



**AMCAL**  
INDUSTRIAL PUMP SOLUTIONS

**KSB**  
DATA BOOKLET

## Movitec VCI

### Type Series Booklet



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Type Series Booklet Movitec VCI

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## Centrifugal Pumps

### Multistage High-pressure Immersion Centrifugal Pumps

## Movitec VCI



#### Drive

- Surface-cooled KSB squirrel-cage motor
- Thermal class F to IEC 34-1
- Efficiency class IE3 to IEC 60034-30 ( $\geq 0.75$  kW)
- Enclosure IP55
- Frequency 50 Hz/60 Hz

#### Optional:

- Harting connector, type HAN 10E

#### Bearings

- Plain bearings

#### Shaft seal

- Uncooled, maintenance-free mechanical seal in cartridge design

#### Main applications

- Machine tools
- Industrial washing machines
- Condensate transport

#### Fluids handled

- Condensate
- Cooling lubricants
- Emulsions
- Lyes
- Oil

#### Operating data

**Table 1:** Operating properties

| Characteristic     |          | Value       |
|--------------------|----------|-------------|
| Flow rate          | Q [m³/h] | $\leq 22,5$ |
| Head               | H [m]    | $\leq 249$  |
| Fluid temperature  | T [°C]   | $\geq -10$  |
|                    |          | $\leq +120$ |
| Operating pressure | p [bar]  | $\leq 25$   |

#### Design details

##### Design

- Multistage high-pressure immersion centrifugal pump

##### Optional:

- Blind stages

##### Installation

- Vertical installation

## Designation

**Table 2:** Designation example

| Position                      |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |                |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1                             | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19             | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| M                             | o | v | i | t | e | c | V | C | I  | 0  | 6  | /  | 1  | 2  | -  | 1  | 8  | A              | B  | 1  | 3  | C  | S  | 0  | 7  | 1  | A  | 5  | C  | A  |    |
| See name plate and data sheet |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    | See data sheet |    |    |    |    |    |    |    |    |    |    |    |    |    |

**Table 3:** Designation key

| Position | Code                             | Description                  |
|----------|----------------------------------|------------------------------|
| 1-7      | Type series                      |                              |
|          | Movitec                          |                              |
| 8-9      | Variant                          |                              |
|          | VC                               | Grey cast iron EN-GJL-250    |
|          | V-                               | Stainless steel 304 - 304    |
| 10       | Connection type                  |                              |
|          | I                                | Internal thread              |
| 11-12    | Size                             |                              |
|          | 002                              | 2                            |
|          | ...                              | ...                          |
|          | 015                              | 15                           |
| 14-15    | Number of stages                 |                              |
|          | 01                               | 1                            |
|          | ...                              | ...                          |
|          | 30                               | 30                           |
| 17-18    | Number of blind stages           |                              |
|          | 01                               | 1                            |
|          | ...                              | ...                          |
|          | 30                               | 30                           |
| 19       | Connection standard              |                              |
|          | A                                | Internal thread EN ISO 228-1 |
| 20       | Product generation               |                              |
|          | B                                | Movitec from 2010            |
|          | C                                | Movitec from 2021            |
| 21-22    | Seal code                        |                              |
|          | 51                               | A/ESIC-Q7 EGG/Y10            |
|          | 53                               | B/ESIC-Q7 EGG/Y10-WA         |
|          | 55                               | B/ESIC-Q7 VGG                |
|          | 56                               | B/ESIC-Q7 VGG/Y10            |
|          | 58                               | ESIC-Q7/ESIC-Q7 EGG/Y10-WA   |
|          | 61                               | ESIC-Q7/ESIC-Q7 VGG/Y10      |
| 23       | Mechanical seal design           |                              |
|          | C                                | Cartridge seal               |
| 24       | Drive                            |                              |
|          | 0                                | Without motor                |
|          | 2                                | With PumpDrive 2             |
|          | E                                | With PumpDrive 2 Eco         |
|          | S                                | Standard IEC                 |
| 25-27    | Motor size                       |                              |
|          | 071                              | IEC 071                      |
|          | 080                              | IEC 080                      |
|          | 090                              | IEC 090                      |
|          | 100                              | IEC 100                      |
|          | 112                              | IEC 112                      |
|          | 132                              | IEC 132                      |
|          | 160                              | IEC 160                      |
| 28       | Pressure class                   |                              |
|          | A                                | PN 16 / PN 25                |
|          | B                                | PN 25                        |
| 29       | Frequency, number of motor poles |                              |

| Position | Code                | Description                         |
|----------|---------------------|-------------------------------------|
| 29       | 5                   | 50 Hz, 2-pole                       |
|          | 6                   | 60 Hz, 2-pole                       |
|          | 7                   | 50 Hz, 4-pole                       |
|          | 8                   | 60 Hz, 4-pole                       |
| 30       | Motor specification |                                     |
|          | C                   | 230 / 400 V - IE2                   |
|          | K                   | EXM IEC, Movitec                    |
|          | M                   | 230 V, single-phase AC motor        |
|          | U                   | 230 / 400 V - IE3                   |
|          | V                   | 400 / 690 V - IE3                   |
|          | W                   | 230 / 400 V - IE4/IE5 (KSB SuPremE) |
|          | X                   | 400 / 690 V - IE4/IE5 (KSB SuPremE) |
| 31       | PumpMeter           |                                     |
|          | W                   | Without PumpMeter                   |
| 32       | Design              |                                     |
|          | _1)                 | Standard                            |
|          | X                   | Non-standard (BT3D, BT3)            |

