

# herborner.D-PM

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## Use

The **herborner.D-PM** with its 100% coating is particularly suited for use in swimming complexes, leisure and adventure pools, theme parks, industrial plants and ship technology. The inline version of the block pump is intended for direct installation into a pipeline. The coating is approved for use in swimming pools and for drinking water, making it the right choice for just about any application.

The coating thickness of up to 1000 µm ensures an extremely smooth surface. This increases hydraulic efficiency by up to 10%, saving energy for years.

## Coating

Corrosion protection and protection against aggressive media thanks to the 100% coating of all relevant parts at risk from corrosion and that come in contact with the medium. Corrosion damage to the pump or system components is thereby prevented.

## Impeller protector

Special impeller protector made of highly durable plastic protects the impeller from seizing up due to corrosion (after standstill periods) and ensures that the pump runs quietly.

The version with a particularly small gap achieves high efficiency.

## Mechanical seal protector

The seat of the mechanical seal is fully protected against corrosion. This prevents corrosion cavities forming in the intermediate casing in the area of the O-ring seat of the mechanical seal. Improving corrosion stability leads to reduced life cycle costs.

## X-Lock-System

With the X-Lock-System, it is possible to achieve 100% coating of the internal threads in cast parts in order to avoid corrosion in the threads.

## Service and maintenance

Only stainless steel screwed connections are used, allowing trouble-free maintenance of components for years.

## Seal-Guard-System (optional)

Normally, a mechanical seal is defective after a few seconds of dry running. The innovative and maintenance-free Seal-Guard-System has a reserve medium supply for such cases that compensates for insufficient lubrication for a much longer period of time. Thus, the primary mechanical seal is effectively protected against dry running.

## Impellers

Dynamically balanced impellers ensure vibration-free running and contribute significantly to the long lifetime of the pump. By correcting the diameter, all impellers can reach any duty point within the set of performance curves.



Closed multi vane impellers for clean to slightly soiled pumped media are used.

## Construction

The robust and stable type of construction was consistently continued. The dynamic process design for easy disassembling of the interchangeable module is also an integral element. Variable flange positions in intervals of 45° also offer optimal design flexibility.

### Venting

Simple ventilation of the pump in vertical installation by means of a ball valve to remove air accumulation and avoid dry running of the mechanical seal.

### Efficiency

An extended lifetime is achieved through liberally dimensioned shafts and bearings. The 4-pole motors are also equipped with a relubrication unit from 1.1 kW.

These technological improvements reduce the life cycle costs of the pump significantly compared to standard motors.

### Motor shaft

The rigid motor shaft made from high-alloy stainless steel ensures minimal deflection. In this way, seal leaks can be minimised and the service life of the motor shaft increased.

### Shaft sealing

A maintenance-free mechanical seal is used for shaft sealing. It is independent of the direction of rotation and made from wear-resistant silicon carbide (SiC).

For the versions with the Seal-Guard-System, a mechanical seal made from wear-resistant silicon carbide (SiC) is used for sealing on the pump side and a mechanical seal in the form of cast carbon/chromium molybdenum on the drive side. The intermediate casing is filled with NSF H1 lubricating oil to lubricate and cool the mechanical seals. This oil even enables a short-term dry run.

All motors are equipped with a special seal for splash-proofing on the pump side.

### By-pass channel

The mechanical seal is flushed optimally by the pumped medium through this channel. This gives the sliding surfaces the required lubricating and cooling medium thereby, extending the lifetime of the mechanical seal.

### Installation

The pumps can be integrated into a piping system both horizontally and vertically with "Motor to the top".



Horizontal installation of the pump



Vertical installation of the pump

Optionally, a pump support for simple ground attachment can be included in delivery.



Vertical installation of the pump with pump support.

## Output range

| Speed    | Q <sub>max</sub> [m <sup>3</sup> /h] | H <sub>max</sub> [m] |
|----------|--------------------------------------|----------------------|
| 1500 rpm | 650                                  | 61                   |
| 3000 rpm | 110                                  | 75                   |

## Noise

Noise emission is determined by complex influencing factors such as size, materials, operating and installation conditions. As early as the development stage, hydraulic measures and solid construction are used to reduce noise emission. The maximum sound pressure level is generally determined by air, magnetic and bearing noise from the drive motors. Noise levels are below the permissible limit curves specified for electrical motors as defined by DIN EN 60034-9. Noise emission during operation close to Q<sub>optimal</sub> (optimal efficiency) is minimal.

## Motor

A permanently energised surface-cooled synchronous motor is used. The motors continuously achieve the motor efficiency of energy class IE4. Synchronous motors require a frequency converter in order to operate because they cannot start up independently.

|                             |                      |
|-----------------------------|----------------------|
| Design                      | IM B5/V1             |
| Protection type             | IP55                 |
| Speed                       | 1500 rpm<br>3000 rpm |
| Connection                  | ▲ 300 - 400 V        |
| Insulation class EN 60034-1 | F (155 °C)           |

The motors are fitted with a PTC thermistor as standard. The motor is optionally available with an integrated or external frequency converter.

Frequency regulation of pumps is available and depends upon the working conditions.

1500 rpm: 900 - 1500 rpm

## General data

Media temperature range from -5 to +60 °C  
 Explosion-proof version from -5 to +40 °C,  
 Ambient temperature range from -5 to +40 °C  
 Pumped medium free of H<sub>2</sub>S, up to 1000 mg/l of chloride ions  
 Certificate of performance according to DIN EN ISO 9906, Class 2  
 Density of the pumped medium up to max. 1050 kg/m<sup>3</sup>  
 Viscosity of the pumped medium up to max. 1.75 mm<sup>2</sup>/s

In case of deviating application conditions, the output is corrected in accordance with customer-specific requirements.

## Special configurations

Different insulation class  
 Heightened ambient temperature  
 Higher protection type  
 Enhanced tropical and moisture protection  
 Special materials  
 Special paint finish for all uncoated components  
 Asynchronous motors with efficiency class IE2 or IE3 (**herborner.D**)  
 Heat exchanger motor with heat transfer from motor to swimming pool water (**herborner.D-C**)  
 Customer-specific solutions

**Model designation**

**D040-220A-0114P-W2B-L-EX**

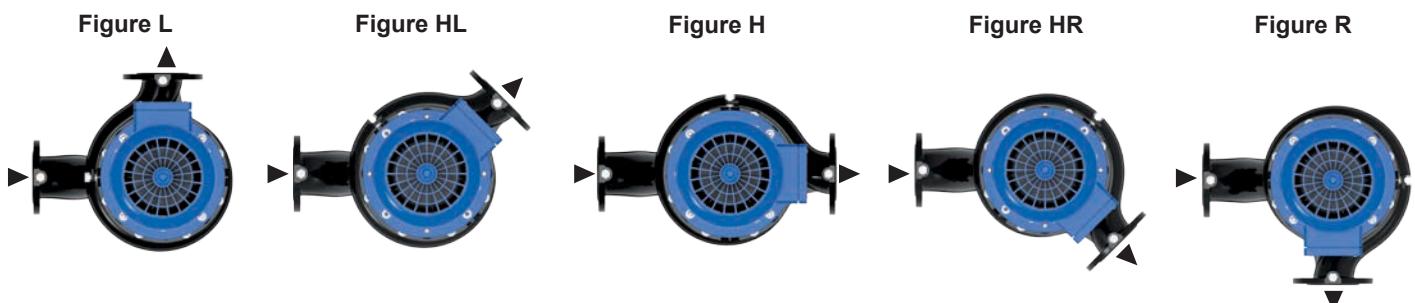
|   |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|

| Number | Designation                         | Type code marking | Meaning                            |
|--------|-------------------------------------|-------------------|------------------------------------|
| 1      | Design                              | D                 | herborner.D                        |
| 2      | Nominal diameter of pressure flange | 025               | DN 25                              |
|        |                                     | 032               | DN 32                              |
|        |                                     | 040               | DN 40                              |
|        |                                     | 050               | DN 50                              |
|        |                                     | 065               | DN 65                              |
|        |                                     | 080               | DN 80                              |
|        |                                     | 100               | DN 100                             |
|        |                                     | 125               | DN 125                             |
|        |                                     | 150               | DN 150                             |
|        |                                     | 200               | DN 200                             |
| 3      | Construction dimensions             | 220               | Centering diameter                 |
| 4      | Version                             | A-Z               | Design version                     |
| 5      | Motor rating                        | 003               | 0.37 kW                            |
|        |                                     | 005               | 0.55 kW                            |
|        |                                     | 007               | 0.75 kW                            |
|        |                                     | 011               | 1.1 kW                             |
|        |                                     | 015               | 1.5 kW                             |
|        |                                     | 022               | 2.2 kW                             |
|        |                                     | 030               | 3 kW                               |
|        |                                     | 040               | 4 kW                               |
|        |                                     | 055               | 5.5 kW                             |
|        |                                     | 075               | 7.5 kW                             |
|        |                                     | 110               | 11 kW                              |
|        |                                     | 150               | 15 kW                              |
|        |                                     | 185               | 18.5 kW                            |
|        |                                     | 220               | 22 kW                              |
|        |                                     | 300               | 30 kW                              |
|        |                                     | 370               | 37 kW                              |
|        |                                     | 450               | 45 kW                              |
|        |                                     | 550               | 55 kW                              |
| 6      | Speed                               | 4                 | 1500 rpm                           |
|        |                                     | 2                 | 3000 rpm                           |
| 7      | Motor model                         | P                 | Permanent magnet motor             |
| 8      | Materials                           | W2B               | See materials                      |
|        |                                     | W30               | See materials                      |
| 9      | Flange position                     | L                 | Left                               |
|        |                                     | RrL               | Centred between the rear and left  |
|        |                                     | Rr                | Rear                               |
|        |                                     | RrR               | Centred between the rear and right |
|        |                                     | R                 | Right                              |
| 10     | Permitted use                       |                   | Standard                           |
|        |                                     | EX                | Explosion protection               |

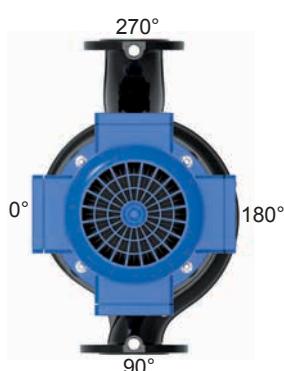
## Materials

| 1)    | Individual components     | W2B 2)                                  | W30 2)                        |
|-------|---------------------------|---|-------------------------------|
| 025   | Impeller protector        | POM/FKM                                 | POM                           |
| 101   | Pump casing               | EN-GJL-250 <sup>3)</sup><br>(EN-JL1040) | CuSn10<br>(CC480K)            |
| 113   | Intermediate casing       | EN-GJL-250 <sup>3)</sup><br>(EN-JL1040) | CuSn10<br>(CC480K)            |
| 161   | Casing cover              | EN-GJL-250 <sup>3)</sup><br>(EN-JL1040) | CuSn10<br>(CC480K)            |
| 181   | Pump support              | EN-GJL-250<br>(EN-JL1040)               | EN-GJL-250<br>(EN-JL1040)     |
| 230   | Impeller                  | CuAl10Fe5Ni5-C<br>(CC333G)              | CuAl10Fe5Ni5-C<br>(CC333G)    |
| 433.1 | Mechanical seal           | SiC/SiC/FKM                             | SiC/SiC/FKM                   |
| 433.2 | Mechanical seal           | Carbon/CrMo cast/NBR                    | Carbon/CrMo cast/NBR          |
| 471   | Seal cover                | EN-GJL-250<br>(EN-JL1040)               | EN-GJL-250<br>(EN-JL1040)     |
| 819   | Motor shaft               | X6CrNiMoTi17-12-2<br>(1.4571)           | X6CrNiMoTi17-12-2<br>(1.4571) |
|       | Mechanical seal protector | CuSn12-C<br>(CC483K)                    | CuSn12-C<br>(CC483K)          |

## Flange position <sup>4)5)</sup>



## Terminal box alignment



<sup>1)</sup> See exploded view (page 31)

<sup>2)</sup> Other material pairings upon request

<sup>3)</sup> With thick coating

<sup>4)</sup> The position of the terminal box may vary for versions with a frequency converter for direct mounting.

<sup>5)</sup> See Versions (page 8)

## 1500 rpm

| Model     | P <sub>2</sub><br>[kW] |                            |                      | Flange position |     |    |     |   | Accessories               |  |  |
|-----------|------------------------|----------------------------|----------------------|-----------------|-----|----|-----|---|---------------------------|--|--|
|           |                        | without<br>pump<br>support | with pump<br>support | L               | RrL | Rr | RrR | R | Seal-<br>Guard-<br>System | frequency<br>converter<br>(direct instal-<br>lation) | frequency<br>converter<br>(wall installa-<br>tion) |
| D025-125A | 0,37                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | -                         | ○  | ○  |
| D025-160A | 0,37                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | -                         | ○  | ○  |
| D025-200A | 0,55                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D025-200A | 0,75                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D025-200A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-160A | 0,37                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | -                         | ○  | ○  |
| D032-200A | 0,55                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-200A | 0,75                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-200A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 4                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-160A | 0,37                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | -                         | ○  | ○  |
| D040-160A | 0,55                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-160A | 0,75                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-220A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-220A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 4                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-140A | 0,55                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-140A | 0,75                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-140A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-140A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 0,75                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-190A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-190A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-190A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-240A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-240A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-240A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-300A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-200A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-200A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-200A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-220A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-220A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-220A | 4                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-240A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-240A | 4                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-270A | 4                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-270A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |

● Standard

○ Option

- cannot be implemented

| Model     | P <sub>2</sub><br>[kW] |                      |                   | Flange position |     |    |     |   | Accessories       |   |   |
|-----------|------------------------|----------------------|-------------------|-----------------|-----|----|-----|---|-------------------|---|---|
|           |                        | without pump support | with pump support | L               | RrL | Rr | RrR | R | Seal-Guard-System | frequency converter (direct installation) | frequency converter (wall installation) |
| D065-270C | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D065-300B | 7,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D065-300B | 11                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-170A | 1,1                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-170A | 1,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-170A | 2,2                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-210A | 3                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-210A | 4                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-210A | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-255A | 3                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-255A | 4                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-255A | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-330A | 11                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-330A | 15                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-330A | 18,5                   | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D080-330A | 22                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-180A | 2,2                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-180A | 3                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-180A | 4                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-200A | 2,2                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-200A | 3                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-200A | 4                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-210A | 3                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-210A | 4                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-210A | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-210A | 7,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-240A | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-240A | 7,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-270A | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-270A | 7,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-270A | 11                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-330A | 18,5                   | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-330A | 22                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-330C | 11                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D100-330C | 15                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-360A | 3                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-250A | 4                      | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-250A | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-250A | 7,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270A | 5,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270A | 7,5                    | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270A | 11                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270A | 15                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270B | 11                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270B | 15                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270B | 18,5                   | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |
| D125-270B | 22                     | ●                    | ○                 | ○               | ○   | ●  | ○   | ○ | ○                 | ○   | ○                                       |

● Standard

○ Option

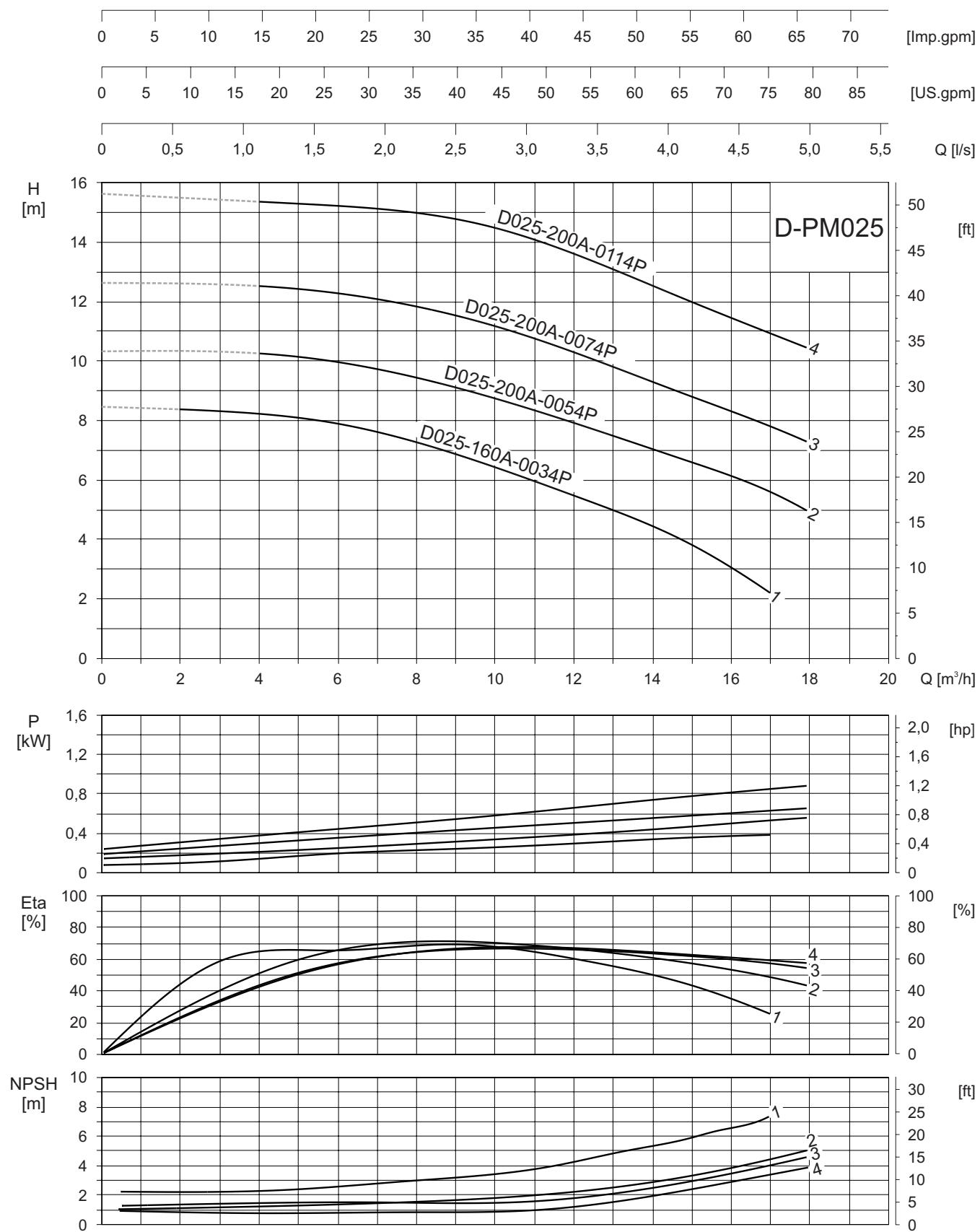
- cannot be implemented

| Model     | P <sub>2</sub><br>[kW] |                            |                      | Flange position |     |    |     |   | Accessories               |  |  |
|-----------|------------------------|----------------------------|----------------------|-----------------|-----|----|-----|---|---------------------------|--|--|
|           |                        | without<br>pump<br>support | with pump<br>support | L               | RrL | Rr | RrR | R | Seal-<br>Guard-<br>System | frequency<br>converter<br>(direct instal-<br>lation) | frequency<br>converter<br>(wall installa-<br>tion) |
| D125-330A | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D125-330A | 30                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-250A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-250A | 7,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-250A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-270B | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-270B | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-270B | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-270B | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-300A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-300A | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-300A | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-400A | 37                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-400A | 45                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D150-400A | 55                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-250A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-250A | 7,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-250A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-250A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-270B | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-270B | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-270B | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-270B | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-350A | 30                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-350A | 37                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-350A | 45                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D200-350A | 55                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |

