



## DESMI Vertical Pumps DP

Water, Sprinkler, Marine Applications, Cleaning Systems,  
Boiler Feed & Industrial

# The Ability to Innovate

The art of transporting water is finding the right solution, with maximum efficiency, for each situation. The DPV series of vertical, multistage, centrifugal pumps is the result of 55 years of experience and the pumps can be used for numerous applications.

The new DPV pump series is revolutionary in terms of energy-savings and efficiency. Corrosion-free materials, advanced production methods and an

optimized hydraulic assembly all contribute towards providing a unique example of craftsmanship.

The modular construction of the product enables you to modify the pump according to your specifications and contributes towards a reliable drinking and processing water supply in the most sustainable way.

## Highest possible efficiency:

- Energy saving
- Unique hydraulic design: high pressure per impeller with high efficiency
- Efficiency DPV 2, 4, 6, 10, 15, 25, respectively 54%, 62%, 68%, 71%, 77%
- Standard motor with high performance IE2
- Optimal flow is adjusted according to standard pipe diameter
- Optimum consistency between models



It is important to act responsibly when it comes to man and the environment, and we translate these values into important product characteristics.

## Low NPSH

- Extended life span as a result of favorable suction conditions
- NPSH-level 0.6 up to 3.8 (Qopt)

## Modular construction

- Wide range of options
- All specials are standard
- Short delivery times

## Stay in front by selecting the right pump, or more importantly be selected by doing it right!

### Durable solution

- High quality materials
- 100% adjustable to application; long life span
- Sustainable production process; modern welding and production techniques
- Production monitoring; ISO 9001 certified

### Ecodesign

- High score within EUP guideline
- Sustainable material
- 100% recyclable
- Minimal waste production process
- ISO 14001 certified

### Noise reduction

- Negligible noise as a result of optimization of the pump's flow profile and special design of motor cooling fan

### Maintenance-free electric motor

- Extensive choice of voltages and frequencies
- IP55
- Insulation class F
- Efficiency 1 motor IE2
- Temperature safeguard,  $\geq 3$  kW PTC
- Can be equipped with a variety of motor types, brands, or options

### Shaft seal

- Extensive choice of elastomers and shaft seals
- Exchangable without disassembling the pump
- Fixed, Easy Access, Cartridge

### Versatile pump casing

- Cast
- Easy to connect
- VC-design with rigid flanges
- V and VS design with collar flanges
- E-design with built-in non return valve
- Draining without residue

### Smart plugs

- For filling, draining, de-aerating and measuring
- Separate measuring suction and discharge pressure ( $\Delta p$ )
- Stainless steel AISI 304 or 316
- By-pass possible
- Durable sealing

### Hydraulic assembly

- Highest efficiency in the market
- High quality stainless steel AISI 304 or 316

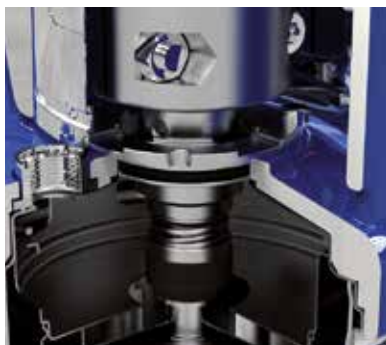
### Solid construction shroud

- Stainless steel, robust housing
- Standard pressure durability PN 40
- Low vibration and noise

### Solid base plate

- Powder coated 100  $\mu\text{m}$
- Stainless steel optional

Wide range of shaft seals



Replace without dismantling the pump

Modular construction



Quality materials

# APPLICATIONS

The combination of durable and innovative construction methods result in a wide range of options and designs. The DPV series is suitable for many applications. The stainless steel base guarantees water quality in every situation. The pump is suitable for many applications, including:

- Domestic water supply
- Utility
- Cooling water transport
- Hot water applications
- Fire fighting
- Food, chemical and process industry
- Irrigation

## Upgrade and certificates

Our pumps are of the utmost quality and are finished to the highest standards but some applications require an even more exclusive design. A DPV can, therefore, also be provided with:

- Electrolytically polished pump casing and/or pickled and passivated hydraulic assembly
- Various certified sealings
- Purchase and test certificate
- ATEX motors EEXe II T3, EEXd IIC T4

Our pumps can be equipped with special seals for different pressure classes. The certificates and/or approvals available can be seen below.

## Upgrading and certificates

The pumps are of the highest quality and are produced to the highest standard, but some applications require special design.



The DPV is a modular pump series. As a result of the extended range of possibilities, the pumps can easily be customized to the application. See the following overview of the available modules.