## Materials

**Table 4:** Overview of available materials

| Part No. | Description     | Material                           |
|----------|-----------------|------------------------------------|
| 106      | Suction casing  | EN-GJL-250                         |
| 108      | Stage casing    | 1.4301                             |
| 160      | Discharge cover | 1.4301                             |
| 210      | Shaft           | 1.4057                             |
| 230      | Impeller        | 1.4301                             |
| 341      | Drive lantern   | EN-GJL-250                         |
| 412      | O-ring          | EPDM                               |
| 525      | Spacer ring     | 1.4301                             |
| 529      | Bearing sleeve  | Tungsten carbide / aluminium oxide |
| 905      | Tie bolt        | 1.4057                             |
| 920      | Nut             | 1.4301                             |
| 932      | Circlip         | 1.4571                             |

**Table 5:** Comparison of materials

| EN         | ASTM           |
|------------|----------------|
| EN-GJL-250 | A48 Class 35 B |
| 1.4057     | SS 431         |
| 1.4301     | SS 304         |
| 1.4571     | SS 316Ti       |

<sup>1</sup> Blank

## Coating and preservation

**Table 6:** Coating of pump components

| Component                  | Coating               |
|----------------------------|-----------------------|
| Stainless steel components | No additional coating |
| Cast iron pump casing      | Cataphoretic coating  |
| Cast iron suction casing   | Cataphoretic coating  |

## Product benefits

- Top quality pump thanks to advanced high-precision production technology and durable high-grade materials
- Excellent reliability, enabled by compact, easy-to-replace cartridge seal and automatic return of small amounts of leakage into the tank
- An energy-saving, state-of-the-art pump solution characterised by high efficiency levels, optimum flow passage, the use of high-efficiency motors, and precision engineering of all hydraulic components
- Flexible use due to modular design, optional blind stages and versatile seal materials for a wide variety of applications, as well as numerous motor options
- Easy replacement of competitor products due to comparable dimensions
- High energy efficiency as well as low investment and maintenance costs make for low life cycle costs.

## Product information

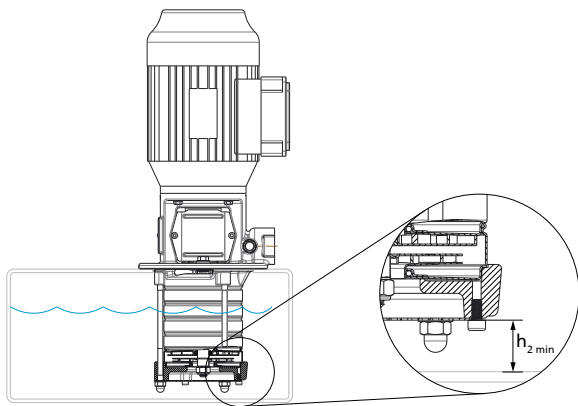
### Product information as per Regulation No. 1907/2006 (REACH)

For information as per European chemicals regulation (EC) No. 1907/2006 (REACH) see <https://www.ksb.com/en-global/company/corporate-responsibility/reach>.

### Selection information

Blind stages can be provided, depending on the immersion depth required.

### Minimum installation height



**Fig. 1:** Minimum installation height

**Table 7:** Minimum installation height ( $h_{2 \min}$ )

| Size | $h_{2 \min}$ |
|------|--------------|
|      | [mm]         |
| 2B   | 25           |
| 4B   | 25           |
| 6B   | 25           |
| 10B  | 40           |
| 15C  | 40           |

### Fluid handled

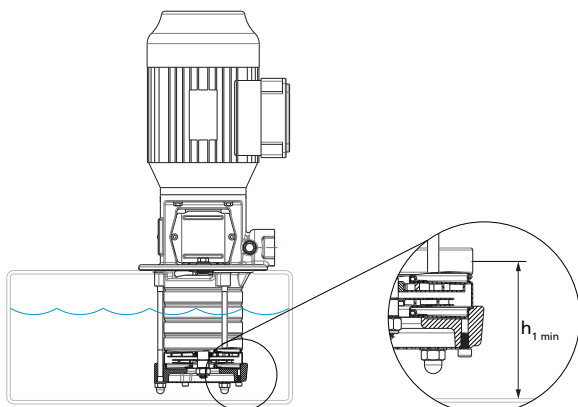
The actual operating conditions must always be checked (concentration, temperature, solids content). Penetration of air into the system must be avoided by all means.

If the fluid handled contains solids such as steel chips or steel chip dust, check the permissible particle concentration with KSB.

### Fluid temperature

Permissible temperature range: -10 °C to +90 °C

### Minimum level of fluid handled

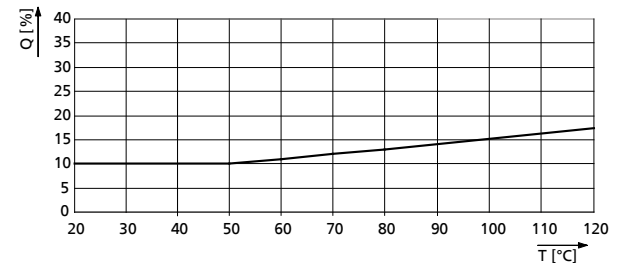


**Fig. 2:** Minimum level of fluid handled

**Table 8:** Minimum level of fluid handled ( $h_{1 \min}$ )

| Size | $h_{1 \min}$ |
|------|--------------|
|      | [mm]         |
| 2B   | 61           |
| 4B   | 61           |
| 6B   | 61           |
| 10B  | 82           |
| 15C  | 82           |

### Minimum flow rate



**Fig. 3:** Minimum flow rate required as a function of fluid temperature at a fluid temperature > +20 °C

**Table 9:** Minimum flow rate ( $Q_{\min}$ ) at a fluid temperature of ≤ 20 °C depending on the frequency

| Size | $Q_{\min}$ |        |
|------|------------|--------|
|      | 50 Hz      | 60 Hz  |
|      | [m³/h]     | [m³/h] |
| 2B   | 0,2        | 0,2    |
| 4B   | 0,4        | 0,5    |
| 6B   | 0,6        | 0,8    |
| 10B  | 1,1        | 1,3    |
| 15C  | 1,6        | 2,3    |

### Permissible fluids

If the operating conditions differ from the data given (e.g. mixed products) or if the fluids handled are not included in the table below, please contact KSB.