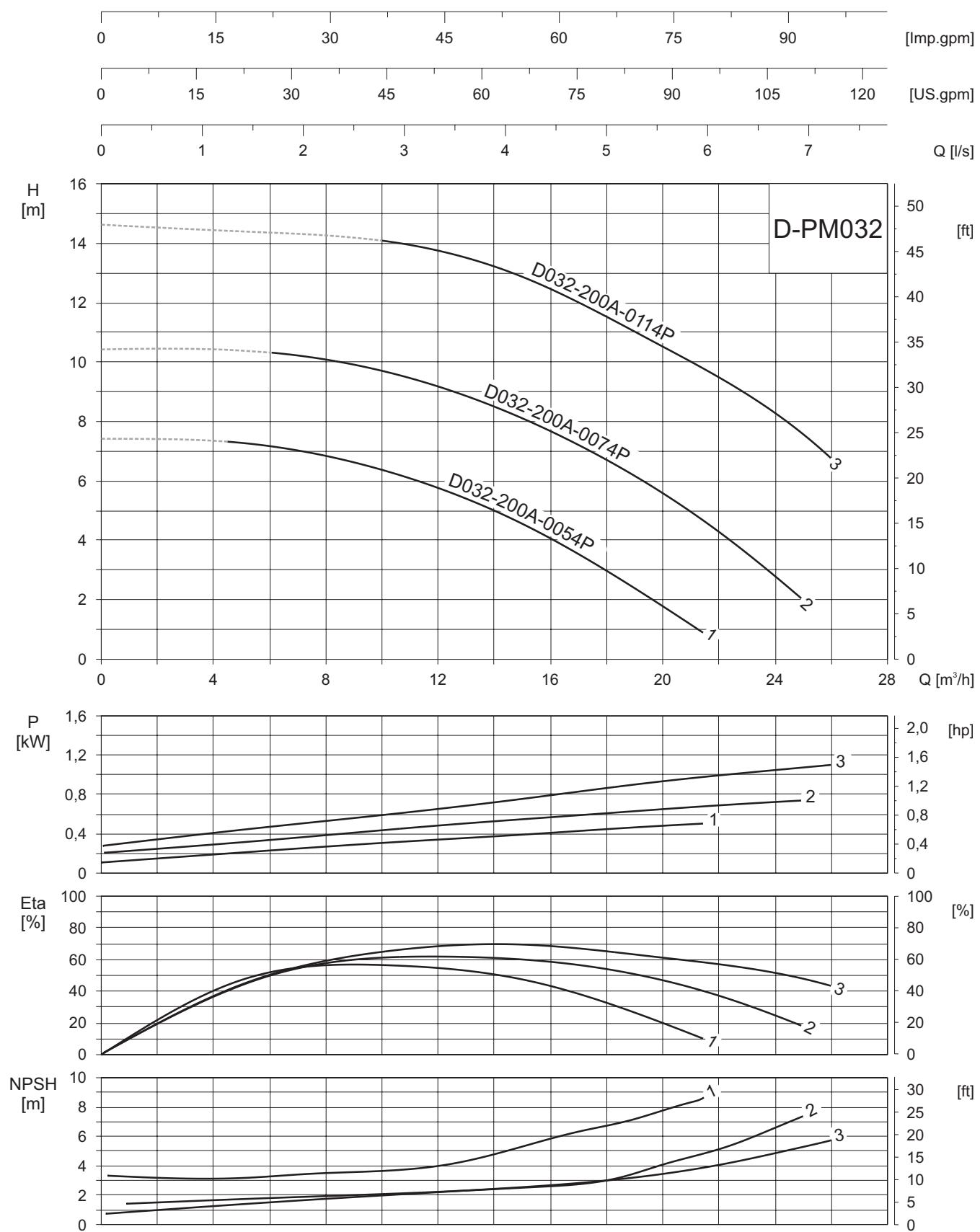
## 3000 rpm

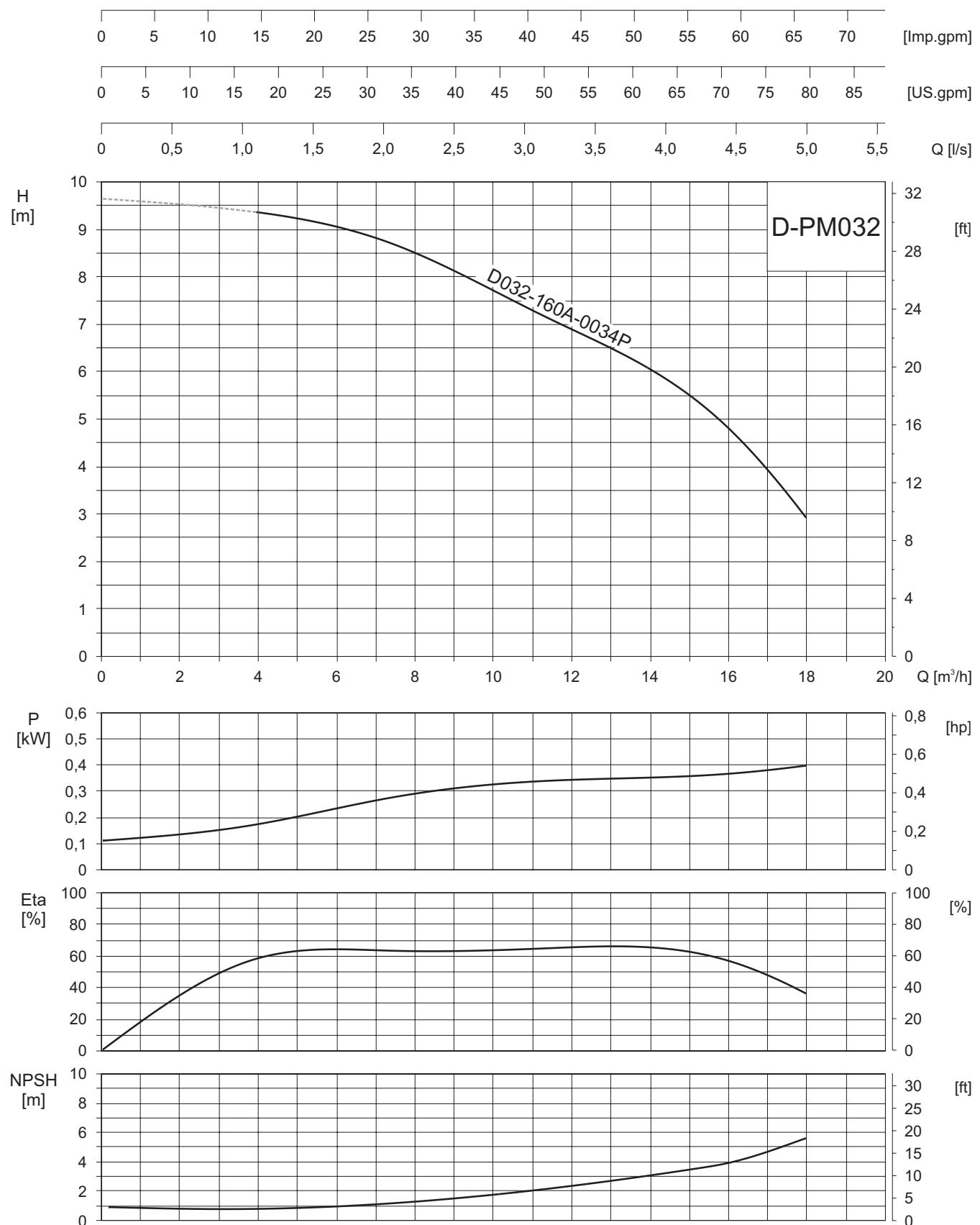
| Model     | P <sub>2</sub><br>[kW] |                            |                      | Flange position |     |    |     |   | Accessories               |  |  |
|-----------|------------------------|----------------------------|----------------------|-----------------|-----|----|-----|---|---------------------------|--|--|
|           |                        | without<br>pump<br>support | with pump<br>support | L               | RrL | Rr | RrR | R | Seal-<br>Guard-<br>System | frequency<br>converter<br>(direct instal-<br>lation) | frequency<br>converter<br>(wall instal-<br>lation) |
| D025-125A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D025-160A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D025-160A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D025-160A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D025-160A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D025-200A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-160A | 1,1                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-160A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-160A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-160A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-200A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-200A | 7,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D032-250A | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-160A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-160A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-160A | 4                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-160A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-220A | 7,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-220A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-220A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 7,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D040-270A | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 1,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 2,2                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 3                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 4                      | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D050-160A | 7,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-200A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-200A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-300B | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-300B | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-300B | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D065-300B | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-240A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-240A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-240A | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-240A | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-255A | 5,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-255A | 7,5                    | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-255A | 11                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-255A | 15                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-255A | 18,5                   | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D080-255A | 22                     | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |

| Model     | $P_2$<br>[kW] |                            |                      | Flange position |     |    |     |   | Accessories               |  |  |
|-----------|---------------|----------------------------|----------------------|-----------------|-----|----|-----|---|---------------------------|--|--|
|           |               | without<br>pump<br>support | with pump<br>support | L               | RrL | Rr | RrR | R | Seal-<br>Guard-<br>System | frequency<br>converter<br>(direct instal-<br>lation) | frequency<br>converter<br>(wall instal-<br>lation) |
| D100-330C | 11            | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D100-330C | 15            | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D100-330C | 18,5          | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D100-330C | 22            | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D125-250A | 11            | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D125-250A | 15            | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D125-250A | 18,5          | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |
| D125-250A | 22            | ●                          | ○                    | ○               | ○   | ●  | ○   | ○ | ○                         | ○  | ○  |