Shaft seals  
3 reliable options for a wide range of media

- Fixed seal
- Easy access seal
- Cartridge seal



Hydraulic assembly  
Durable and reliable stainless steel

- AISI 304
- AISI 316



Connections

- Pressure class PN 16, 25, 40
- Option of stainless steel AISI 304 or 316
- Connections: external thread with built-in non return valve, counter flange, Victaulic, Triclam, round flange
- DIN, JIS, ASME



Base plate

- Powder coated cast iron (standard)
- Stainless steel (optional)

| 50 Hz                                |              |            |                |            |              |
|--------------------------------------|--------------|------------|----------------|------------|--------------|
| Model                                | DPV 2        | DPV 4      | DPV 6          | DPV 10 2P  | DPV 10 4P    |
| <b>Capacity</b>                      |              |            |                |            |              |
| Capacity range (gallon/h)            | 53 - 872     | 106 - 1717 | 158.5 - 2377.5 | 264 - 3487 | 132 - 1743.5 |
| Nominal capacity at Qopt. (gallon/h) | 502          | 1057       | 1664           | 2641       | 1321         |
| <b>Pressure</b>                      |              |            |                |            |              |
| Norm pressure                        | PN16-25-40   |            |                |            |              |
| Maximum pump pressure (in)           | 9016         | 9212.5     | 10079          | 9409       | 2283         |
| Maximum pressure at Qopt. (in)       | 7362         | 7598       | 7874           | 7047       | 1693         |
| NPSH at Qopt. (in)                   | 78           | 47         | 47             | 47         | 35           |
| <b>Hydraulic assembly</b>            |              |            |                |            |              |
| Temperature range medium             | -4 to 284° F |            |                |            |              |
| Maximum efficiency                   | 54%          | 62%        | 68%            | 68%        | 68%          |

| 50 Hz                                |                 |            |            |            |              |
|--------------------------------------|-----------------|------------|------------|------------|--------------|
| Model                                | DPV 15 2P       | DPV 15 4P  | DPV 25 2P  | DPV 25 4P  | DPV 85       |
| <b>Capacity</b>                      |                 |            |            |            |              |
| Capacity range (gallon/h)            | 475.5 - 5944    | 259 - 2985 | 740 - 9246 | 370 - 4623 | 2245 - 29799 |
| Nominal capacity at Qopt. (gallon/h) | 4755            | 2589       | 7397       | 3698       | 22639.5      |
| <b>Pressure</b>                      |                 |            |            |            |              |
| Norm pressure                        | PN16-25-40      |            |            |            |              |
| Maximum pump pressure (in)           | 9763            | 2323       | 9685       |            | 6929         |
| Maximum pressure at Qopt. (in)       | 7598            | 1732       | 7283       | 1772       | 5197         |
| NPSH at Qopt. (in)                   | 47              | 24         | 118        | 31         | 87           |
| <b>Hydraulic assembly</b>            |                 |            |            |            |              |
| Temperature range medium             | -4 up to 284° F |            |            |            |              |
| Maximum efficiency                   | 71%             | 71%        | 77%        | 77%        | 79%          |

| 60 Hz                                |              |            |            |            |            |
|--------------------------------------|--------------|------------|------------|------------|------------|
| Model                                | DPV 2        | DPV 4      | DPV 6      | DPV 10 2P  | DPV 10 4P  |
| <b>Capacity</b>                      |              |            |            |            |            |
| Capacity range (gallon/h)            | 63 - 1057    | 127 - 2060 | 190 - 2853 | 343 - 4174 | 158 - 2087 |
| Nominal capacity at Qopt. (gallon/h) | 607.5        | 1268       | 2007       | 3513       | 1664       |
| <b>Pressure</b>                      |              |            |            |            |            |
| Norm pressure                        | PN16-25-40   |            |            |            |            |
| Maximum pump pressure (in)           | 9685         | 9370       | 10039      | 9685       | 2401       |
| Maximum pressure at Qopt. (in)       | 7913         | 7677       | 7835       | 6811       | 1732       |
| NPSH at Qopt. (in)                   | 118          | 71         | 79         | 79         | 51         |
| <b>Hydraulic assembly</b>            |              |            |            |            |            |
| Temperature range medium             | -4 to 284° F |            |            |            |            |
| Maximum efficiency                   | 54%          | 64%        | 68%        | 68%        | 68%        |

| 60 Hz                                |                 |              |             |            |              |
|--------------------------------------|-----------------|--------------|-------------|------------|--------------|
| Model                                | DPV 15 2P       | DPV 15 4P    | DPV 25 2P   | DPV 25 4P  | DPV 85       |
| <b>Capacity</b>                      |                 |              |             |            |              |
| Capacity range (gallon/h)            | 581 - 7133      | 290.5 - 3645 | 898 - 11095 | 449 - 5547 | 2642 - 34870 |
| Nominal capacity at Qopt. (gallon/h) | 5732.5          | 2879         | 8981        | 4490       | 26417        |
| <b>Pressure</b>                      |                 |              |             |            |              |
| Norm pressure                        | PN16-25-40      |              |             |            |              |
| Maximum pump pressure (in)           | 9173            | 2244         | 8268        | 3425       | 5945         |
| Maximum pressure at Qopt. (in)       | 6968.5          | 1693         | 6181        | 2559       | 4251         |
| NPSH at Qopt. (in)                   | 59              | 51           | 181         | 43         | 150          |
| <b>Hydraulic assembly</b>            |                 |              |             |            |              |
| Temperature range medium             | -4 up to 284° F |              |             |            |              |
| Maximum efficiency                   | 71%             | 71%          | 77%         | 77%        | 79%          |