## Overview of product features / selection tables

### Overview of fluids handled

The data refer to the chemical resistance of the materials. The relevant regulations / standards governing individual pump applications must be complied with.

If the operating conditions differ from the data given (e.g. mixed products) or if the fluids handled are not included in the table below, please consult us for details.

- **Temperature ranges:**
  - Reference temperature: +20 °C
  - For temperatures <0 °C: consult us.
  - For temperatures > +50 °C: check and observe the vapour pressure of the fluid handled.
  - Max. temperature = +120 °C, unless indicated otherwise.
- Max. concentration = 100 % unless indicated otherwise.
- Mechanical seal silicon carbide / carbon (Q1B): not suitable for fluids containing solid substances. This also applies to fluids which may contain particles developing as a result of salt crystallisation at low fluid temperatures.
- Mechanical seal tungsten carbide / tungsten carbide (U3U3): solids content max. 20 ppm (depending on particle size), with the exception of corrosive fluids. Fluids with a higher solids content are not permitted (ppm = 1 mg/kg).
- Caution: High temperatures will increase corrosion (reference temperature = +20 °C).
- The density and/or viscosity may vary. This leads to different operating conditions and affects the motor rating required.

**Table 10: Symbols key**

| Symbol   | Description                          |
|----------|--------------------------------------|
| <b>x</b> | Standard                             |
| <b>o</b> | Optional                             |
| -        | Version not available / not feasible |

**Table 11: Mechanical seal selection depending on the fluid to be handled**

| Fluid handled                                                |                  |                   | 2-4-6     |    |    |    |    | 10-15 |    |    |    |    |
|--------------------------------------------------------------|------------------|-------------------|-----------|----|----|----|----|-------|----|----|----|----|
| Substance contained                                          | Max. per-centage | T <sub>max.</sub> | Seal code |    |    |    |    |       |    |    |    |    |
|                                                              | [%]              | [°C]              | 50        | 54 | 55 | 60 | 66 | 51    | 53 | 56 | 61 | 66 |
| Alkaline solution, bottle rinsing, max. 2 % sodium hydroxide | ≤ 100            | +90               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Alcohol                                                      |                  |                   |           |    |    |    |    |       |    |    |    |    |
| ▪ Butanol                                                    | ≤ 100            | +60               | ✗         | -  | -  | -  | -  | ✗     | -  | -  | -  | -  |
| ▪ Ethanol                                                    | ≤ 100            | +60               | ✗         | -  | -  | -  | -  | ✗     | -  | -  | -  | -  |
| ▪ Propanol                                                   | ≤ 100            | +80               | ✗         | -  | -  | -  | -  | ✗     | -  | -  | -  | -  |
| Ammonium bicarbonate                                         | ≤ 10             | +40               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Calcium acetate                                              | ≤ 10             | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Water-oil emulsion (95 %, 5 %), free of solids               | ≤ 100            | +80               | -         | -  | ✗  | -  | ✗  | -     | -  | ✗  | -  | ✗  |
| Ethylene glycol base antifreeze, inhibited, closed system    | ≤ 20             | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
|                                                              | ≤ 25             | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
|                                                              | ≤ 30             | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
|                                                              | ≤ 35             | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
|                                                              | ≤ 40             | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
|                                                              | ≤ 45             | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
|                                                              | ≤ 50             | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Glycerine                                                    | ≤ 40             | +80               | ✗         | -  | ✗  | ✗  | -  | ✗     | -  | ✗  | ✗  | -  |
| Potassium hydroxide                                          | ≤ 5              | +40               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Potassium nitrate                                            | ≤ 5              | +30               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Potassium sulphate                                           | ≤ 2              | +20               | o         | -  | ✗  | -  | -  | o     | -  | ✗  | -  | -  |
| Sodium carbonate                                             | ≤ 6              | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Sodium hydroxide                                             | ≤ 5              | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Sodium nitrate                                               | ≤ 10             | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| Sodium sulphate                                              | ≤ 5              | +60               | o         | -  | ✗  | -  | -  | o     | -  | ✗  | -  | -  |
| Oil                                                          |                  |                   |           |    |    |    |    |       |    |    |    |    |
| ▪ Cutting oil                                                | ≤ 100            | +90               | -         | -  | -  | ✗  | -  | -     | -  | -  | ✗  | -  |
| ▪ Peanut oil                                                 | ≤ 100            | +80               | -         | -  | ✗  | o  | -  | -     | -  | ✗  | o  | -  |