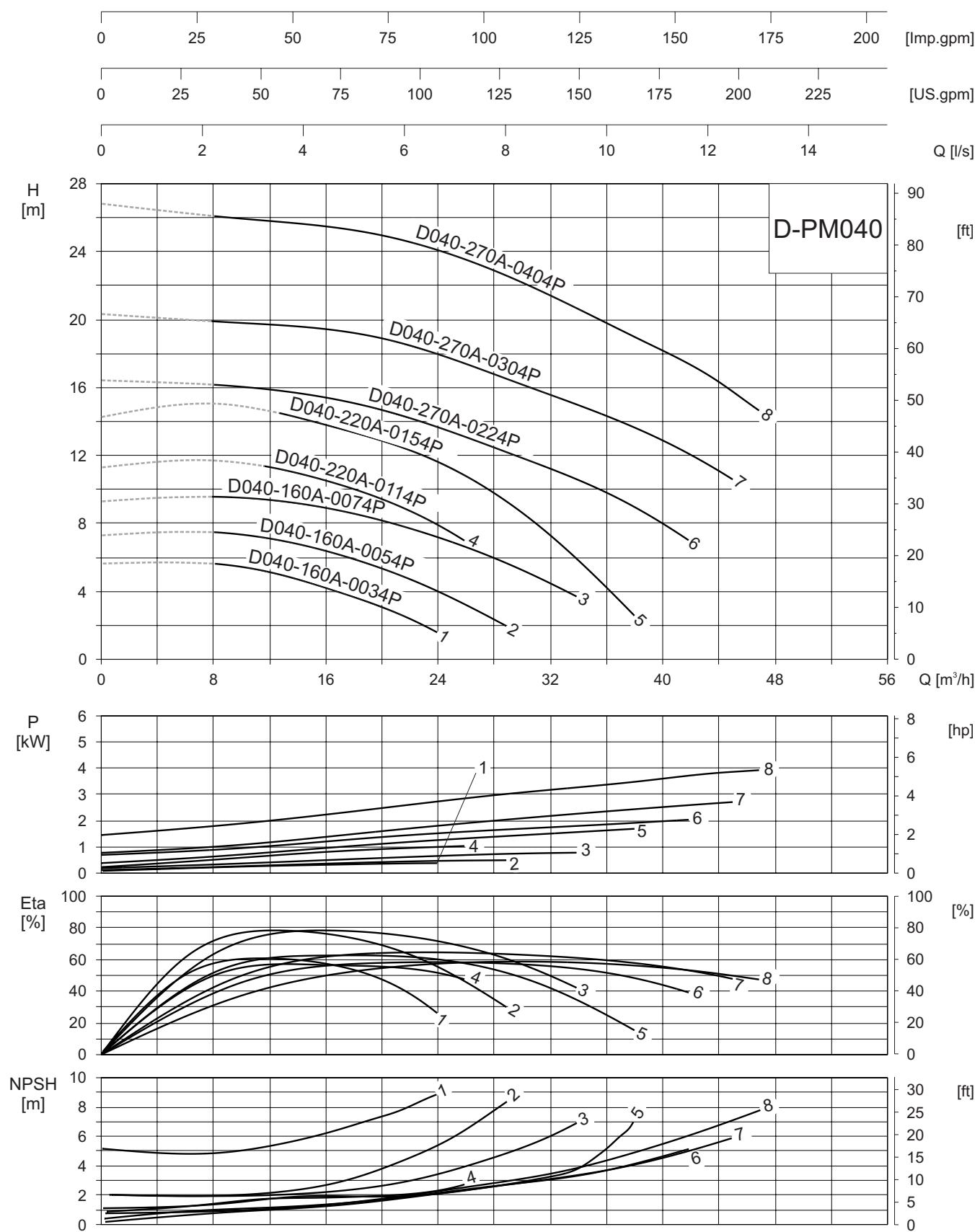
**1500 rpm**

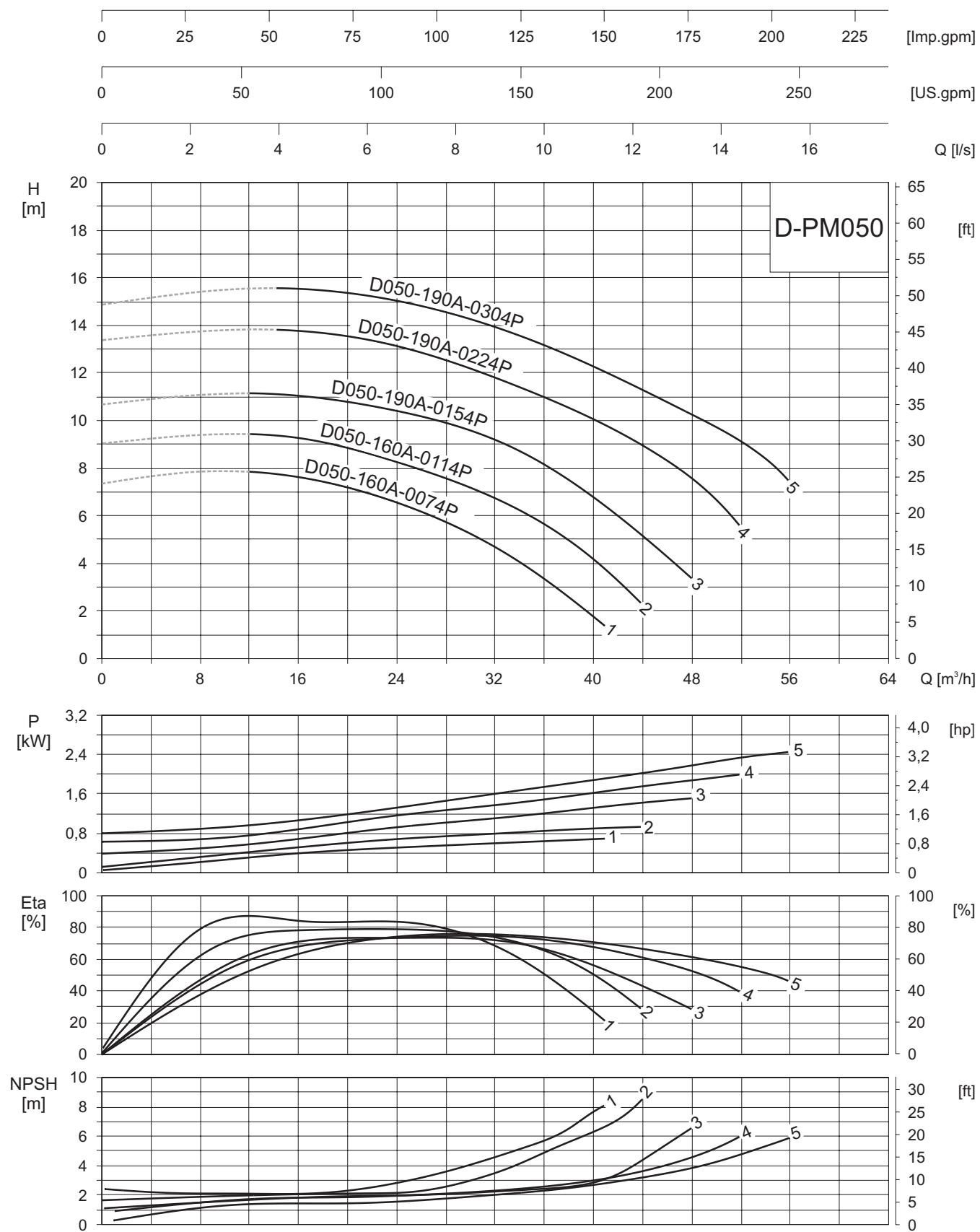
1500 rpm



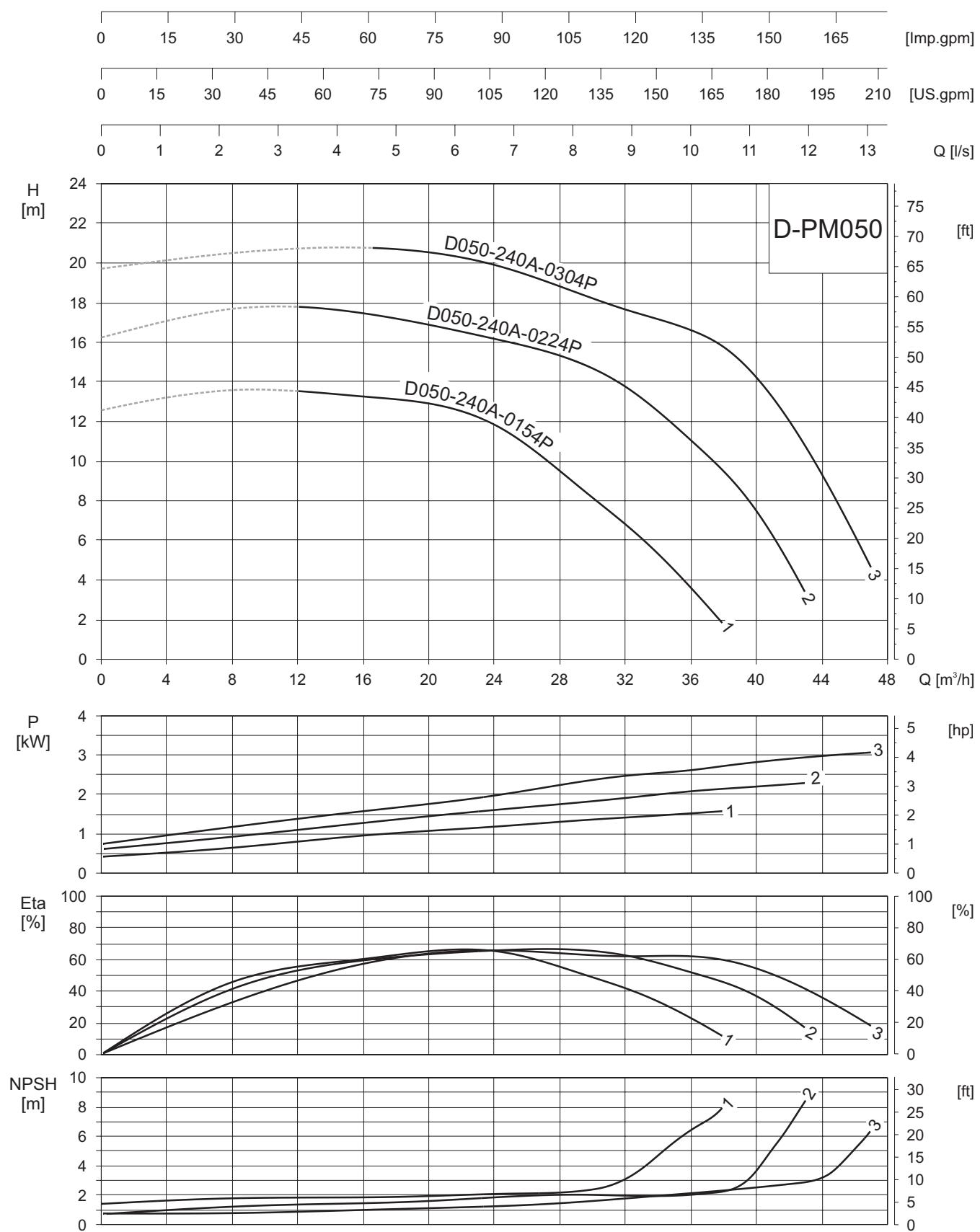
**1500 rpm**

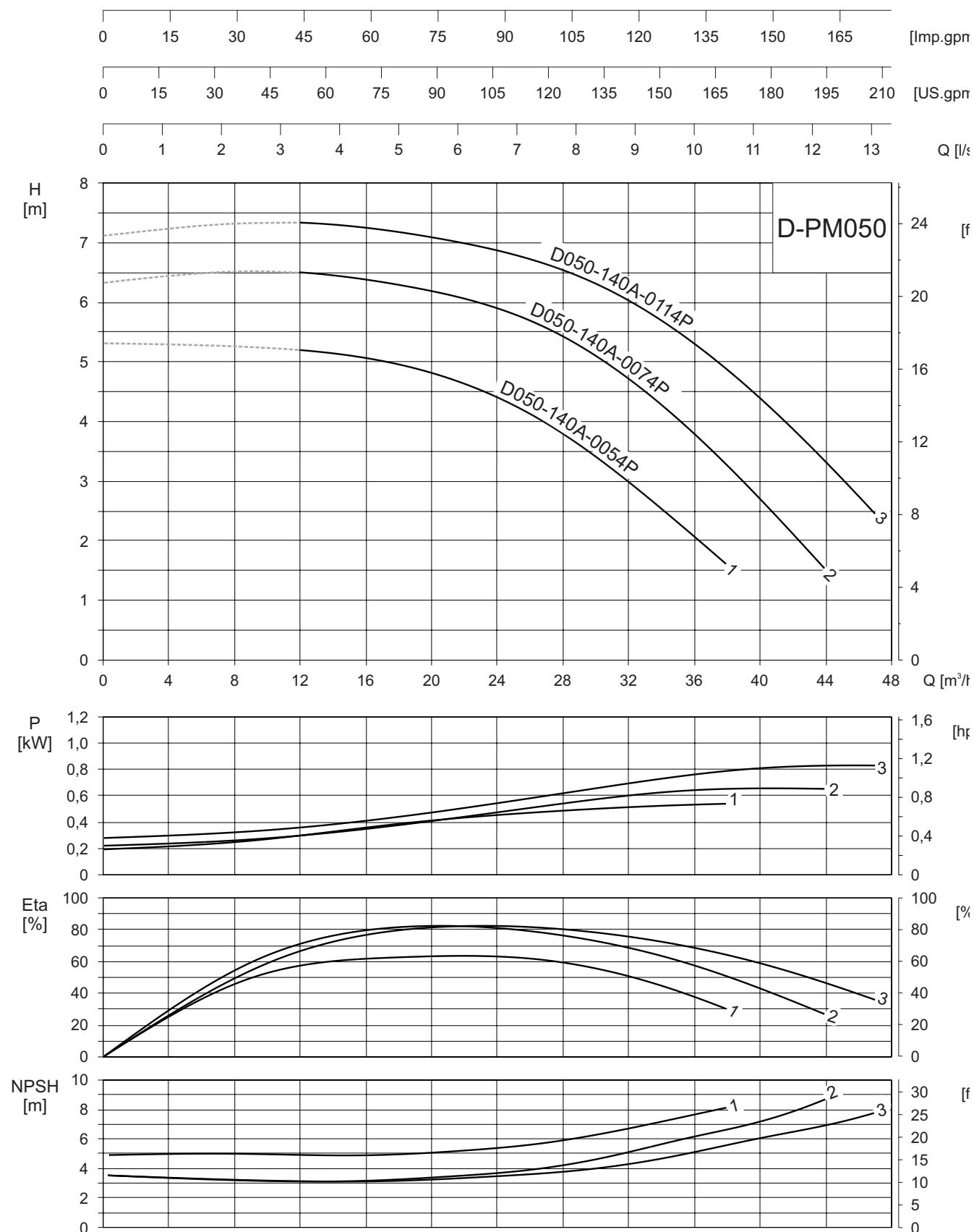
1500 rpm



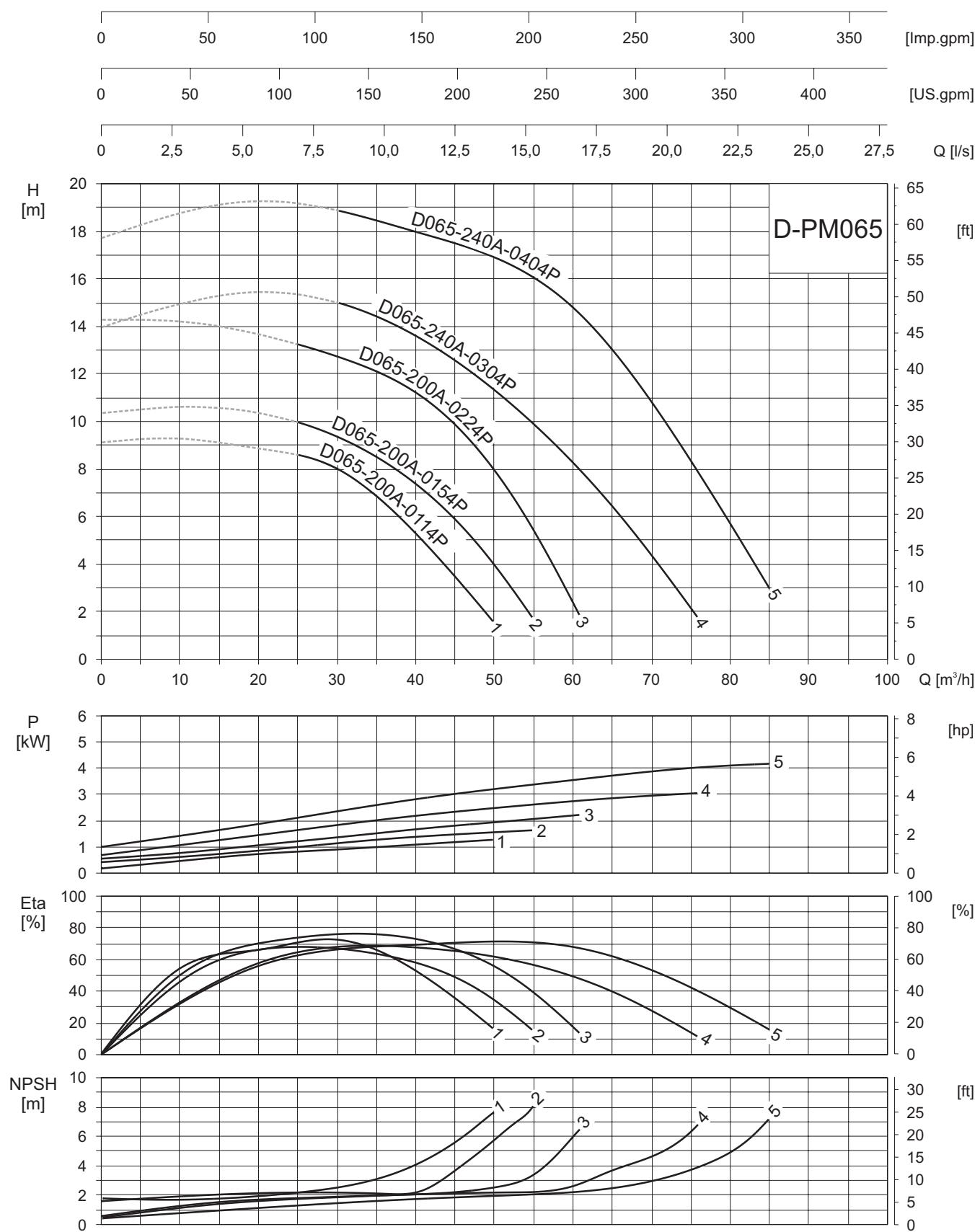
**1500 rpm**

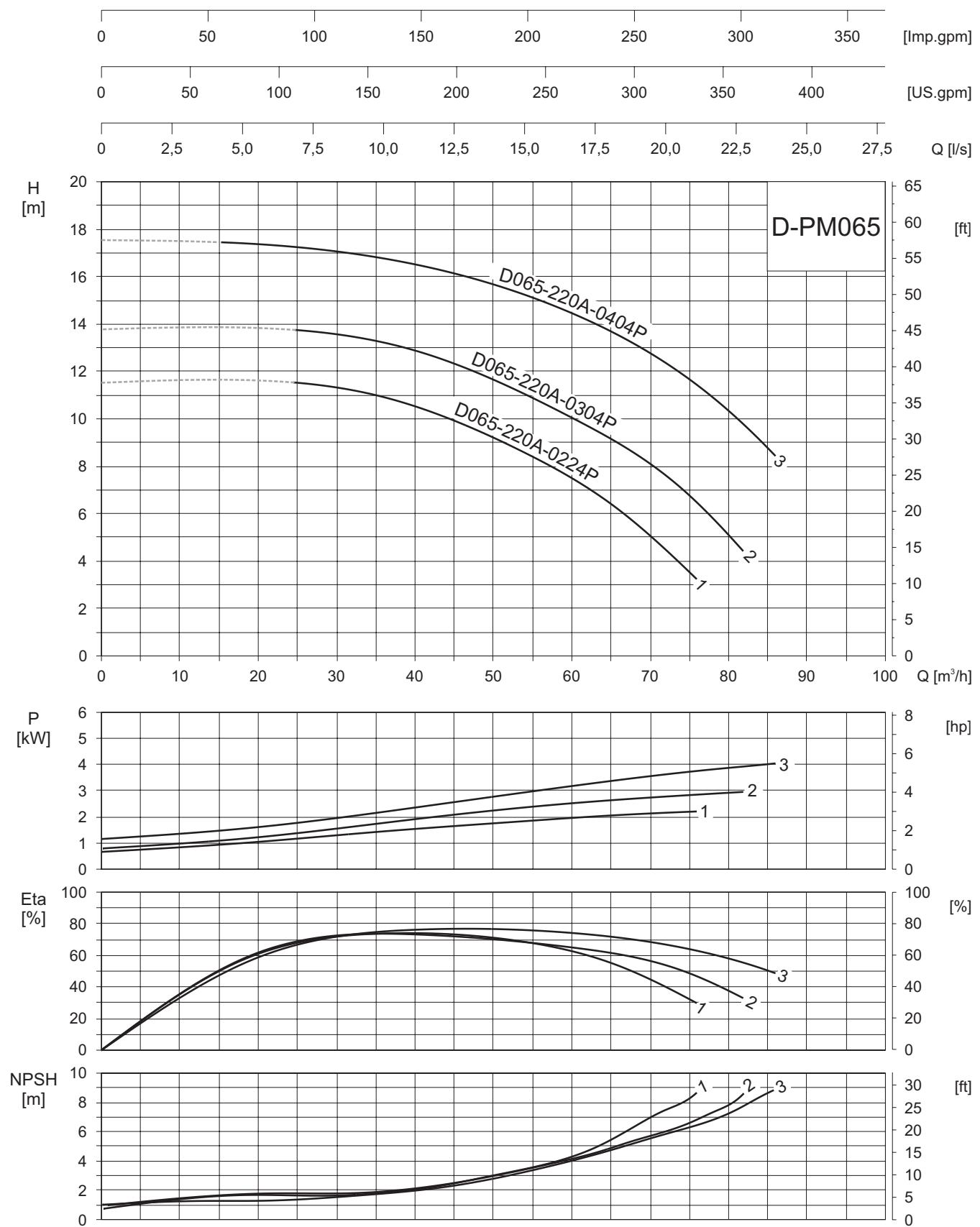
1500 rpm



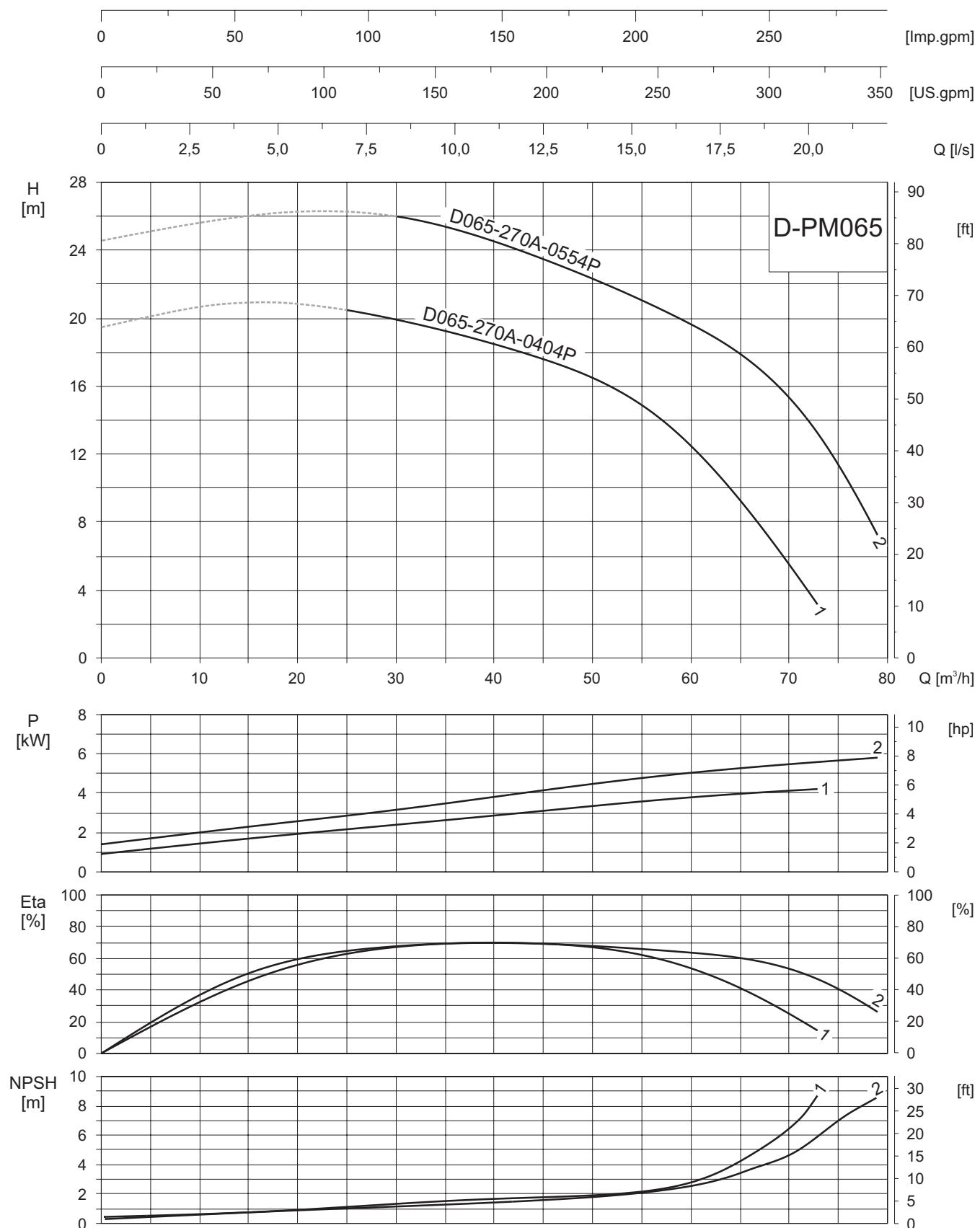
**1500 rpm**

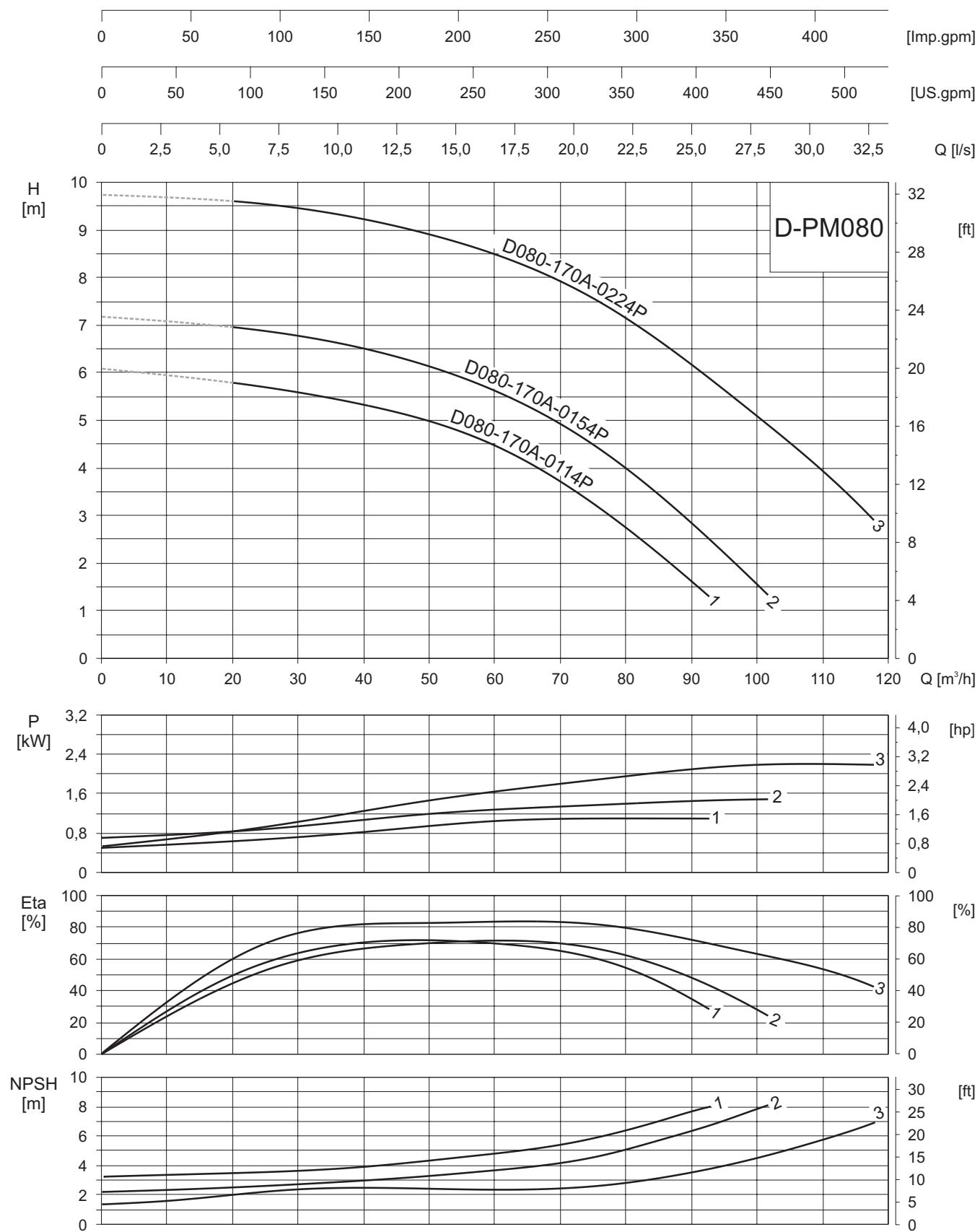
1500 rpm



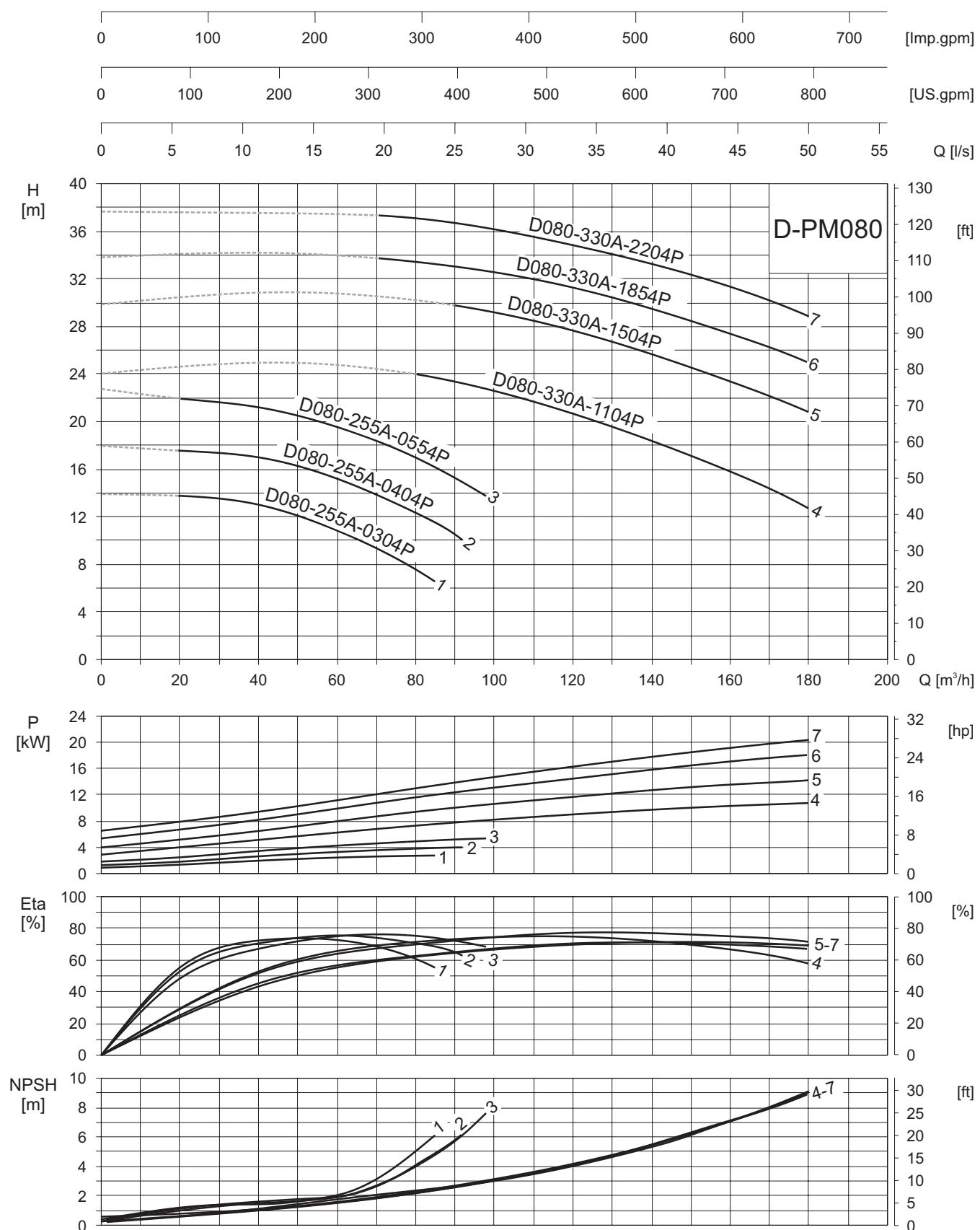
**1500 rpm**

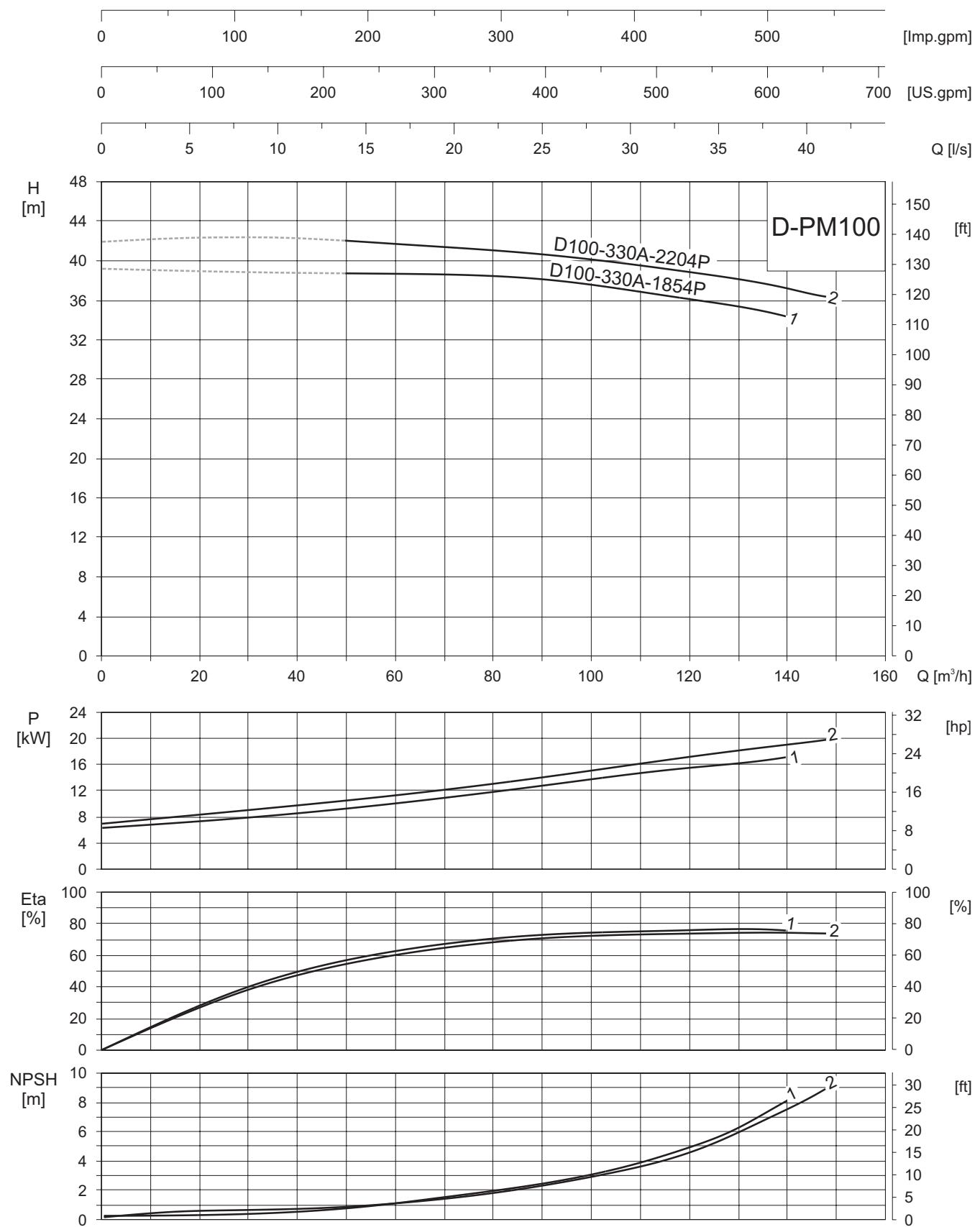
1500 rpm



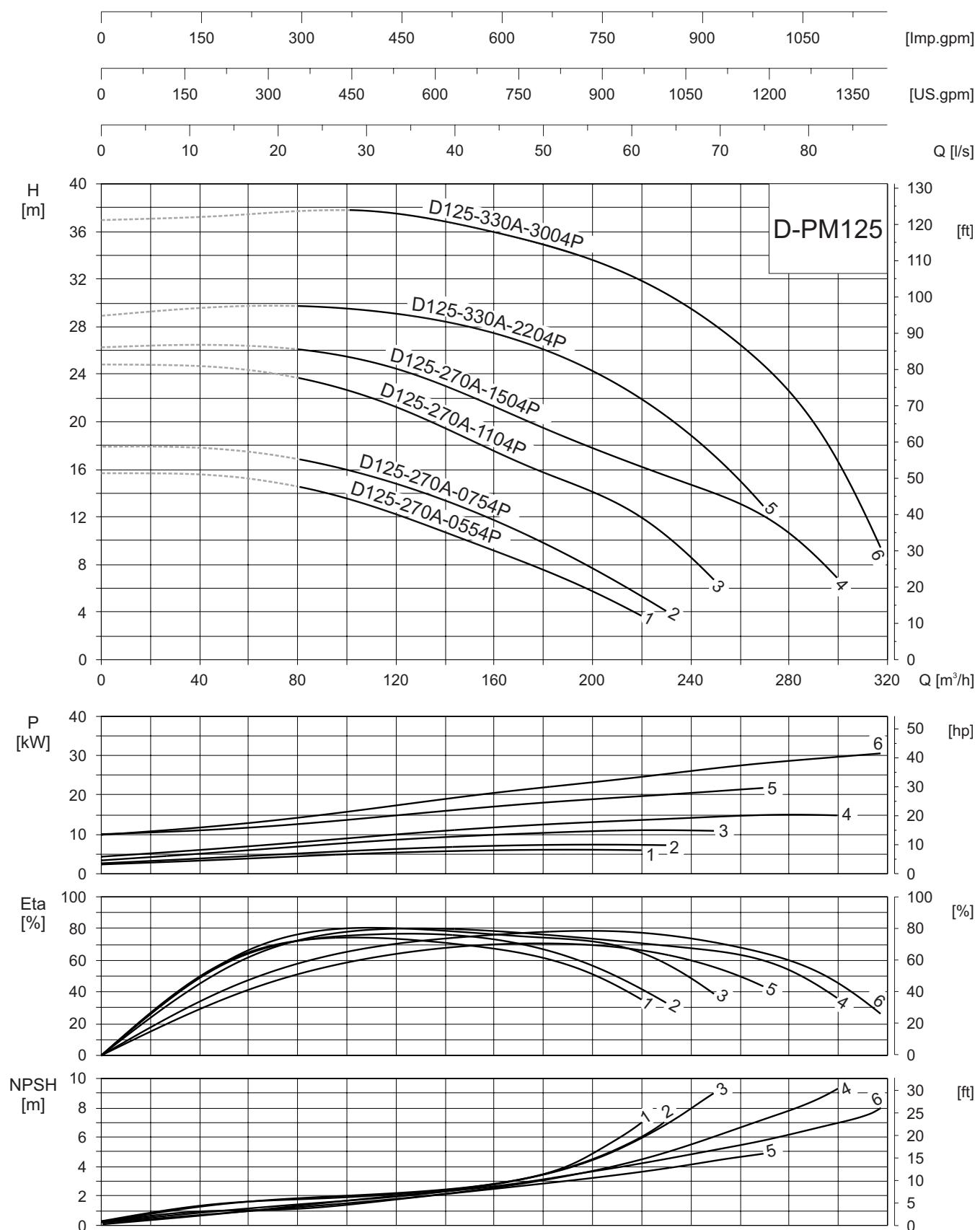
**1500 rpm**

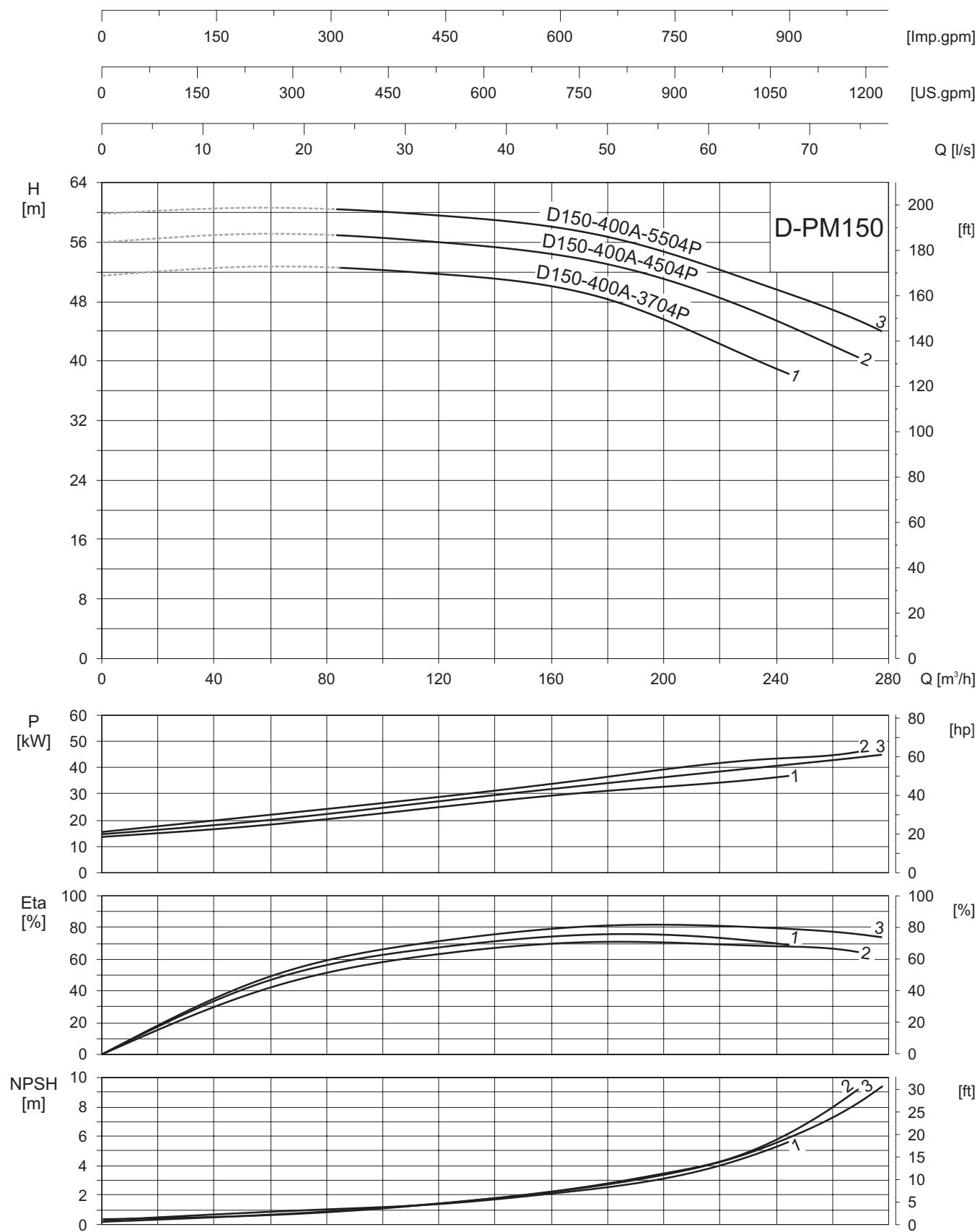
1500 rpm



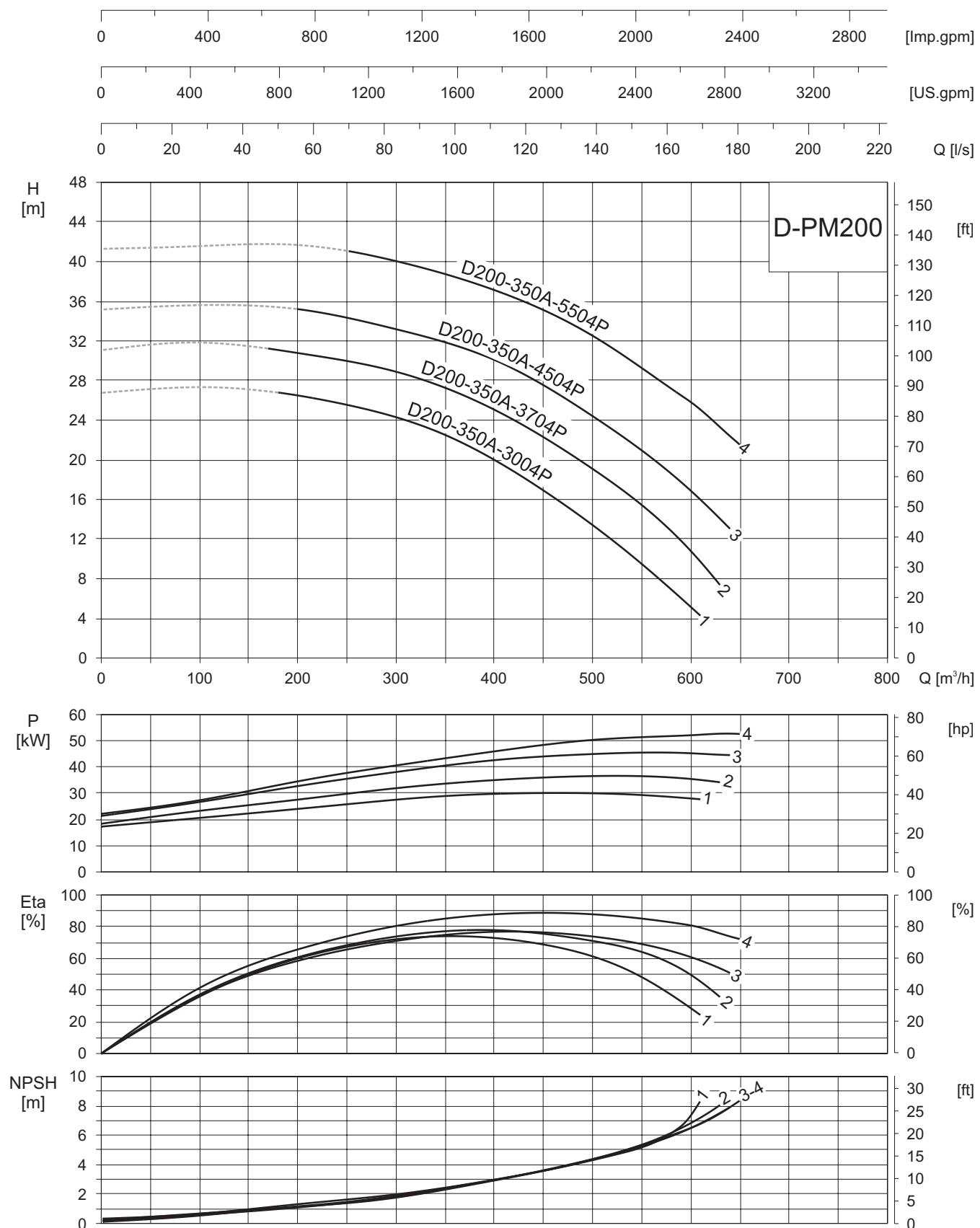
**1500 rpm**

1500 rpm

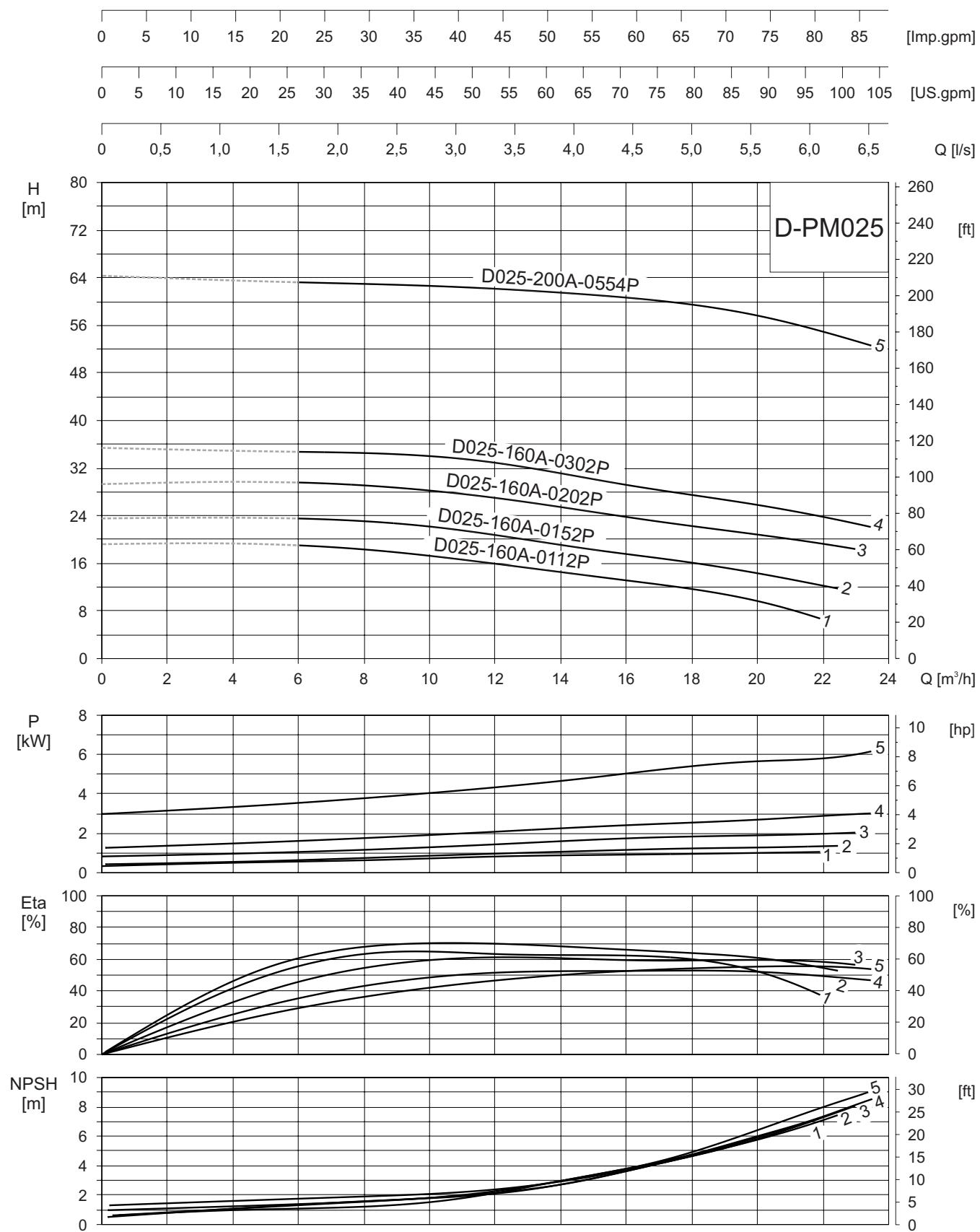


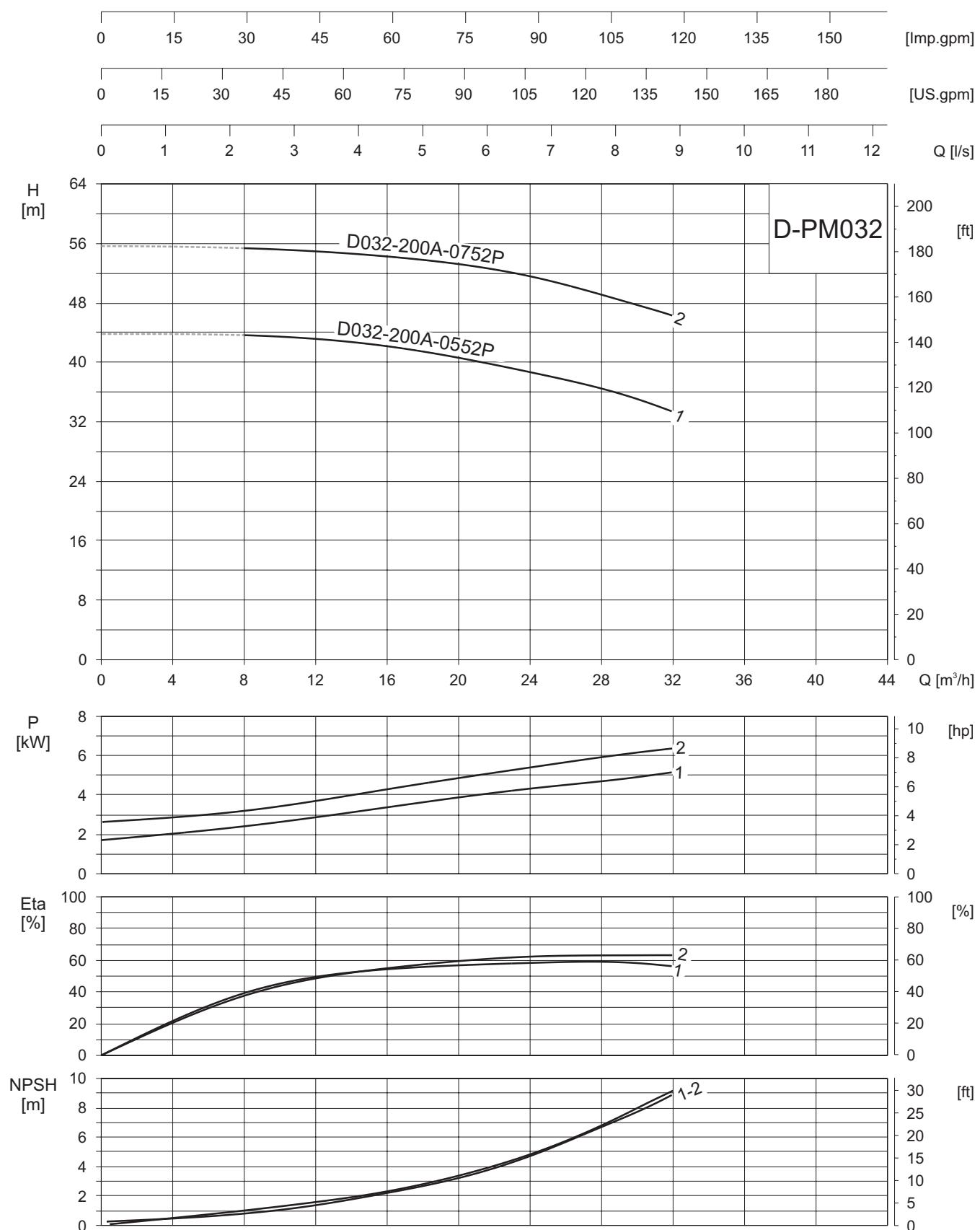
**1500 rpm**

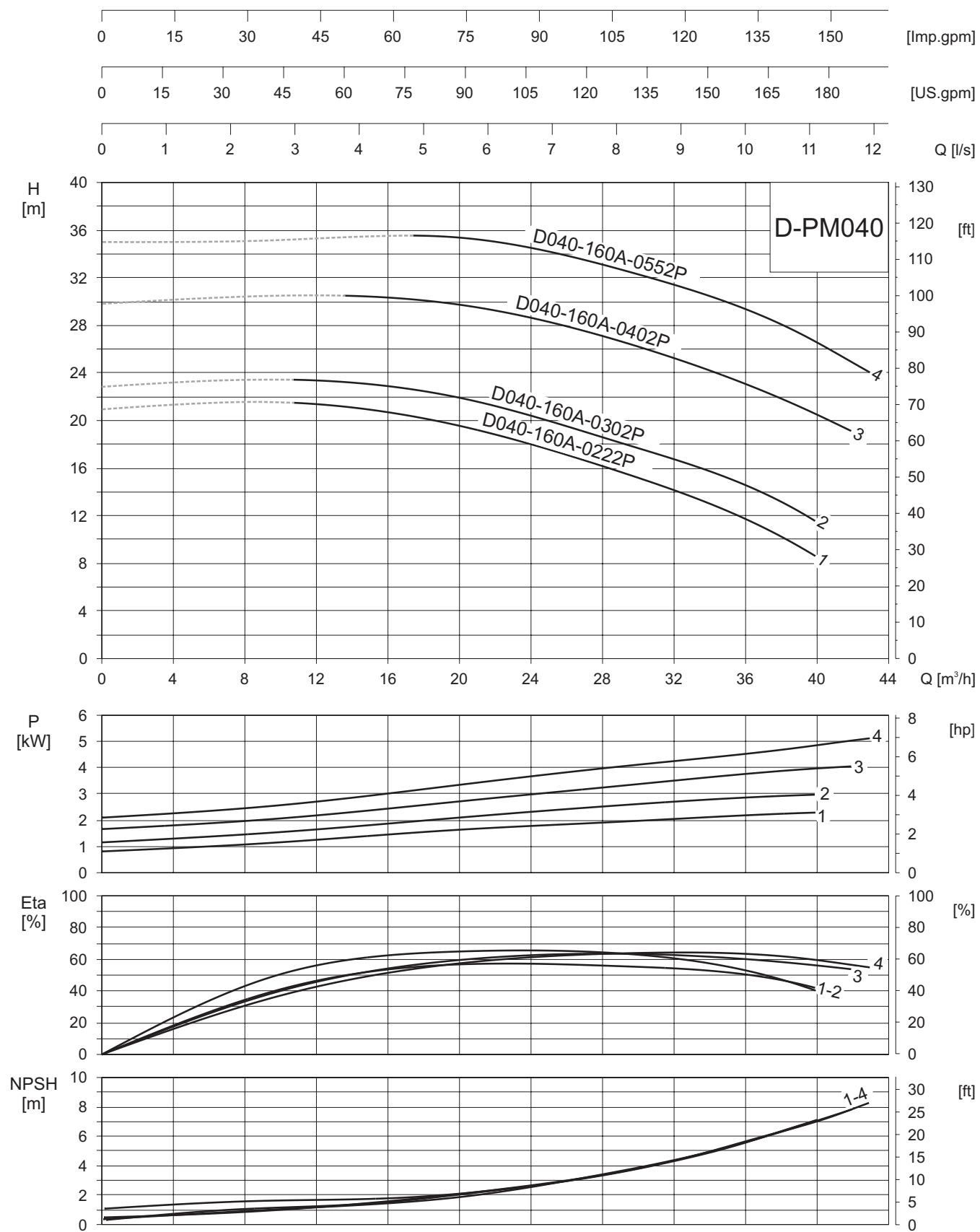
1500 rpm



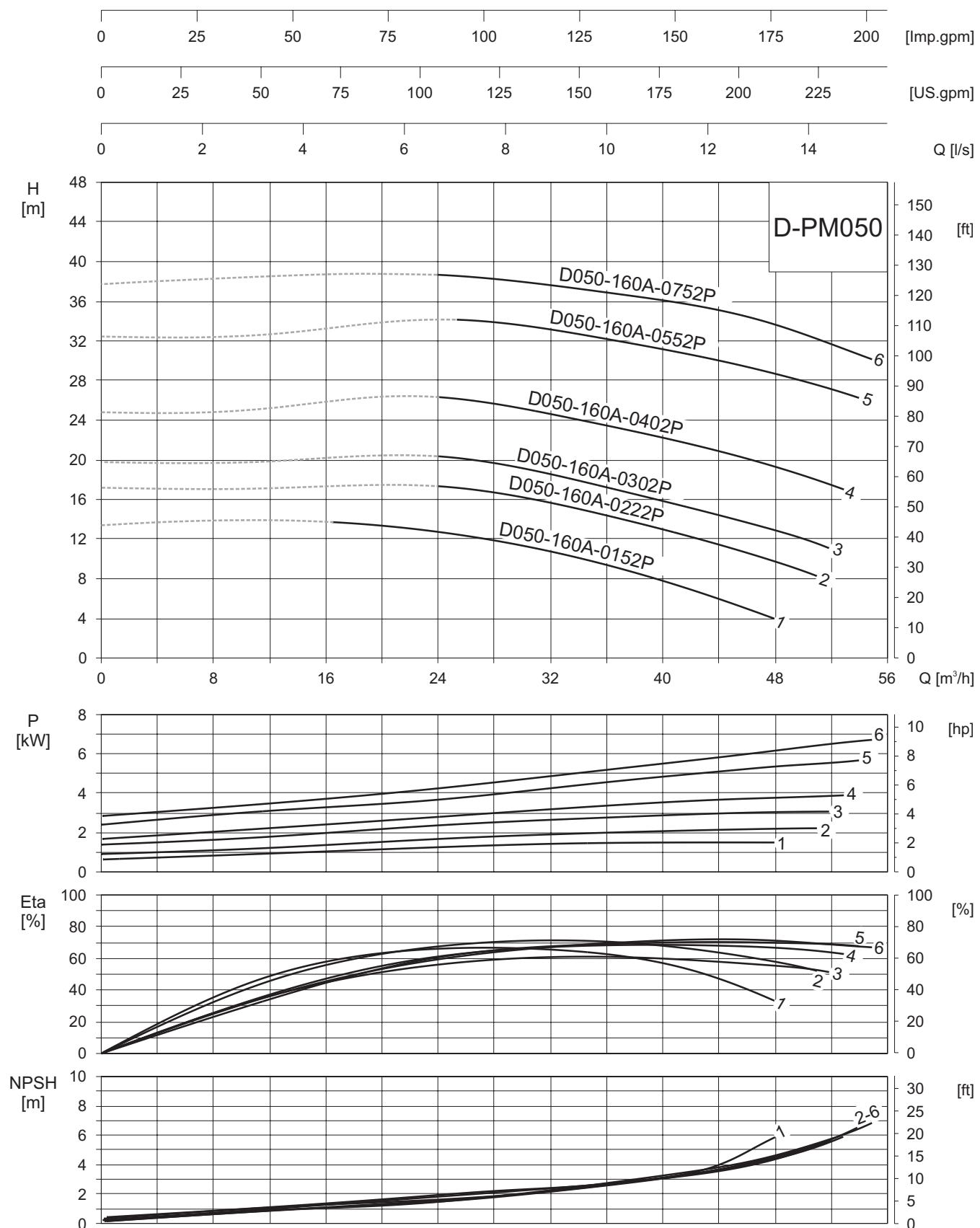
1500 rpm

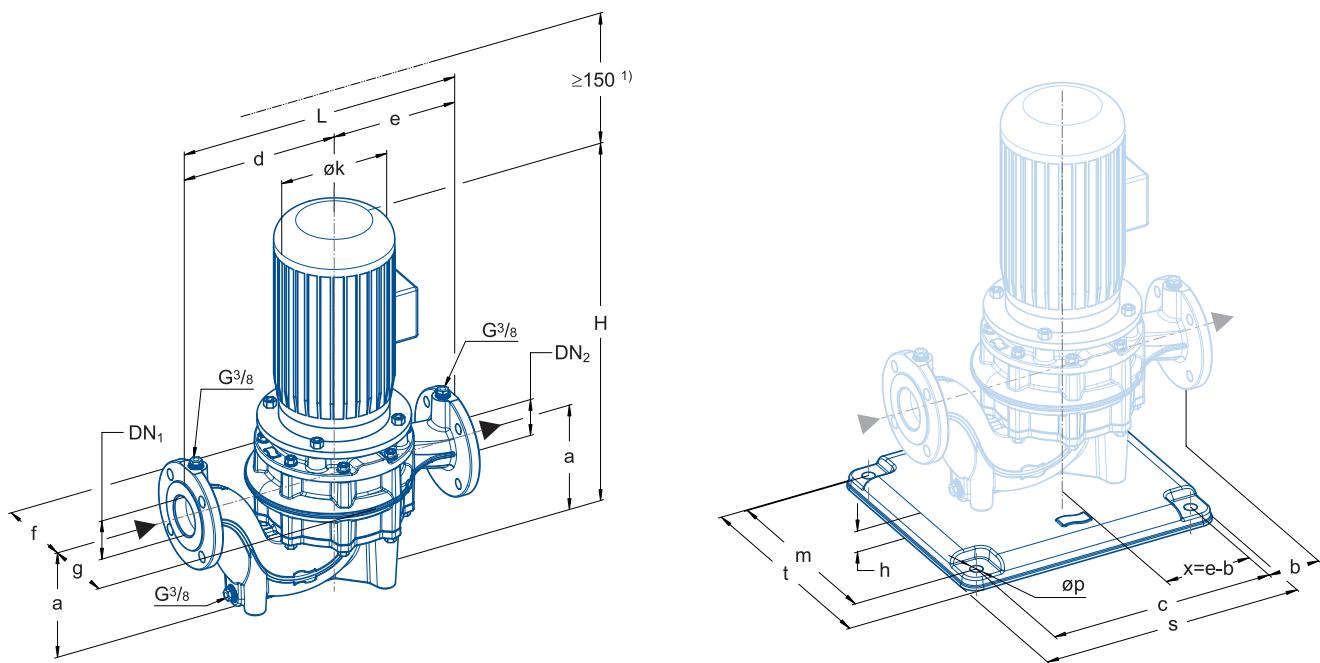


**3000 rpm**

**3000 rpm**

3000 rpm





### PM 1500 rpm

| Typ       | P2 [kW] | DN <sub>1/2</sub> | H   | L   | a   | b  | c   | d   | e   | fmax | gmax | h  | Ø k | m   | p  | s   | t   | m <sup>2)</sup> [kg] | m <sup>3)</sup> [kg] |
|-----------|---------|-------------------|-----|-----|-----|----|-----|-----|-----|------|------|----|-----|-----|----|-----|-----|----------------------|----------------------|
| D025-125A | 0,37    | 25                | 434 | 320 | 140 | 31 | 300 | 180 | 140 | 122  | 122  | 35 | 138 | 250 | 17 | 354 | 304 | 28                   | 40                   |
| D025-160A | 0,37    | 25                | 443 | 360 | 145 | 54 | 300 | 200 | 160 | 122  | 122  | 35 | 138 | 250 | 17 | 354 | 304 | 35                   | 47                   |
| D025-200A | 0,55    | 25                | 491 | 405 | 165 | 39 | 390 | 225 | 180 | 133  | 123  | 40 | 139 | 340 | 21 | 454 | 404 | 46                   | 67                   |
