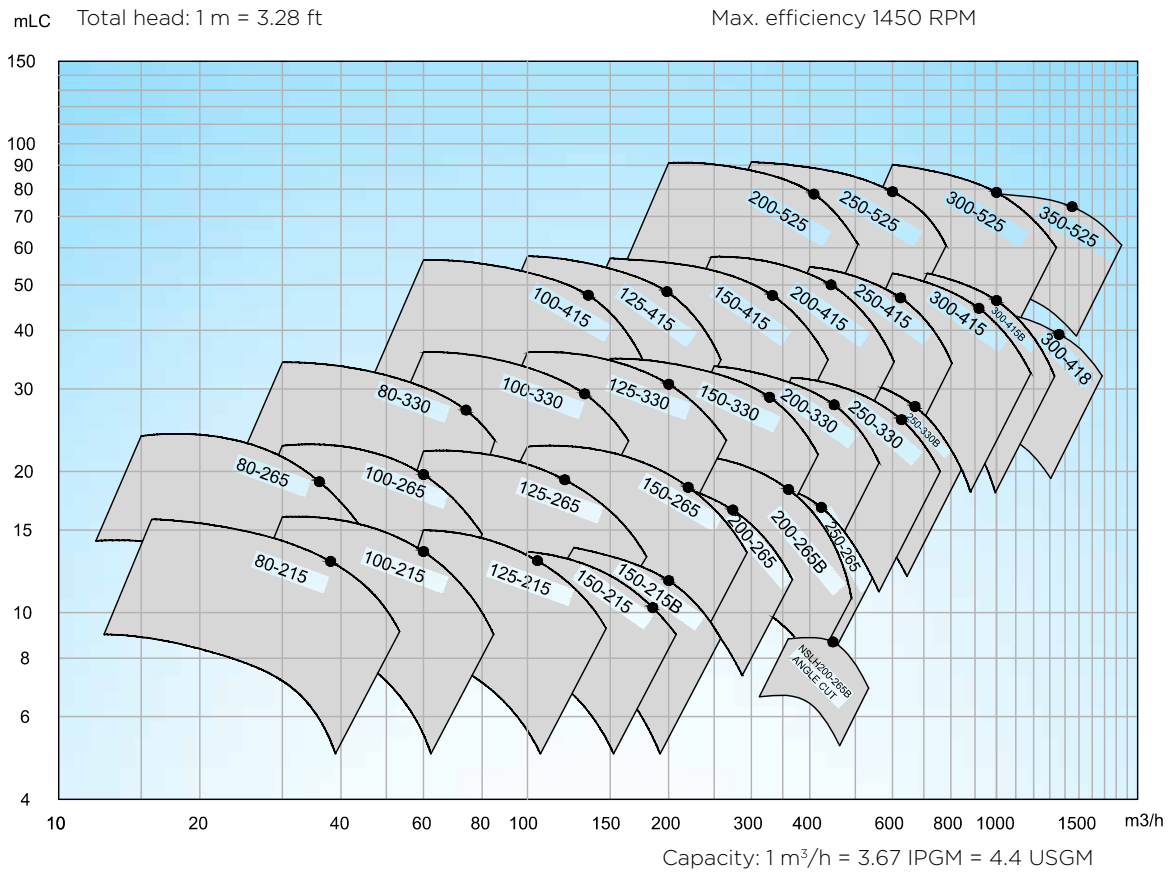
ESL Centrifugal Pump, 2950 rpm



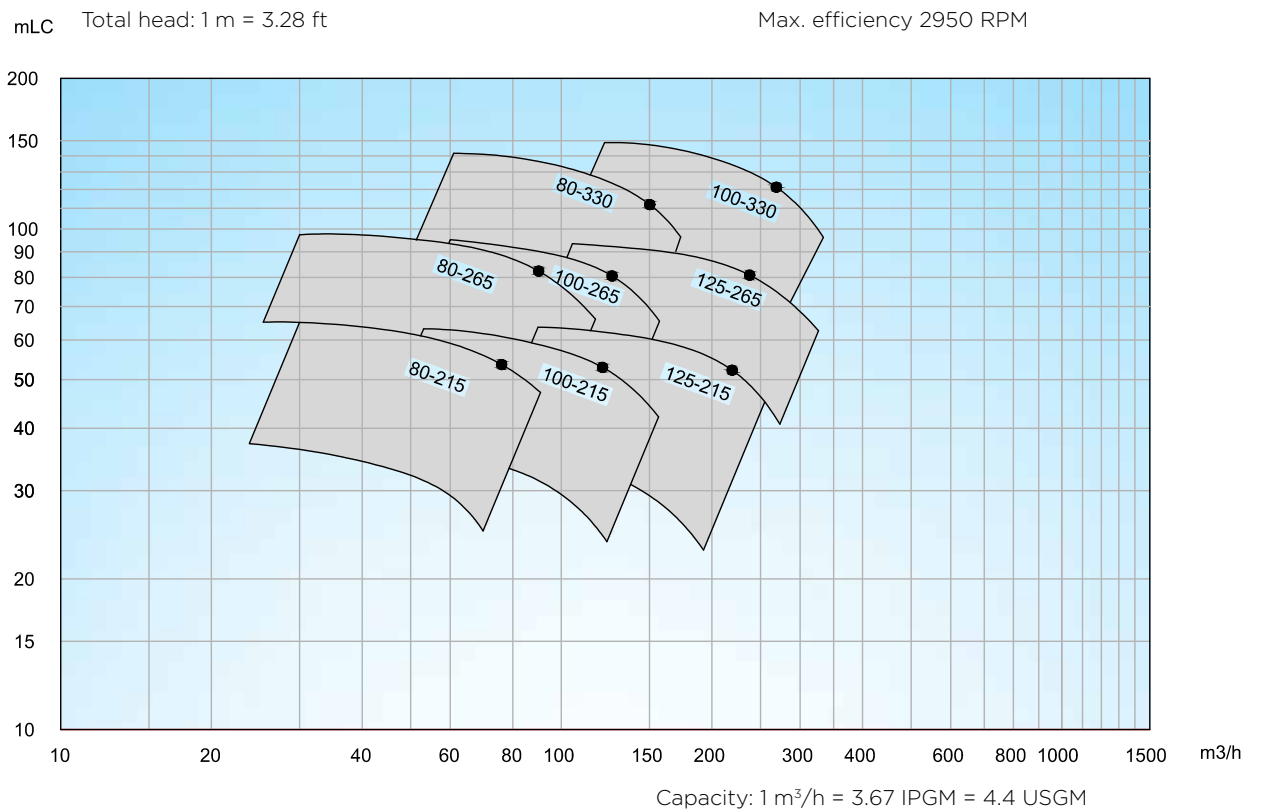
DSL Centrifugal Pump, 50 Hz



NSL Centrifugal Pump, 1450 rpm



NSL Centrifugal Pump, 2950 rpm



# DESMI Water and Waste Water Centrifugal Pumps



Norm Pump



Horizontal High-pressure Pump



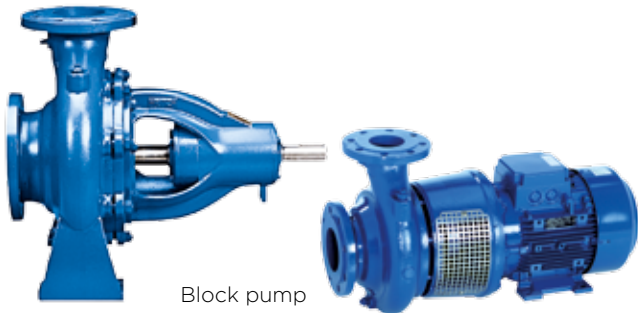
Vertical High-pressure Pump

## Single-stage Norm Pumps

Norm pumps EN 733, ISO 2858/5199 Block pumps	
Nominal diameter (DN)	32 to 150
Flow rate	Up to 600 m <sup>3</sup> /h (2642 US gpm)
Head	Up to 160 m (525 ft)
Pressure	Up to 16 bar (232 psi)
Temperature	Up to 140° C (284° F)
Applications: Water, pulp and paper, sugar, thermal power, other industries, small hydropower Media: Clean, slightly contaminated, and aggressive liquids up to a viscosity of 150 mm <sup>2</sup> /s without abrasive and solids content	

## High-pressure Pumps

HP 45/46/49 Horizontal High Pressure Pump Vertical High Pressure Pump	
Nominal diameter (DN)	25 to 250
Flow rate	Up to 800 m <sup>3</sup> /h (3522 US gpm)
Head	Up to 1000 m (2625 ft)
Pressure	Up to 100 bar (1450 psi)
Temperature	Up to 160° C (320° F)
Applications: Water, pulp and paper, sugar, thermal power, other industries, small hydropower. Media: Clean and slightly contaminated liquids up to a viscosity of 150 mm <sup>2</sup> /s without abrasive and solids content.	