| Fluid handled                                                          |                  |                   | 2-4-6     |    |    |    |    | 10-15 |    |    |    |    |
|------------------------------------------------------------------------|------------------|-------------------|-----------|----|----|----|----|-------|----|----|----|----|
| Substance contained                                                    | Max. per-centage | T <sub>max.</sub> | Seal code |    |    |    |    |       |    |    |    |    |
|                                                                        | [%]              | [°C]              | 50        | 54 | 55 | 60 | 66 | 51    | 53 | 56 | 61 | 66 |
| ▪ Linseed oil                                                          | ≤ 100            | +60               | -         | -  | ✗  | o  | -  | -     | -  | ✗  | o  | -  |
| ▪ Corn oil                                                             | ≤ 100            | +80               | -         | -  | ✗  | o  | -  | -     | -  | ✗  | o  | -  |
| ▪ Olive oil                                                            | ≤ 100            | +80               | -         | -  | ✗  | o  | -  | -     | -  | ✗  | o  | -  |
| ▪ Rapeseed oil                                                         | ≤ 100            | +80               | -         | -  | ✗  | o  | -  | -     | -  | ✗  | o  | -  |
| ▪ Soybean oil                                                          | ≤ 100            | +100              | -         | -  | ✗  | o  | -  | -     | -  | ✗  | o  | -  |
| Trisodium phosphate                                                    | ≤ 4              | +80               | -         | -  | o  | ✗  | -  | -     | -  | o  | ✗  | -  |
| Water                                                                  |                  |                   |           |    |    |    |    |       |    |    |    |    |
| ▪ Clean water                                                          | ≤ 100            | +60               | ✗         | ✗  | -  | -  | -  | ✗     | ✗  | -  | -  | -  |
| ▪ Fire-fighting water                                                  | ≤ 100            | +60               | ✗         | ✗  | -  | -  | -  | ✗     | ✗  | -  | -  | -  |
| ▪ Hot water treated in accordance with VdTÜV 1466                      | ≤ 100            | +120              | ✗         | -  | -  | -  | -  | ✗     | -  | -  | -  | -  |
| ▪ Heating water in accordance with VDI 2035                            | ≤ 100            | +100              | ✗         | -  | -  | -  | -  | ✗     | -  | -  | -  | -  |
| ▪ Boiler feed water to VdTÜV 1466                                      | ≤ 100            | +120              | ✗         | o  | -  | -  | -  | ✗     | o  | -  | -  | -  |
| ▪ Condensate treated in acc. with VdTÜV 1466                           | ≤ 100            | +120              | ✗         | -  | -  | -  | -  | ✗     | -  | -  | -  | -  |
| ▪ Vapour condensate (brewery)                                          | ≤ 100            | +120              | ✗         | -  | -  | -  | -  | ✗     | -  | -  | -  | -  |
| ▪ Cooling water                                                        | ≤ 100            | +100              | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| ▪ River water                                                          | ≤ 100            | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| ▪ Surface water                                                        | ≤ 100            | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| ▪ Lake water (fresh water)                                             | ≤ 100            | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| ▪ Dam water                                                            | ≤ 100            | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| ▪ Rinsing water, without particles of oil, acids or lyes               | ≤ 100            | +70               | o         | ✗  | -  | -  | -  | o     | ✗  | -  | -  | -  |
| ▪ Barrier water                                                        | ≤ 100            | +70               | o         | ✗  | -  | -  | -  | o     | ✗  | -  | -  | -  |
| ▪ Rainwater, with strainer                                             | ≥ 20             | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| ▪ Raw water                                                            | ≤ 100            | +60               | o         | -  | -  | -  | -  | o     | -  | -  | -  | -  |
| ▪ Grey water, slightly contaminated water without particles, e.g. sand | ≤ 100            | +60               | -         | -  | -  | -  | -  | -     | -  | -  | -  | -  |
| ▪ Tap water                                                            | ≤ 100            | +60               | o         | ✗  | -  | -  | -  | o     | ✗  | -  | -  | -  |
| ▪ Brewing water                                                        | ≤ 100            | +60               | -         | ✗  | -  | -  | -  | -     | ✗  | -  | -  | -  |
| ▪ Ice water (brewery)                                                  | ≤ 100            | +60               | -         | ✗  | -  | -  | -  | -     | ✗  | -  | -  | -  |
| ▪ Hot water (brewery)                                                  | ≤ 100            | +60               | -         | ✗  | -  | -  | -  | -     | ✗  | -  | -  | -  |
| ▪ Water containing lime                                                | ≤ 100            | +90               | -         | ✗  | -  | -  | -  | -     | ✗  | -  | -  | -  |

## Shaft seal

Table 12: Available mechanical seals

| Seal code | Type      | Material         |            |        |           | Unpres-surised shaft seal | T    |             | Elast-omer material of pump |
|-----------|-----------|------------------|------------|--------|-----------|---------------------------|------|-------------|-----------------------------|
|           |           | Mechanical seal  | Shaft seal |        |           |                           | Min. | Max.        |                             |
|           |           |                  | Rotor      | Stator | Elastomer |                           | [°C] | [°C]        |                             |
| 50        | RMG12-G6  | A Q7 E GG        | Ca         | eSiC   | EPDM      | PN25 (PN18)               | -20  | +120 (+140) | EPDM 559236                 |
| 51        | eRMG12-G6 | A Q7 E GG Y10    | Ca         | eSiC   | EPDM      | PN25 (PN18)               | -20  | +120 (+140) | EPDM                        |
| 53        | eMG12-G6  | B Q7 E GG Y10 WA | Ca         | eSiC   | EPDM      | PN25                      | -20  | +100        | EPDM                        |
| 54        | MG12-G6   | B Q7 E GG WA     | Ca         | eSiC   | EPDM      | PN25                      | -20  | +100        | EPDM                        |
| 55        | RMG12-G6  | B Q7 V GG        | Ca         | eSiC   | FPM       | PN25                      | -20  | +120        | FPM                         |
| 56        | eRMG12-G6 | B Q7 V GG Y10    | Ca         | eSiC   | FPM       | PN25                      | -20  | +120        | FPM                         |
| 60        | RMG12-G6  | Q7 Q7 V GG       | eSiC       | eSiC   | FPM       | PN18                      | -20  | +120        | FPM                         |