| D025-200A | 0,75    | 25                | 491 | 405 | 165 | 39 | 390 | 225 | 180 | 133  | 123  | 40 | 139 | 340 | 21 | 454 | 404 | 47                   | 69                   |
| D025-200A | 1,1     | 25                | 519 | 405 | 165 | 39 | 390 | 225 | 180 | 133  | 123  | 40 | 157 | 340 | 21 | 454 | 404 | 51                   | 73                   |
| D032-160A | 0,37    | 32                | 442 | 360 | 145 | 54 | 300 | 200 | 160 | 122  | 122  | 35 | 138 | 250 | 17 | 354 | 304 | 37                   | 49                   |
| D032-200A | 0,55    | 32                | 481 | 405 | 160 | 39 | 390 | 225 | 180 | 135  | 125  | 40 | 139 | 340 | 21 | 454 | 404 | 46                   | 68                   |
| D032-200A | 0,75    | 32                | 481 | 405 | 160 | 39 | 390 | 225 | 180 | 135  | 125  | 40 | 139 | 340 | 21 | 454 | 404 | 47                   | 69                   |
| D032-200A | 1,1     | 32                | 509 | 405 | 160 | 39 | 390 | 225 | 180 | 135  | 125  | 40 | 157 | 340 | 21 | 454 | 404 | 53                   | 74                   |
| D032-250A | 1,1     | 32                | 544 | 495 | 193 | 69 | 390 | 270 | 225 | 155  | 150  | 40 | 157 | 340 | 21 | 454 | 404 | 71                   | 93                   |
| D032-250A | 1,5     | 32                | 571 | 495 | 193 | 69 | 390 | 270 | 225 | 155  | 150  | 40 | 176 | 340 | 21 | 454 | 404 | 74                   | 95                   |
| D032-250A | 2,2     | 32                | 596 | 495 | 193 | 69 | 390 | 270 | 225 | 155  | 150  | 40 | 177 | 340 | 21 | 454 | 404 | 79                   | 100                  |
| D032-250A | 3       | 32                | 608 | 495 | 193 | 69 | 390 | 270 | 225 | 155  | 150  | 40 | 196 | 340 | 21 | 454 | 404 | 88                   | 109                  |
| D032-250A | 4       | 32                | 668 | 495 | 193 | 69 | 390 | 270 | 225 | 155  | 150  | 40 | 196 | 340 | 21 | 454 | 404 | 95                   | 117                  |