Block pump



Split-case Pump

## Single-stage Block Pumps

From closed to open impellers Block pump, closed and open impeller	
Nominal diameter (DN)	65 to 600
Flow rate	Up to 6,000 m <sup>3</sup> /h (26417 US gpm)
Head	Up to 160 m (525 ft)
Pressure	Up to 25 bar (363 psi)
Temperature	Up to 200° C (392° F)
Applications: Water, pulp and paper, mining, sugar, thermal power, other industries, small hydropower. Media: Depending on the impeller design: water, slightly contaminated, and contaminated media with some solids content; consistencies up to 8%.	

## Double-flow Axial

Horizontal split-case	
Nominal diameter (DN)	150 to 1200
Flow rate	Up to 20,000 m <sup>3</sup> /h(88057 US gpm) Customized up to 36,000 m <sup>3</sup> /h (158502 US gpm)
Head	Up to 220 m (722 ft)
Pressure	Up to 25 bar (363 psi)
Temperature	Up to 110° C (230° F)
Applications: Water, pulp and paper, mining, sugar, thermal power, other industries, small hydropower. Media: Depending on the impeller design: water, slightly contaminated, and contaminated media with some solids content; consistencies up to 8%.	





# DESMI Automation

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DESMI Automation offers a wide range of automation solutions developed for the industrial segment.

Our product portfolio includes solutions from simple motor starters to advanced PLC based solutions.

DESMI Automation is constantly developing new product solutions, currently the following products are offered as standard products:

- Motor starters ranging from 0,75kW to 90kW
- Frequency converter solutions with build-in optional web server facility, 0,75kW to 1MW (in various voltage ranges)
- Tank level control solutions
- Pump heating control solutions

DESMI Automation offers customized solutions for advanced pump systems.

Our automation team currently consists of 25 skilled automation engineers and technicians, who are located in Denmark, Poland, Singapore, Korea, and China.

DESMI Automation handles technical clarification, design, programming, installation, commissioning and service.

Automation solutions are developed in accordance with specified rules and regulations, UL standard, EN/IEC standard, ATEX/IECex standard and all major marine classification societies.





## DESMI Genuine Spare Parts Kits for Simple Overhaul and Service

DESMI provides spare parts kits for easy and simple maintenance and overhaul of your pumps. We offer a variety of spare parts kits for a number of DESMI pump series.

To determine which spare parts kit you need and to provide you with the best service, we need to have the following information:

- **Pump type (e.g. NSL 150-265)**
- **Serial number (e.g. 323249 or 30192-1)**

### Spare Parts Kits include:

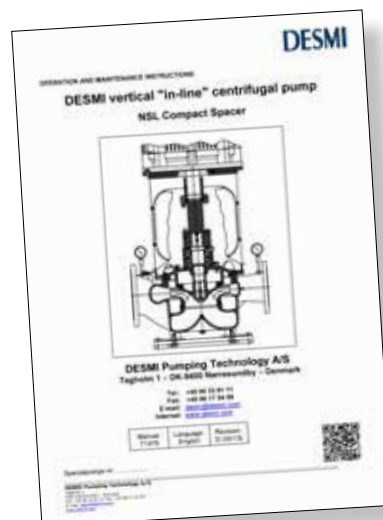
- Mechanical shaft seal
- Special tool
- Bearings
- O-rings
- Gaskets
- Washers & nuts
- Item list
- Etc.



Overhaul videos at [www.desmi.com/overhaul.aspx](http://www.desmi.com/overhaul.aspx)



Parts numbers and flyers at [www.desmi.com/parts.aspx](http://www.desmi.com/parts.aspx)



Manuals at [www.desmi.com/aftersales.aspx](http://www.desmi.com/aftersales.aspx)

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