| Seal code | Type      | Material        |            |        |           | Unpres-<br>surised<br>shaft<br>seal | T    |      | Elast-<br>omer<br>material<br>of pump |
|-----------|-----------|-----------------|------------|--------|-----------|-------------------------------------|------|------|---------------------------------------|
|           |           | Mechanical seal | Shaft seal |        |           |                                     | Min. | Max. |                                       |
|           |           |                 | Rotor      | Stator | Elastomer |                                     | [°C] | [°C] |                                       |
| 61        | eRMG12-G6 | Q7 Q7 V GG Y10  | eSiC       | eSiC   | FPM       | PN18                                | -20  | +120 | FPM                                   |
| 65        | eRMG12-G6 | U3 U3 V GG Y10  | TuC        | TuC    | FPM       | PN18                                | -20  | +120 | FPM                                   |
| 66        | eMG12-G6  | Q7 Q7 V GG Y10  | eSiC       | eSiC   | FPM       | PN20                                | -20  | +60  | FPM                                   |

**Table 13:** Key to mechanical seal materials

| Description       | Code to EN 12756 | Seal face materials / secondary seals |
|-------------------|------------------|---------------------------------------|
| Primary ring      | A                | Carbon graphite, antimony-impregnated |
|                   | U3               | Tungsten carbide (CrNiMo binder)      |
|                   | eCarb-B          | Carbon graphite, resin-impregnated    |
|                   | eSiC-Q7          | Silicon carbide                       |
| Mating ring       | U3               | Tungsten carbide (CrNiMo binder)      |
|                   | eSiC-Q7          | Silicon carbide                       |
| Elastomer         | E                | EPDM (ethylene propylene rubber)      |
|                   | V                | FPM (fluoroelastomer)                 |
|                   | X4               | HNBR                                  |
| Spring            | G                | CrNiMo steel                          |
| Other metal parts | G                | CrNiMo steel                          |

**Technical data**
**Movitec VCI B/C, cartridge mechanical seal 56, n = 2900 rpm**

56 = mechanical seal code B/ESIC-Q7 VGG/Y10

**Table 14:** Technical data, 50 Hz

| Size       | P <sub>N</sub>                 | I <sub>N</sub> | I <sub>N</sub> | Version with seal code 56 (B/ESIC-Q7 VGG/Y10) |      |
|------------|--------------------------------|----------------|----------------|-----------------------------------------------|------|
|            | P <sub>N</sub> ≥ 0,75 kW = IE3 | 3~230 / 400 V  | 3~400 / 690 V  |                                               |      |
|            | [kW]                           | [A]            | [A]            | Mat. No.                                      | [kg] |
| 02/02-02 B | 0,37                           | 1,64/0,94      | -              | 05267343                                      | 14.1 |
| 02/03-03 B | 0,37                           | 1,64/0,94      | -              | 05267344                                      | 14.5 |
| 02/04-04 B | 0,37                           | 1,64/0,94      | -              | 05267345                                      | 14.8 |
| 02/05-05 B | 0,37                           | 1,64/0,94      | -              | 05267346                                      | 15.2 |
| 02/06-06 B | 0,55                           | 2,31/1,33      | -              | 05267347                                      | 16.3 |
| 02/07-07 B | 0,55                           | 2,31/1,33      | -              | 05267348                                      | 16.7 |
| 02/08-08 B | 0,55                           | 2,31/1,33      | -              | 05267349                                      | 17   |
| 02/09-09 B | 0,75                           | 2,92/1,68      | -              | 05267350                                      | 18.6 |
| 02/10-10 B | 0,75                           | 2,92/1,68      | -              | 48021266                                      | 19   |
| 02/11-11 B | 1,10                           | 4,17/2,40      | -              | 48021267                                      | 21.9 |
| 02/12-12 B | 1,10                           | 4,17/2,40      | -              | 48021268                                      | 22.2 |
| 02/14-14 B | 1,10                           | 4,17/2,40      | -              | 48021269                                      | 22.9 |
| 02/16-16 B | 1,50                           | 5,08/2,92      | -              | 48021270                                      | 30.3 |
| 02/18-18 B | 1,50                           | 5,08/2,92      | -              | 48021271                                      | 31   |
| 02/20-20 B | 1,50                           | 5,08/2,92      | -              | 48021272                                      | 31.7 |
| 02/22-22 B | 2,20                           | 7,22/4,15      | -              | 48021273                                      | 34.7 |
| 02/24-24 B | 2,20                           | 7,22/4,15      | -              | 48021274                                      | 35.4 |
| 02/26-26 B | 2,20                           | 7,22/4,15      | -              | 48021275                                      | 36.2 |
| 02/28-28 B | 2,20                           | 7,22/4,15      | -              | 48021657                                      | 36.9 |
| 02/30-30 B | 2,20                           | 7,22/4,15      | -              | 48021658                                      | 37.6 |
| 04/02-02 B | 0,37                           | 1,64/0,94      | -              | 05267787                                      | 14   |
| 04/03-03 B | 0,55                           | 2,31/1,33      | -              | 05267788                                      | 15.1 |
| 04/04-04 B | 0,55                           | 2,31/1,33      | -              | 05267789                                      | 15.4 |
| 04/05-05 B | 0,75                           | 2,92/1,68      | -              | 05267790                                      | 17.1 |
| 04/06-06 B | 1,10                           | 4,17/2,40      | -              | 48021344                                      | 19.9 |
| 04/07-07 B | 1,10                           | 4,17/2,40      | -              | 48021345                                      | 20.2 |
| 04/08-08 B | 1,50                           | 5,08/2,92      | -              | 48021346                                      | 27.2 |
| 04/09-09 B | 1,50                           | 5,08/2,92      | -              | 48021347                                      | 27.5 |
| 04/10-10 B | 1,50                           | 5,08/2,92      | -              | 48021348                                      | 27.8 |
| 04/11-11 B | 2,20                           | 7,22/4,15      | -              | 48021349                                      | 30.4 |
| 04/12-12 B | 2,20                           | 7,22/4,15      | -              | 48021350                                      | 30.7 |
| 04/14-14 B | 2,20                           | 7,22/4,15      | -              | 48021351                                      | 31.4 |
| 04/16-16 B | 3,00                           | -              | 5,59/3,24      | 48021352                                      | 39.7 |
| 04/18-18 B | 3,00                           | -              | 5,59/3,24      | 48021353                                      | 40.3 |
| 04/20-20 B | 3,00                           | -              | 5,59/3,24      | 48021354                                      | 41   |
| 04/22-22 B | 4,00                           | -              | 7,45/4,32      | 48021355                                      | 45.1 |
| 04/24-24 B | 4,00                           | -              | 7,45/4,32      | 48021356                                      | 45.7 |
| 04/26-26 B | 4,00                           | -              | 7,45/4,32      | 48021357                                      | 46.4 |
| 04/26-28 B | 4,00                           | -              | 7,45/4,32      | 48021358                                      | 46.7 |
| 04/26-30 B | 4,00                           | -              | 7,45/4,32      | 48021359                                      | 47   |
| 06/02-02 B | 0,37                           | 1,64/0,94      | -              | 05268213                                      | 14.1 |
| 06/03-03 B | 0,75                           | 2,92/1,68      | -              | 05268214                                      | 16.6 |
| 06/04-04 B | 1,10                           | 4,17/2,40      | -              | 48021433                                      | 19.4 |
| 06/05-05 B | 1,10                           | 4,17/2,40      | -              | 48021434                                      | 19.8 |
| 06/06-06 B | 1,50                           | 5,08/2,92      | -              | 05268216                                      | 26.8 |
| 06/07-07 B | 1,50                           | 5,08/2,92      | -              | 48021435                                      | 27.2 |
| 06/08-08 B | 2,20                           | 7,22/4,15      | -              | 48021436                                      | 29.9 |
| 06/09-09 B | 2,20                           | 7,22/4,15      | -              | 48021437                                      | 30.2 |
| 06/10-10 B | 2,20                           | 7,22/4,15      | -              | 48021438                                      | 30.6 |
| 06/11-11 B | 3,00                           | -              | 5,59/3,24      | 48021439                                      | 38.7 |
| 06/12-12 B | 3,00                           | -              | 5,59/3,24      | 48021440                                      | 39   |