| D032-250A | 2,2     | 32                | 596 | 495 | 193 | 69 | 390 | 270 | 225 | 155  | 150  | 40 | 177 | 340 | 21 | 454 | 404 | 79                   | 101                  |
| D040-160A | 0,37    | 40                | 462 | 390 | 160 | 60 | 300 | 230 | 160 | 122  | 122  | 35 | 138 | 250 | 17 | 354 | 304 | 39                   | 51                   |
| D040-160A | 0,55    | 40                | 491 | 390 | 160 | 60 | 300 | 230 | 160 | 120  | 112  | 35 | 139 | 250 | 17 | 354 | 304 | 41                   | 53                   |
| D040-160A | 0,75    | 40                | 491 | 390 | 160 | 60 | 300 | 230 | 160 | 120  | 112  | 35 | 139 | 250 | 17 | 354 | 304 | 42                   | 54                   |
| D040-220A | 1,1     | 40                | 527 | 460 | 170 | 65 | 390 | 260 | 200 | 157  | 138  | 40 | 157 | 340 | 21 | 454 | 404 | 65                   | 86                   |
| D040-220A | 1,5     | 40                | 554 | 460 | 170 | 65 | 390 | 260 | 200 | 157  | 148  | 40 | 176 | 340 | 21 | 454 | 404 | 67                   | 89                   |
| D040-270A | 2,2     | 40                | 599 | 514 | 195 | 91 | 390 | 280 | 234 | 178  | 162  | 40 | 177 | 340 | 21 | 454 | 404 | 84                   | 106                  |
| D040-270A | 3       | 40                | 607 | 514 | 195 | 91 | 390 | 280 | 234 | 178  | 162  | 40 | 196 | 340 | 21 | 454 | 404 | 92                   | 114                  |
| D040-270A | 4       | 40                | 667 | 514 | 195 | 91 | 390 | 280 | 234 | 178  | 162  | 40 | 196 | 340 | 21 | 454 | 404 | 99                   | 121                  |
| D040-270A | 5,5     | 40                | 697 | 514 | 195 | 91 | 390 | 280 | 234 | 178  | 162  | 40 | 220 | 340 | 21 | 454 | 404 | 104                  | 126                  |