| Size       | P <sub>N</sub>                 | I <sub>N</sub> | I <sub>N</sub> | Version with seal code 56 (B/ESIC-Q7 VGG/Y10) |       |
|------------|--------------------------------|----------------|----------------|-----------------------------------------------|-------|
|            | P <sub>N</sub> ≥ 0,75 kW = IE3 | 3~230 / 400 V  | 3~400 / 690 V  |                                               |       |
|            | [kW]                           | [A]            | [A]            | Mat. No.                                      | [kg]  |
| 06/14-14 B | 3,00                           | -              | 5,59/3,24      | 48021441                                      | 39.7  |
| 06/16-16 B | 4,00                           | -              | 7,45/4,32      | 48021442                                      | 43.9  |
| 06/18-18 B | 4,00                           | -              | 7,45/4,32      | 48021443                                      | 44.6  |
| 06/20-20 B | 5,50                           | -              | 10,00/5,80     | 48021444                                      | 70.1  |
| 06/22-22 B | 5,50                           | -              | 10,00/5,80     | 48021445                                      | 70.8  |
| 06/24-24 B | 5,50                           | -              | 10,00/5,80     | 05268217                                      | 71.6  |
| 06/26-26 B | 5,50                           | -              | 10,00/5,80     | 05268218                                      | 72.3  |
| 06/28-28 B | 5,50                           | -              | 10,00/5,80     | 48021446                                      | 72.6  |
| 06/26-30 B | 5,50                           | -              | 10,00/5,80     | 48021447                                      | 73    |
| 10/01-02 B | 0,75                           | 2,92/1,68      | -              | 48021179                                      | 21.1  |
| 10/02-02 B | 0,75                           | 2,92/1,68      | -              | 48021180                                      | 21.5  |
| 10/03-03 B | 1,10                           | 4,17/2,40      | -              | 05268554                                      | 24.6  |
| 10/04-04 B | 1,50                           | 5,08/2,92      | -              | 48021181                                      | 32.5  |
| 10/05-05 B | 2,20                           | 7,22/4,15      | -              | 48021182                                      | 35.4  |
| 10/06-06 B | 2,20                           | 7,22/4,15      | -              | 48021183                                      | 36.1  |
| 10/07-07 B | 3,00                           | -              | 5,59/3,24      | 48021184                                      | 44.5  |
| 10/08-08 B | 3,00                           | -              | 5,59/3,24      | 48021185                                      | 45.2  |
| 10/09-09 B | 4,00                           | -              | 7,45/4,32      | 48021186                                      | 49.3  |
| 10/10-10 B | 4,00                           | -              | 7,45/4,32      | 48021187                                      | 50    |
| 10/11-11 B | 4,00                           | -              | 7,45/4,32      | 48021188                                      | 50.7  |
| 10/13-13 B | 5,50                           | -              | 10,00/5,80     | 48021189                                      | 77.8  |
| 10/15-15 B | 5,50                           | -              | 10,00/5,80     | 48021190                                      | 79.1  |
| 10/17-17 B | 7,50                           | -              | 13,40/7,74     | 48021659                                      | 86    |
| 10/19-19 B | 7,50                           | -              | 13,40/7,74     | 48021660                                      | 37.4  |
| 10/21-21 B | 7,50                           | -              | 13,40/7,74     | 48021661                                      | 88.7  |
| 15/01-02 C | 1,10                           | 4,17/2,40      | -              | 05272003                                      | 24.8  |
| 15/02-02 C | 2,20                           | 7,50/4,30      | -              | 05272004                                      | 34.7  |
| 15/03-03 C | 3,00                           | -              | 5,80/3,30      | 05272005                                      | 43    |
| 15/04-04 C | 4,00                           | -              | 12,80/7,40     | 05272006                                      | 53.4  |
| 15/05-05 C | 5,50                           | -              | 17,30/10,0     | 05272007                                      | 94.2  |
| 15/06-06 C | 5,50                           | -              | 23,0/13,30     | 05272008                                      | 99.7  |
| 15/07-07 C | 7,50                           | -              | 23,0/13,30     | 05272009                                      | 97.4  |
| 15/08-08 C | 11,00                          | -              | 33,40/19,30    | 05272010                                      | 158.5 |
| 15/09-09 C | 11,00                          | -              | 33,40/19,30    | 05272011                                      | 159.9 |
| 15/10-10 C | 11,00                          | -              | 33,40/19,30    | 05272012                                      | 156.3 |
| 15/11-11 C | 11,00                          | -              | 33,40/19,30    | 05272013                                      | 162.5 |
| 15/13-13 C | 15,00                          | -              | 45,40/26,20    | 05272014                                      | 175.3 |
| 15/15-15 C | 15,00                          | -              | 45,40/26,20    | 05272015                                      | 178.6 |
| 15/17-17 C | 18,50                          | -              | 55,60/32,10    | 05272016                                      | 191.3 |

**Movitec VCI B/C, cartridge mechanical seal 56, n = 3500 rpm**

56 = mechanical seal code B/ESIC-Q7 VGG/Y10

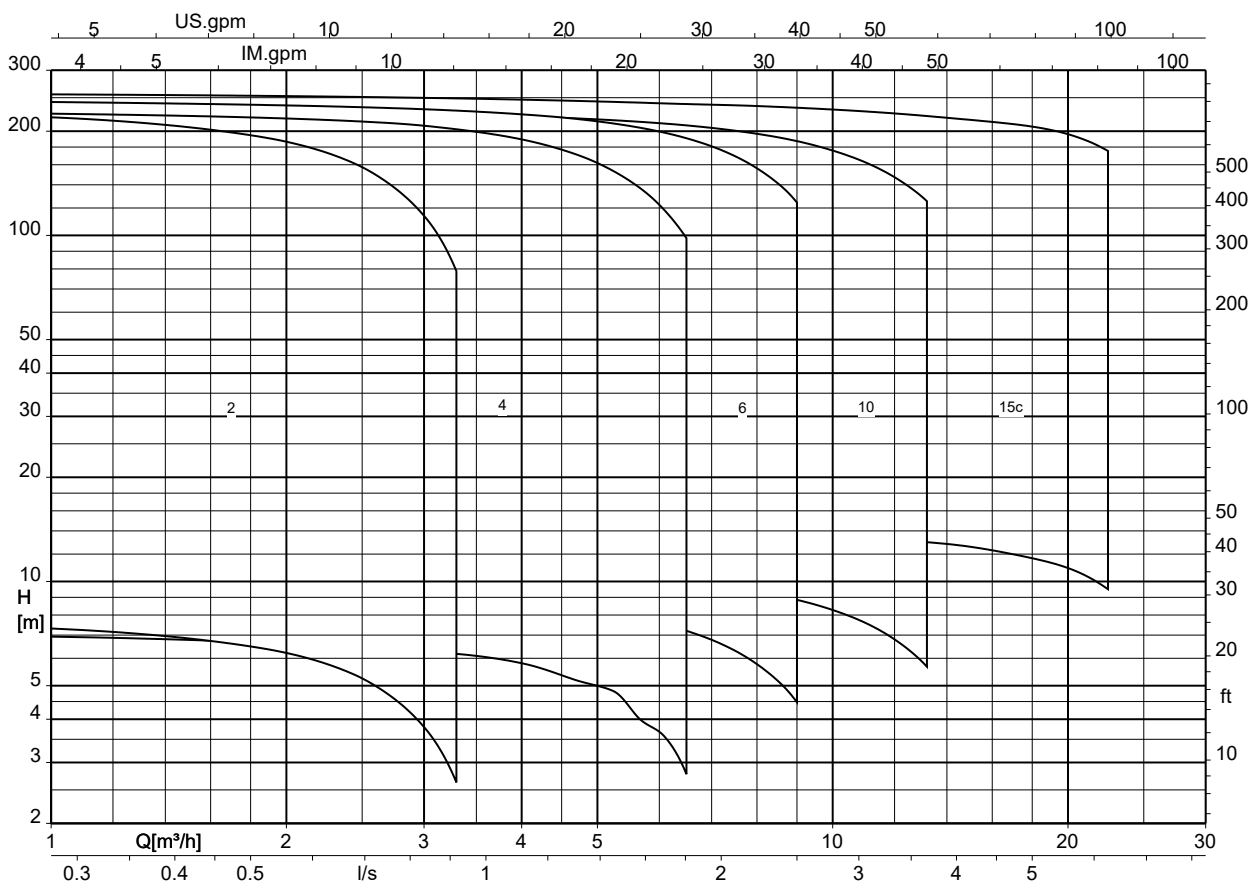
**Table 15:** Technical data, 60 Hz

| Size       | P <sub>N</sub>                 | I <sub>N</sub> | Version with seal code 56 (B/ESIC-Q7 VGG/Y10) |      |
|------------|--------------------------------|----------------|-----------------------------------------------|------|
|            | P <sub>N</sub> ≥ 0,75 kW = IE3 | 3~230 / 400 V  | Mat. No.                                      | [kg] |
|            | [kW]                           | [A]            |                                               |      |
| 02/02-02 B | 0,37                           | 1,54/0,89      | 05267351                                      | 14.1 |
| 02/03-03 B | 0,37                           | 1,54/0,89      | 05267352                                      | 14.5 |
| 02/04-04 B | 0,55                           | 2,29/1,32      | 05267353                                      | 15.6 |
| 02/05-05 B | 0,75                           | 2,87/1,65      | 48021276                                      | 17.3 |
| 02/06-06 B | 0,75                           | 2,87/1,65      | 48021277                                      | 17.6 |
| 02/07-07 B | 1,10                           | 4,11/2,36      | 48021278                                      | 20.5 |
| 02/08-08 B | 1,10                           | 4,11/2,36      | 48021279                                      | 20.8 |
| 02/09-09 B | 1,10                           | 4,11/2,36      | 48021280                                      | 21.1 |
| 02/10-10 B | 1,50                           | 5,01/2,88      | 48021281                                      | 28.2 |
| 02/11-11 B | 1,50                           | 5,01/2,88      | 48021282                                      | 28.6 |
| 02/12-12 B | 1,50                           | 5,01/2,88      | 48021283                                      | 28.9 |
| 02/14-14 B | 2,20                           | 7,12/4,09      | 48021284                                      | 31.9 |
| 02/16-16 B | 2,20                           | 7,12/4,09      | 48021285                                      | 32.8 |
| 02/18-18 B | 2,20                           | 7,12/4,09      | 48021286                                      | 33.3 |
| 02/20-20 B | 3,00                           | 9,57/5,51      | 48021287                                      | 41.7 |
| 02/22-22 B | 3,00                           | 9,57/5,51      | 48021288                                      | 42.5 |
| 02/22-24 B | 3,00                           | 9,57/5,51      | 48021289                                      | 42.8 |
| 02/22-26 B | 3,00                           | 9,57/5,51      | 48021290                                      | 43.1 |
| 02/22-28 B | 3,00                           | 9,57/5,51      | 48021291                                      | 43.5 |