| D050-140A | 0,55    | 50                | 516 | 410 | 187 | 30 | 390 | 250 | 160 | 130  | 115  | 40 | 139 | 340 | 21 | 454 | 404 | 43                   | 65                   |
| D050-140A | 0,75    | 50                | 516 | 410 | 187 | 30 | 390 | 250 | 160 | 130  | 115  | 40 | 139 | 340 | 21 | 454 | 404 | 44                   | 66                   |
| D050-140A | 1,1     | 50                | 547 | 410 | 187 | 30 | 390 | 250 | 160 | 130  | 119  | 40 | 157 | 340 | 21 | 454 | 404 | 49                   | 71                   |
| D050-140A | 1,5     | 50                | 574 | 410 | 187 | 30 | 390 | 250 | 160 | 148  | 148  | 40 | 176 | 340 | 21 | 454 | 404 | 52                   | 74                   |
| D050-160A | 0,75    | 50                | 485 | 430 | 160 | 80 | 300 | 250 | 180 | 132  | 116  | 35 | 139 | 250 | 17 | 354 | 304 | 45                   | 56                   |
| D050-160A | 1,1     | 50                | 518 | 430 | 160 | 80 | 300 | 250 | 180 | 132  | 119  | 35 | 157 | 250 | 17 | 354 | 304 | 50                   | 61                   |
| D050-190A | 1,5     | 50                | 577 | 460 | 190 | 70 | 390 | 260 | 200 | 150  | 148  | 40 | 176 | 340 | 21 | 454 | 404 | 62                   | 84                   |
| D050-190A | 2,2     | 50                | 600 | 460 | 190 | 70 | 390 | 260 | 200 | 150  | 129  | 40 | 177 | 340 | 21 | 454 | 404 | 66                   | 87                   |
| D050-190A | 3       | 50                | 600 | 460 | 190 | 70 | 390 | 260 | 200 | 150  | 129  | 40 | 196 | 340 | 21 | 454 | 404 | 74                   | 95                   |

<sup>1)</sup> When dismantling the motor, ensure there is sufficient room for the lifting device.

<sup>2)</sup> Total weight of the pump

<sup>3)</sup> Total weight of the pump with pump support

Flange connection dimensions according to DIN 2501 PN 10  
Dimensions with frequency converter for direct installation on request.

| Typ       | P2<br>[kW] | DN <sub>1/2</sub> | H    | L   | a   | b   | c   | d   | e   | fmax | gmax | h  | Ø k | m   | p  | s   | t   | m <sup>2)</sup><br>[kg] | m <sup>3)</sup><br>[kg] |
|-----------|------------|-------------------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|-----|----|-----|-----|-------------------------|-------------------------|
| D050-240A | 1,5        | 50                | 565  | 500 | 185 | 77  | 390 | 280 | 220 | 170  | 150  | 40 | 176 | 340 | 21 | 454 | 404 | 67                      | 88                      |
| D050-240A | 2,2        | 50                | 590  | 500 | 185 | 77  | 390 | 280 | 220 | 170  | 150  | 40 | 177 | 340 | 21 | 454 | 404 | 72                      | 94                      |
| D050-240A | 3          | 50                | 600  | 500 | 185 | 77  | 390 | 280 | 220 | 170  | 150  | 40 | 196 | 340 | 21 | 454 | 404 | 81                      | 103                     |
| D050-300A | 5,5        | 50                | 715  | 600 | 210 | 55  | 630 | 320 | 280 | 195  | 180  | 45 | 220 | 530 | 25 | 704 | 604 | 129                     | 180                     |
| D065-200A | 1,1        | 65                | 570  | 505 | 193 | 90  | 390 | 280 | 225 | 150  | 135  | 40 | 157 | 340 | 21 | 454 | 404 | 71                      | 93                      |
| D065-200A | 1,5        | 65                | 597  | 505 | 193 | 90  | 390 | 280 | 225 | 150  | 148  | 40 | 176 | 340 | 21 | 454 | 404 | 74                      | 95                      |
| D065-200A | 2,2        | 65                | 610  | 505 | 193 | 90  | 390 | 280 | 225 | 150  | 135  | 40 | 177 | 340 | 21 | 454 | 404 | 78                      | 100                     |
| D065-220A | 2,2        | 65                | 585  | 533 | 170 | 165 | 300 | 283 | 250 | 170  | 146  | 35 | 177 | 250 | 17 | 354 | 304 | 74                      | 86                      |
| D065-220A | 3          | 65                | 585  | 533 | 170 | 165 | 300 | 283 | 250 | 170  | 146  | 35 | 196 | 250 | 17 | 354 | 304 | 81                      | 92                      |
| D065-220A | 4          | 65                | 645  | 533 | 170 | 165 | 300 | 283 | 250 | 170  | 146  | 35 | 196 | 250 | 17 | 354 | 304 | 88                      | 100                     |
| D065-240A | 3          | 65                | 622  | 560 | 205 | 105 | 390 | 310 | 250 | 184  | 156  | 40 | 196 | 340 | 21 | 454 | 404 | 92                      | 114                     |
| D065-240A | 4          | 65                | 682  | 560 | 205 | 105 | 390 | 310 | 250 | 184  | 156  | 40 | 196 | 340 | 21 | 454 | 404 | 100                     | 121                     |
| D065-270A | 4          | 65                | 682  | 560 | 205 | 95  | 390 | 320 | 240 | 184  | 161  | 40 | 196 | 340 | 21 | 454 | 404 | 107                     | 128                     |
| D065-270A | 5,5        | 65                | 712  | 560 | 205 | 95  | 390 | 320 | 240 | 184  | 161  | 40 | 220 | 340 | 21 | 454 | 404 | 112                     | 134                     |
| D065-270C | 5,5        | 65                | 714  | 570 | 205 | 105 | 390 | 320 | 250 | 192  | 173  | 40 | 220 | 340 | 21 | 454 | 404 | 114                     | 136                     |
| D065-300B | 7,5        | 65                | 761  | 615 | 225 | 130 | 390 | 340 | 275 | 211  | 200  | 40 | 258 | 340 | 21 | 454 | 404 | 159                     | 180                     |
| D065-300B | 11         | 65                | 845  | 615 | 225 | 130 | 390 | 340 | 275 | 211  | 202  | 40 | 260 | 340 | 21 | 454 | 404 | 183                     | 204                     |
| D080-170A | 1,1        | 80                | 580  | 545 | 220 | 95  | 390 | 320 | 225 | 165  | 137  | 40 | 157 | 340 | 21 | 454 | 404 | 67                      | 88                      |
| D080-170A | 1,5        | 80                | 607  | 545 | 220 | 95  | 390 | 320 | 225 | 165  | 148  | 40 | 176 | 340 | 21 | 454 | 404 | 69                      | 91                      |
| D080-170A | 2,2        | 80                | 645  | 545 | 220 | 95  | 390 | 320 | 225 | 165  | 137  | 40 | 177 | 340 | 21 | 454 | 404 | 76                      | 97                      |
| D080-210A | 3          | 80                | 654  | 595 | 240 | 115 | 390 | 345 | 250 | 188  | 160  | 40 | 196 | 340 | 21 | 454 | 404 | 93                      | 115                     |
| D080-210A | 4          | 80                | 714  | 595 | 240 | 115 | 390 | 345 | 250 | 188  | 160  | 40 | 196 | 340 | 21 | 454 | 404 | 100                     | 122                     |
| D080-210A | 5,5        | 80                | 744  | 595 | 240 | 115 | 390 | 345 | 250 | 188  | 160  | 40 | 220 | 340 | 21 | 454 | 404 | 118                     | 140                     |
| D080-255A | 3          | 80                | 641  | 630 | 230 | 135 | 390 | 350 | 280 | 190  | 167  | 40 | 196 | 340 | 21 | 454 | 404 | 114                     | 136                     |
| D080-255A | 4          | 80                | 701  | 630 | 230 | 135 | 390 | 350 | 280 | 190  | 167  | 40 | 196 | 340 | 21 | 454 | 404 | 121                     | 143                     |
| D080-255A | 5,5        | 80                | 731  | 630 | 230 | 135 | 390 | 350 | 280 | 190  | 167  | 40 | 220 | 340 | 21 | 454 | 404 | 117                     | 139                     |
| D080-330A | 11         | 80                | 896  | 715 | 265 | 90  | 630 | 400 | 315 | 248  | 214  | 45 | 260 | 530 | 25 | 704 | 604 | 224                     | 275                     |
| D080-330A | 15         | 80                | 933  | 715 | 265 | 90  | 630 | 400 | 315 | 248  | 243  | 45 | 313 | 530 | 25 | 704 | 604 | 253                     | 304                     |
| D080-330A | 18,5       | 80                | 1036 | 715 | 265 | 90  | 630 | 400 | 315 | 253  | 253  | 45 | 315 | 530 | 25 | 704 | 604 | 298                     | 350                     |
| D080-330A | 22         | 80                | 1062 | 715 | 265 | 90  | 630 | 400 | 315 | 263  | 263  | 45 | 350 | 530 | 25 | 704 | 604 | 324                     | 376                     |
| D100-180A | 2,2        | 100               | 688  | 630 | 260 | 162 | 390 | 350 | 280 | 185  | 140  | 40 | 177 | 340 | 21 | 454 | 404 | 93                      | 115                     |
| D100-180A | 3          | 100               | 694  | 630 | 260 | 162 | 390 | 350 | 280 | 185  | 140  | 40 | 196 | 340 | 21 | 454 | 404 | 99                      | 121                     |
| D100-180A | 4          | 100               | 754  | 630 | 260 | 162 | 390 | 350 | 280 | 185  | 140  | 40 | 196 | 340 | 21 | 454 | 404 | 107                     | 128                     |
| D100-200A | 2,2        | 100               | 692  | 655 | 280 | 162 | 390 | 375 | 280 | 220  | 164  | 40 | 177 | 340 | 21 | 454 | 404 | 92                      | 114                     |
| D100-200A | 3          | 100               | 697  | 655 | 280 | 162 | 390 | 375 | 280 | 220  | 164  | 40 | 196 | 340 | 21 | 454 | 404 | 100                     | 121                     |
| D100-200A | 4          | 100               | 757  | 655 | 280 | 162 | 390 | 375 | 280 | 220  | 164  | 40 | 196 | 340 | 21 | 454 | 404 | 107                     | 129                     |
| D100-210A | 3          | 100               | 697  | 645 | 280 | 162 | 390 | 365 | 280 | 197  | 163  | 40 | 196 | 340 | 21 | 454 | 404 | 101                     | 123                     |
| D100-210A | 4          | 100               | 757  | 645 | 280 | 162 | 390 | 365 | 280 | 197  | 163  | 40 | 196 | 340 | 21 | 454 | 404 | 109                     | 130                     |
| D100-210A | 5,5        | 100               | 787  | 645 | 280 | 162 | 390 | 365 | 280 | 197  | 163  | 40 | 220 | 340 | 21 | 454 | 404 | 127                     | 148                     |
| D100-210A | 7,5        | 100               | 810  | 645 | 280 | 162 | 390 | 365 | 280 | 200  | 200  | 40 | 258 | 340 | 21 | 454 | 404 | 153                     | 174                     |
| D100-240A | 5,5        | 100               | 746  | 650 | 245 | 135 | 390 | 370 | 280 | 202  | 166  | 40 | 220 | 340 | 21 | 454 | 404 | 122                     | 144                     |
| D100-240A | 7,5        | 100               | 769  | 650 | 245 | 135 | 390 | 370 | 280 | 202  | 200  | 40 | 258 | 340 | 21 | 454 | 404 | 148                     | 170                     |
| D100-270A | 5,5        | 100               | 756  | 640 | 255 | 152 | 390 | 370 | 270 | 198  | 172  | 40 | 220 | 340 | 21 | 454 | 404 | 129                     | 151                     |
| D100-270A | 7,5        | 100               | 779  | 640 | 255 | 152 | 390 | 370 | 270 | 200  | 200  | 40 | 258 | 340 | 21 | 454 | 404 | 155                     | 177                     |
| D100-270A | 11         | 100               | 891  | 640 | 255 | 152 | 390 | 370 | 270 | 202  | 202  | 40 | 260 | 340 | 21 | 454 | 404 | 185                     | 207                     |
| D100-330A | 18,5       | 100               | 992  | 705 | 245 | 205 | 390 | 390 | 315 | 253  | 253  | 40 | 315 | 340 | 21 | 454 | 404 | 271                     | 293                     |
| D100-330A | 22         | 100               | 1018 | 705 | 245 | 205 | 390 | 390 | 315 | 263  | 263  | 40 | 350 | 340 | 21 | 454 | 404 | 298                     | 319                     |
| D100-330C | 11         | 100               | 869  | 710 | 250 | 90  | 630 | 395 | 315 | 225  | 202  | 45 | 260 | 530 | 25 | 704 | 604 | 211                     | 262                     |
| D100-330C | 15         | 100               | 906  | 710 | 250 | 90  | 630 | 395 | 315 | 243  | 243  | 45 | 313 | 530 | 25 | 704 | 604 | 240                     | 291                     |
| D125-250A | 3          | 125               | 702  | 810 | 290 | 165 | 630 | 455 | 355 | 260  | 188  | 45 | 196 | 530 | 25 | 704 | 604 | 144                     | 196                     |
| D125-250A | 4          | 125               | 762  | 810 | 290 | 165 | 630 | 455 | 355 | 260  | 188  | 45 | 196 | 530 | 25 | 704 | 604 | 152                     | 203                     |
| D125-250A | 5,5        | 125               | 792  | 810 | 290 | 165 | 630 | 455 | 355 | 260  | 188  | 45 | 220 | 530 | 25 | 704 | 604 | 156                     | 208                     |
| D125-250A | 7,5        | 125               | 815  | 810 | 290 | 165 | 630 | 455 | 355 | 260  | 200  | 45 | 258 | 530 | 25 | 704 | 604 | 183                     | 234                     |
| D125-270A | 5,5        | 125               | 756  | 729 | 245 | 239 | 390 | 374 | 355 | 209  | 181  | 40 | 220 | 340 | 21 | 454 | 404 | 136                     | 158                     |
| D125-270A | 7,5        | 125               | 779  | 729 | 245 | 239 | 390 | 374 | 355 | 209  | 200  | 40 | 258 | 340 | 21 | 454 | 404 | 162                     | 184                     |
| D125-270A | 11         | 125               | 868  | 729 | 245 | 239 | 390 | 374 | 355 | 209  | 202  | 40 | 260 | 340 | 21 | 454 | 404 | 188                     | 210                     |
| D125-270A | 15         | 125               | 905  | 729 | 245 | 239 | 390 | 374 | 355 | 243  | 243  | 40 | 313 | 340 | 21 | 454 | 404 | 217                     | 239                     |
| D125-270B | 11         | 125               | 936  | 805 | 310 | 165 | 630 | 450 | 355 | 260  | 212  | 45 | 260 | 530 | 25 | 704 | 604 | 213                     | 264                     |
| D125-270B | 15         | 125               | 973  | 805 | 310 | 165 | 630 | 450 | 355 | 260  | 243  | 45 | 313 | 530 | 25 | 704 | 604 | 242                     | 293                     |
| D125-270B | 18,5       | 125               | 1033 | 805 | 310 | 165 | 630 | 450 | 355 | 260  | 253  | 45 | 315 | 530 | 25 | 704 | 604 | 269                     | 320                     |
| D125-270B | 22         | 125               | 1059 | 805 | 310 | 165 | 630 | 450 | 355 | 263  | 263  | 45 | 350 | 530 | 25 | 704 | 604 | 295                     | 346                     |
| D125-330A | 22         | 125               | 1096 | 805 | 325 | 150 | 630 | 450 | 355 | 263  | 263  | 45 | 350 | 530 | 25 | 704 | 604 | 334                     | 385                     |
| D125-330A | 30         | 125               | 1074 | 805 | 325 | 150 | 630 | 450 | 355 | 270  | 270  | 45 | 400 | 530 | 25 | 704 | 604 | 384                     | 436                     |
| D150-250A | 5,5        | 150               | 826  | 875 | 320 | 205 | 630 | 500 | 375 | 277  | 203  | 45 | 220 | 530 | 25 | 704 | 604 | 175                     | 226                     |
| D150-250A | 7,5        | 150               | 849  |     |     |     |     |     |     |      |      |    |     |     |    |     |     |                         |                         |

| Typ       | P2<br>[kW] | DN <sub>1/2</sub> | H    | L   | a   | b   | c   | d   | e   | fmax | gmax | h  | Ø k | m   | p  | s   | t   | m <sup>2)</sup><br>[kg] | m <sup>3)</sup><br>[kg] |
|-----------|------------|-------------------|------|-----|-----|-----|-----|-----|-----|------|------|----|-----|-----|----|-----|-----|-------------------------|-------------------------|
| D150-250A | 11         | 150               | 942  | 875 | 320 | 205 | 630 | 500 | 375 | 277  | 203  | 45 | 260 | 530 | 25 | 704 | 604 | 229                     | 281                     |
| D150-270B | 11         | 150               | 997  | 925 | 370 | 200 | 630 | 550 | 375 | 313  | 247  | 45 | 260 | 530 | 25 | 704 | 604 | 250                     | 302                     |
| D150-270B | 15         | 150               | 1034 | 925 | 370 | 200 | 630 | 550 | 375 | 313  | 247  | 45 | 313 | 530 | 25 | 704 | 604 | 280                     | 331                     |
| D150-270B | 18,5       | 150               | 1094 | 925 | 370 | 200 | 630 | 550 | 375 | 313  | 253  | 45 | 315 | 530 | 25 | 704 | 604 | 307                     | 358                     |
| D150-270B | 22         | 150               | 1120 | 925 | 370 | 200 | 630 | 550 | 375 | 313  | 263  | 45 | 350 | 530 | 25 | 704 | 604 | 333                     | 384                     |
| D150-300A | 15         | 150               | 996  | 825 | 340 | 125 | 630 | 495 | 330 | 268  | 243  | 45 | 313 | 530 | 25 | 704 | 604 | 268                     | 319                     |
| D150-300A | 18,5       | 150               | 1093 | 825 | 340 | 125 | 630 | 495 | 330 | 268  | 253  | 45 | 315 | 530 | 25 | 704 | 604 | 303                     | 355                     |
| D150-300A | 22         | 150               | 1119 | 825 | 340 | 125 | 630 | 495 | 330 | 268  | 263  | 45 | 350 | 530 | 25 | 704 | 604 | 330                     | 381                     |
| D150-400A | 37         | 150               | 1260 | 951 | 360 | 214 | 630 | 500 | 451 | 305  | 305  | 45 | 392 | 530 | 25 | 704 | 604 | 544                     | 595                     |
| D150-400A | 45         | 150               | 1300 | 951 | 360 | 214 | 630 | 500 | 451 | 305  | 305  | 45 | 392 | 530 | 25 | 704 | 604 | 575                     | 627                     |
| D150-400A | 55         | 150               | 1282 | 951 | 360 | 214 | 630 | 500 | 451 | 364  | 364  | 45 | 438 | 530 | 25 | 704 | 604 | 654                     | 705                     |
| D200-250A | 5,5        | 200               | 900  | 890 | 380 | 180 | 630 | 540 | 350 | 268  | 212  | 45 | 220 | 530 | 25 | 704 | 604 | 193                     | 245                     |
| D200-250A | 7,5        | 200               | 923  | 890 | 380 | 180 | 630 | 540 | 350 | 268  | 212  | 45 | 258 | 530 | 25 | 704 | 604 | 219                     | 271                     |
| D200-250A | 11         | 200               | 1016 | 890 | 380 | 180 | 630 | 540 | 350 | 268  | 212  | 45 | 260 | 530 | 25 | 704 | 604 | 245                     | 296                     |
| D200-250A | 15         | 200               | 1053 | 890 | 380 | 180 | 630 | 540 | 350 | 268  | 243  | 45 | 313 | 530 | 25 | 704 | 604 | 274                     | 325                     |
| D200-270B | 11         | 200               | 1045 | 920 | 390 | 195 | 630 | 550 | 370 | 286  | 221  | 45 | 260 | 530 | 25 | 704 | 604 | 259                     | 311                     |
| D200-270B | 15         | 200               | 1082 | 920 | 390 | 195 | 630 | 550 | 370 | 286  | 243  | 45 | 313 | 530 | 25 | 704 | 604 | 289                     | 340                     |
| D200-270B | 18,5       | 200               | 1151 | 920 | 390 | 195 | 630 | 550 | 370 | 286  | 253  | 45 | 315 | 530 | 25 | 704 | 604 | 318                     | 369                     |
| D200-270B | 22         | 200               | 1177 | 920 | 390 | 195 | 630 | 550 | 370 | 286  | 263  | 45 | 350 | 530 | 25 | 704 | 604 | 344                     | 396                     |
| D200-350A | 30         | 200               | 1171 | 958 | 352 | 205 | 630 | 558 | 400 | 333  | 270  | 45 | 400 | 530 | 25 | 704 | 604 | 450                     | 502                     |
| D200-350A | 37         | 200               | 1184 | 958 | 352 | 205 | 630 | 558 | 400 | 333  | 305  | 45 | 392 | 530 | 25 | 704 | 604 | 507                     | 558                     |
| D200-350A | 45         | 200               | 1224 | 958 | 352 | 205 | 630 | 558 | 400 | 333  | 305  | 45 | 392 | 530 | 25 | 704 | 604 | 539                     | 590                     |
| D200-350A | 55         | 200               | 1206 | 958 | 352 | 205 | 630 | 558 | 400 | 364  | 364  | 45 | 438 | 530 | 25 | 704 | 604 | 617                     | 669                     |

### PM 3000 rpm

| Typ       | P2<br>[kW] | DN <sub>1/2</sub> | H   | L   | a   | b   | c   | d   | e   | fmax | gmax | h  | Ø k | m   | p  | s   | t   | m <sup>2)</sup><br>[kg] | m <sup>3)</sup><br>[kg] |
|-----------|------------|-------------------|-----|-----|-----|-----|-----|-----|-----|------|------|----|-----|-----|----|-----|-----|-------------------------|-------------------------|
| D025-125A | 2,2        | 25                | 545 | 320 | 140 | 31  | 300 | 180 | 140 | 176  | 176  | 35 | 176 | 250 | 17 | 354 | 304 | 40                      | 52                      |
| D025-160A | 1,1        | 25                | 471 | 360 | 145 | 54  | 300 | 200 | 160 | 139  | 139  | 35 | 139 | 250 | 17 | 354 | 304 | 39                      | 50                      |
| D025-160A | 1,5        | 25                | 522 | 360 | 145 | 54  | 300 | 200 | 160 | 157  | 157  | 35 | 157 | 250 | 17 | 354 | 304 | 43                      | 54                      |
| D025-160A | 2,2        | 25                | 547 | 360 | 145 | 54  | 300 | 200 | 160 | 176  | 176  | 35 | 176 | 250 | 17 | 354 | 304 | 45                      | 57                      |
| D025-160A | 3          | 25                | 556 | 360 | 145 | 54  | 300 | 200 | 160 | 177  | 177  | 35 | 177 | 250 | 17 | 354 | 304 | 52                      | 63                      |
| D025-200A | 5,5        | 25                | 671 | 405 | 165 | 39  | 390 | 225 | 180 | 196  | 196  | 40 | 196 | 340 | 21 | 454 | 404 | 75                      | 97                      |
| D032-160A | 1,1        | 32                | 481 | 360 | 145 | 54  | 300 | 200 | 160 | 139  | 139  | 35 | 139 | 250 | 17 | 354 | 304 | 43                      | 55                      |
| D032-160A | 1,5        | 32                | 531 | 360 | 145 | 54  | 300 | 200 | 160 | 157  | 157  | 35 | 157 | 250 | 17 | 354 | 304 | 47                      | 59                      |
| D032-160A | 2,2        | 32                | 556 | 360 | 145 | 54  | 300 | 200 | 160 | 176  | 176  | 35 | 176 | 250 | 17 | 354 | 304 | 50                      | 61                      |
| D032-160A | 3          | 32                | 556 | 360 | 145 | 54  | 300 | 200 | 160 | 177  | 177  | 35 | 177 | 250 | 17 | 354 | 304 | 54                      | 65                      |
| D032-200A | 5,5        | 32                | 660 | 405 | 160 | 39  | 390 | 225 | 180 | 196  | 196  | 40 | 196 | 340 | 21 | 454 | 404 | 75                      | 97                      |
| D032-200A | 7,5        | 32                | 660 | 405 | 160 | 39  | 390 | 225 | 180 | 196  | 196  | 40 | 196 | 340 | 21 | 454 | 404 | 83                      | 105                     |
| D032-250A | 11         | 32                | 793 | 495 | 193 | 69  | 390 | 270 | 225 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 127                     | 148                     |
| D032-250A | 15         | 32                | 807 | 495 | 193 | 69  | 390 | 270 | 225 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 150                     | 171                     |
| D032-250A | 18,5       | 32                | 893 | 495 | 193 | 69  | 390 | 270 | 225 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 179                     | 201                     |
| D040-160A | 2,2        | 40                | 566 | 390 | 160 | 60  | 300 | 230 | 160 | 176  | 176  | 35 | 176 | 250 | 17 | 354 | 304 | 49                      | 60                      |
| D040-160A | 3          | 40                | 576 | 390 | 160 | 60  | 300 | 230 | 160 | 177  | 177  | 35 | 177 | 250 | 17 | 354 | 304 | 56                      | 67                      |
| D040-160A | 4          | 40                | 636 | 390 | 160 | 60  | 300 | 230 | 160 | 196  | 196  | 35 | 196 | 250 | 17 | 354 | 304 | 63                      | 74                      |
| D040-160A | 5,5        | 40                | 671 | 390 | 160 | 60  | 300 | 230 | 160 | 196  | 196  | 35 | 196 | 250 | 17 | 354 | 304 | 73                      | 84                      |
| D040-220A | 7,5        | 40                | 686 | 460 | 170 | 65  | 390 | 260 | 200 | 196  | 196  | 40 | 196 | 340 | 21 | 454 | 404 | 97                      | 118                     |
| D040-220A | 11         | 40                | 781 | 460 | 170 | 65  | 390 | 260 | 200 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 126                     | 148                     |
| D040-220A | 15         | 40                | 795 | 460 | 170 | 65  | 390 | 260 | 200 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 149                     | 171                     |
| D040-270A | 7,5        | 40                | 706 | 514 | 195 | 91  | 390 | 280 | 234 | 196  | 196  | 40 | 196 | 340 | 21 | 454 | 404 | 108                     | 130                     |
| D040-270A | 11         | 40                | 796 | 514 | 195 | 91  | 390 | 280 | 234 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 134                     | 156                     |
| D040-270A | 15         | 40                | 810 | 514 | 195 | 91  | 390 | 280 | 234 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 158                     | 179                     |
| D040-270A | 18,5       | 40                | 896 | 514 | 195 | 91  | 390 | 280 | 234 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 187                     | 209                     |
| D040-270A | 22         | 40                | 896 | 514 | 195 | 91  | 390 | 280 | 234 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 204                     | 225                     |
| D050-160A | 1,5        | 50                | 535 | 430 | 160 | 80  | 300 | 250 | 180 | 157  | 157  | 35 | 157 | 250 | 17 | 354 | 304 | 49                      | 60                      |
| D050-160A | 2,2        | 50                | 560 | 430 | 160 | 80  | 300 | 250 | 180 | 176  | 176  | 35 | 176 | 250 | 17 | 354 | 304 | 51                      | 63                      |
| D050-160A | 3          | 50                | 570 | 430 | 160 | 80  | 300 | 250 | 180 | 177  | 177  | 35 | 177 | 250 | 17 | 354 | 304 | 58                      | 70                      |
| D050-160A | 4          | 50                | 630 | 430 | 160 | 80  | 300 | 250 | 180 | 196  | 196  | 35 | 196 | 250 | 17 | 354 | 304 | 65                      | 77                      |
| D050-160A | 5,5        | 50                | 668 | 430 | 160 | 80  | 300 | 250 | 180 | 196  | 196  | 35 | 196 | 250 | 17 | 354 | 304 | 75                      | 86                      |
| D050-160A | 7,5        | 50                | 668 | 430 | 160 | 80  | 300 | 250 | 180 | 196  | 196  | 35 | 196 | 250 | 17 | 354 | 304 | 83                      | 94                      |
| D065-200A | 11         | 65                | 806 | 505 | 193 | 90  | 390 | 280 | 225 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 128                     | 150                     |
| D065-200A | 15         | 65                | 820 | 505 | 193 | 90  | 390 | 280 | 225 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 151                     | 173                     |
| D065-300B | 11         | 65                | 836 | 615 | 225 | 130 | 390 | 340 | 275 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 160                     | 181                     |

<sup>1)</sup> When dismounting the motor, ensure there is sufficient room for the lifting device.

<sup>2)</sup> Total weight of the pump

<sup>3)</sup> Total weight of the pump with pump support

Flange connection dimensions according to DIN 2501 PN 10

Dimensions with frequency converter for direct installation on request.

| Typ       | P2<br>[kW] | DN <sub>1/2</sub> | H   | L   | a   | b   | c   | d   | e   | fmax | gmax | h  | Ø k | m   | p  | s   | t   | m <sup>2)</sup><br>[kg] | m <sup>3)</sup><br>[kg] |
|-----------|------------|-------------------|-----|-----|-----|-----|-----|-----|-----|------|------|----|-----|-----|----|-----|-----|-------------------------|-------------------------|
| D065-300B | 15         | 65                | 850 | 615 | 225 | 130 | 390 | 340 | 275 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 183                     | 204                     |
| D065-300B | 18,5       | 65                | 936 | 615 | 225 | 130 | 390 | 340 | 275 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 212                     | 234                     |
| D065-300B | 22         | 65                | 936 | 615 | 225 | 130 | 390 | 340 | 275 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 229                     | 251                     |
| D080-240A | 11         | 80                | 842 | 650 | 235 | 135 | 390 | 370 | 280 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 148                     | 169                     |
| D080-240A | 15         | 80                | 856 | 650 | 235 | 135 | 390 | 370 | 280 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 171                     | 192                     |
| D080-240A | 18,5       | 80                | 942 | 650 | 235 | 135 | 390 | 370 | 280 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 200                     | 222                     |
| D080-240A | 22         | 80                | 942 | 650 | 235 | 135 | 390 | 370 | 280 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 217                     | 239                     |
| D080-255A | 5,5        | 80                | 742 | 630 | 230 | 135 | 390 | 350 | 280 | 196  | 196  | 40 | 196 | 340 | 21 | 454 | 404 | 112                     | 134                     |
| D080-255A | 7,5        | 80                | 742 | 630 | 230 | 135 | 390 | 350 | 280 | 196  | 196  | 40 | 196 | 340 | 21 | 454 | 404 | 120                     | 142                     |
| D080-255A | 11         | 80                | 832 | 630 | 230 | 135 | 390 | 350 | 280 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 147                     | 169                     |
| D080-255A | 15         | 80                | 846 | 630 | 230 | 135 | 390 | 350 | 280 | 258  | 258  | 40 | 258 | 340 | 21 | 454 | 404 | 170                     | 192                     |
| D080-255A | 18,5       | 80                | 932 | 630 | 230 | 135 | 390 | 350 | 280 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 200                     | 221                     |
| D080-255A | 22         | 80                | 932 | 630 | 230 | 135 | 390 | 350 | 280 | 313  | 313  | 40 | 313 | 340 | 21 | 454 | 404 | 216                     | 238                     |
| D100-330C | 11         | 100               | 856 | 710 | 250 | 90  | 630 | 395 | 315 | 258  | 258  | 45 | 258 | 530 | 25 | 704 | 604 | 184                     | 236                     |
| D100-330C | 15         | 100               | 870 | 710 | 250 | 90  | 630 | 395 | 315 | 258  | 258  | 45 | 258 | 530 | 25 | 704 | 604 | 207                     | 259                     |
| D100-330C | 18,5       | 100               | 956 | 710 | 250 | 90  | 630 | 395 | 315 | 313  | 313  | 45 | 313 | 530 | 25 | 704 | 604 | 237                     | 288                     |
| D100-330C | 22         | 100               | 956 | 710 | 250 | 90  | 630 | 395 | 315 | 313  | 313  | 45 | 313 | 530 | 25 | 704 | 604 | 254                     | 305                     |
| D125-250A | 11         | 125               | 893 | 810 | 290 | 165 | 630 | 455 | 355 | 260  | 258  | 45 | 258 | 530 | 25 | 704 | 604 | 183                     | 235                     |
| D125-250A | 15         | 125               | 907 | 810 | 290 | 165 | 630 | 455 | 355 | 260  | 258  | 45 | 258 | 530 | 25 | 704 | 604 | 206                     | 258                     |
| D125-250A | 18,5       | 125               | 993 | 810 | 290 | 165 | 630 | 455 | 355 | 313  | 313  | 45 | 313 | 530 | 25 | 704 | 604 | 236                     | 287                     |
| D125-250A | 22         | 125               | 993 | 810 | 290 | 165 | 630 | 455 | 355 | 313  | 313  | 45 | 313 | 530 | 25 | 704 | 604 | 253                     | 304                     |

<sup>1)</sup> When dismounting the motor, ensure there is sufficient room for the lifting device.

<sup>2)</sup> Total weight of the pump

<sup>3)</sup> Total weight of the pump with pump support

Flange connection dimensions according to DIN 2501 PN 10

Dimensions with frequency converter for direct installation on request.

## emod

### 75 Hz: 1500 rpm (350 V)

| P <sub>2</sub> [kW] | P <sub>1</sub> [kW] | I [A] | dB(A) |
|---------------------|---------------------|-------|-------|
| 0,37                | 0,45                | 0,7   | 52    |
| 0,55                | 0,68                | 1,03  | 52    |
| 0,75                | 0,85                | 1,25  | 52    |
| 1,1                 | 1,28                | 1,88  | 52    |
| 1,5                 | 1,69                | 1,69  | 55    |
| 2,2                 | 2,44                | 3,75  | 55    |
| 3                   | 3,35                | 5,0   | 55    |
| 4                   | 4,44                | 6,7   | 55    |
| 5,5                 | 5,98                | 9,2   | 59    |
| 7,5                 | 8,15                | 12,9  | 59    |
| 11                  | 11,89               | 18,8  | 63    |
| 15                  | 16,3                | 26,5  | 63    |
| 18,5                | 19,94               | 30,0  | 63    |
| 22                  | 23,4                | 36,0  | 63    |
| 30                  | 31,85               | 50,0  | 65    |
| 37                  | 39,19               | 63,0  | 65    |
| 45                  | 47,47               | 71,0  | 68    |
| 55                  | 58,14               | 94,0  | 68    |

## VEM

### 50 Hz: 1500 rpm (280 - 380 V)

| P <sub>2</sub> [kW] | P <sub>1</sub> [kW] | I [A] | dB(A) |
|---------------------|---------------------|-------|-------|
| 0,37                | 0,5                 | 1,0   | 45    |
| 0,55                | 0,68                | 1,3   | 47    |
| 0,75                | 0,91                | 1,7   | 47    |
| 1,1                 | 1,3                 | 2,4   | 52    |
| 1,5                 | 1,73                | 3,3   | 52    |
| 2,2                 | 2,43                | 4,5   | 53    |
| 3                   | 3,28                | 5,7   | 53    |
| 4                   | 4,33                | 7,9   | 56    |
| 5,5                 | 5,91                | 10,6  | 61    |
| 7,5                 | 7,98                | 13,3  | 63    |
| 11                  | 11,69               | 19,5  | 63    |
| 15                  | 15,82               | 26,0  | 65    |
| 18,5                | 19,47               | 32,3  | 65    |
| 22                  | 23,06               | 38,5  | 67    |
| 30                  | 31,38               | 52,5  | 67    |
| 37                  | 38,7                | 62,0  | 70    |
| 45                  | 47,02               | 76,6  | 70    |
| 55                  | 57,41               | 93,0  | 71    |

### 150 Hz: 3000 rpm (350 V)

| P <sub>2</sub> [kW] | P <sub>1</sub> [kW] | I [A] | dB(A) |
|---------------------|---------------------|-------|-------|
| 1,5                 | 1,65                | 2,4   | 61    |
| 2,2                 | 2,42                | 3,8   | 67    |
| 3                   | 3,28                | 5,1   | 67    |
| 4                   | 4,3                 | 6,7   | 67    |
| 5,5                 | 5,93                | 8,9   | 67    |
| 7,5                 | 8,06                | 12,5  | 67    |
| 11                  | 11,83               | 17,6  | 74    |
| 15                  | 15,96               | 24,3  | 74    |

### 100 Hz: 3000 rpm (280 - 380 V)

| P <sub>2</sub> [kW] | P <sub>1</sub> [kW] | I [A] | dB(A) |
|---------------------|---------------------|-------|-------|
| 1,5                 | 1,7                 | 3,0   | 59    |
| 2,2                 | 2,5                 | 5,2   | 59    |
| 3                   | 3,24                | 5,9   | 62    |
| 4                   | 4,39                | 7,8   | 64    |
| 5,5                 | 5,95                | 10,5  | 68    |
| 7,5                 | 8,06                | 14,6  | 68    |
| 11                  | 11,96               | 18,8  | 69    |
| 15                  | 16,29               | 24,5  | 70    |

## Legend:

P<sub>2</sub>: Rated power

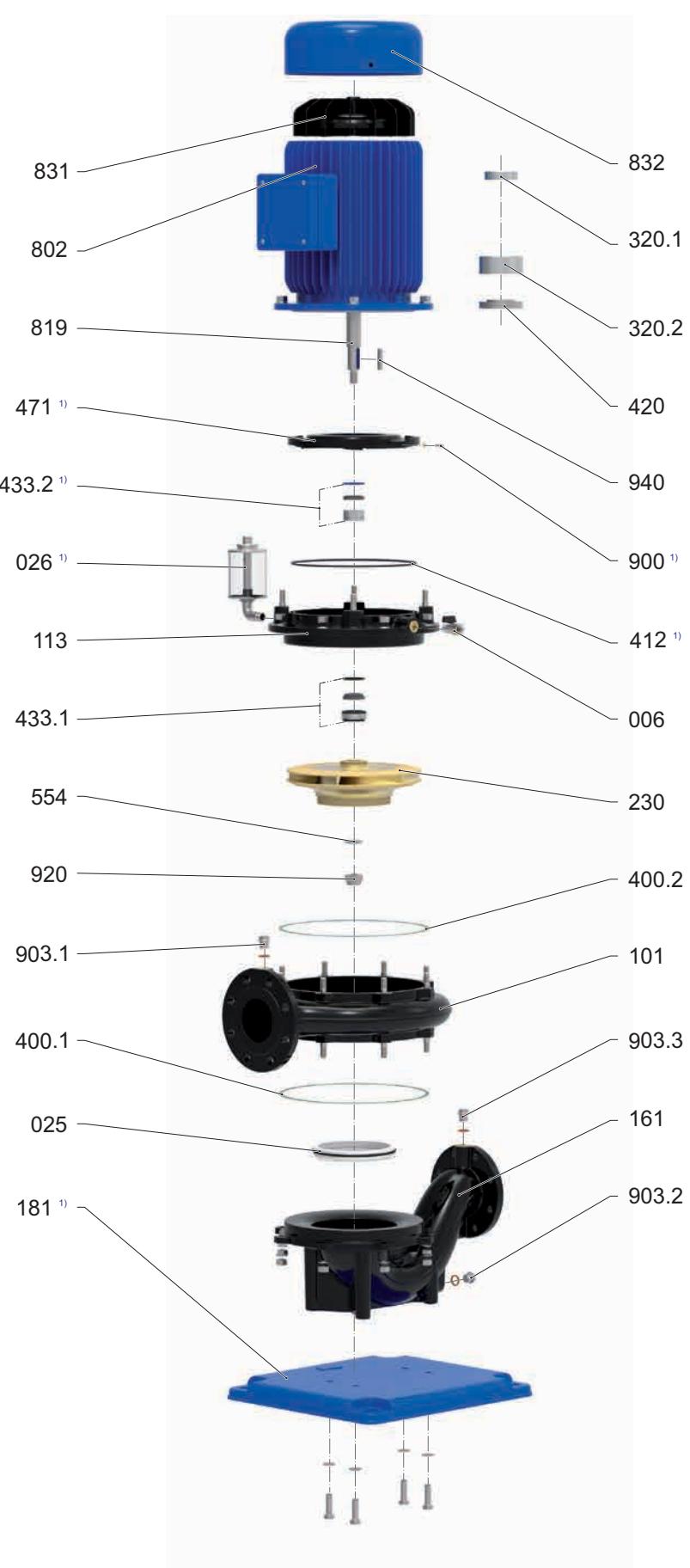
P<sub>1</sub>: Efficiency

I: Rated current

dB(A): Sound pressure level of the entire pump. Tolerance ±3 dB(A)

**Individual components**

|                     |  |
|---------------------|--|
| 006                 | Ball valve                             |
| 025                 | Impeller protector                     |
| 026 <sup>1)</sup>   | Seal-Guard-System                      |
| 101                 | Pump casing                            |
| 113                 | Intermediate casing                    |
| 161                 | Casing cover                           |
| 181 <sup>1)</sup>   | Pump support                           |
| 230                 | Impeller                               |
| 320.1               | Anti-friction bearing (non-drive side) |
| 320.2               | Anti-friction bearing (drive side)     |
| 400.1               | Gasket                                 |
| 400.2               | Gasket                                 |
| 412 <sup>1)</sup>   | O-ring                                 |
| 420                 | Shaft seal ring                        |
| 433.1               | Mechanical seal                        |
| 433.2 <sup>1)</sup> | Mechanical seal                        |
| 471 <sup>1)</sup>   | Seal cover                             |
| 554                 | Washer                                 |
| 802                 | Block motor                            |
| 819                 | Motor shaft                            |
| 831                 | Fan                                    |
| 832                 | Fan hood                               |
| 900 <sup>1)</sup>   | Screw                                  |
| 901 <sup>1)</sup>   | Hexagon screw                          |
| 903.1               | Screwed plug                           |
| 903.2               | Screwed plug                           |
| 903.4               | Drain plug                             |
| 920                 | Nut                                    |
| 940                 | Key                                    |



<sup>1)</sup> Special design/accessories

### Frequency converter

Frequency converters are used for the electronic regulation of motor speed which saves a significant quantity of energy. They also extend the service life of the system and reduce repair and maintenance costs.

Their main advantage is that through pump speed regulation the duty point can be adapted to the system requirements (e.g. night-time energy reduction in swimming pools), which compared to previous technical solutions and possibilities brings significant improvements for saving energy.

Frequency converters are used for direct installation (power up to 22 kW) and for installation in wall or switch cabinets (all ratings).



### Seal-Guard-System

The Seal-Guard-System prevents dry running of the mechanical seal by means of a reserve medium supply.

As soon as the primary mechanical seal in a pump is not in contact with the medium (a situation which subsequently would result in dry running), the reserve medium supply compensates for this insufficient lubrication. The medium supply is introduced into the pump back wall and is sealed on the drive side against the motor by means of a further secondary mechanical seal. You can also see from this tank if the primary mechanical seal is leaking. This system is maintenance-free with the exception of a possible topping up of the reserve medium supply.

Through dry running protection for the primary mechanical seal by means of medium supply costs can be saved and therefore the life cycle costs lowered.



### ETS X4

The electronic dry running protection system (ETS X4) prevents dry running of the mechanical seal by means of electronic monitoring. The air venting process is automated.

This allows a saving of replacement seals and their assembly, reduces standstill times considerably and therefore minimises the life cycle costs for the pump.

Please note that it is not possible to vent an entire system with the ETS.



### Long-Life-Set

The Long-Life-Set consists of a grease gun with high-performance grease. By ensuring the relubrication of motor bearings, the service life of the bearings is noticeably increased and therefore the life cycle costs of the pump are significantly improved.



### Analogue pressure display

The analogue pressure display is for indicating the pressure on the pressure side of the pump. This enables the operator to determine contamination of the filter strainer easily.



### Digital pressure display

The digital pressure detector records the pressure on the pressure side of the pump. The value is displayed directly on the optional digital display.



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