| 02/22-30 B | 3,00                           | 9,57/5,51      | 48021292                                      | 43.8 |
| 04/02-02 B | 0,55                           | 2,29/1,32      | 05267791                                      | 14.8 |
| 04/03-03 B | 0,75                           | 2,87/1,65      | 48021360                                      | 16.4 |
| 04/04-04 B | 1,10                           | 4,11/2,36      | 48021361                                      | 19.2 |
| 04/05-05 B | 1,50                           | 5,01/2,88      | 48021362                                      | 26.2 |
| 04/06-06 B | 1,50                           | 5,01/2,88      | 48021363                                      | 26.6 |
| 04/07-07 B | 2,20                           | 7,12/4,09      | 48021364                                      | 29.2 |
| 04/08-08 B | 2,20                           | 7,12/4,09      | 48021365                                      | 29.5 |
| 04/09-09 B | 3,00                           | 9,57/5,51      | 48021366                                      | 37.5 |
| 04/10-10 B | 3,00                           | 9,57/5,51      | 48021367                                      | 37.8 |
| 04/11-11 B | 3,00                           | 9,57/5,51      | 48021368                                      | 38.2 |
| 04/12-12 B | 4,00                           | 12,80/7,34     | 48021369                                      | 41.8 |
| 04/14-14 B | 4,00                           | 12,80/7,34     | 48021370                                      | 42.4 |
| 04/16-16 B | 5,50                           | 17,10/9,86     | 48021371                                      | 68   |
| 04/18-18 B | 5,50                           | 17,10/9,86     | 48021372                                      | 68.6 |
| 04/18-20 B | 5,50                           | 17,10/9,86     | 48021373                                      | 68.9 |
| 04/18-22 B | 5,50                           | 17,10/9,86     | 48021374                                      | 69.2 |
| 04/18-24 B | 5,50                           | 17,10/9,86     | 48021375                                      | 69.6 |
| 04/18-26 B | 5,50                           | 17,10/9,86     | 48021376                                      | 69.7 |
| 04/18-28 B | 5,50                           | 17,10/9,86     | 48021377                                      | 70.2 |
| 04/18-30 B | 5,50                           | 17,10/9,86     | 48021378                                      | 70.5 |
| 06/02-02 B | 0,75                           | 2,87/1,65      | 48021448                                      | 16.2 |
| 06/03-03 B | 1,10                           | 4,11/2,36      | 48021449                                      | 19.1 |
| 06/04-04 B | 1,50                           | 5,01/2,88      | 48021450                                      | 26.1 |
| 06/05-05 B | 2,20                           | 7,12/4,09      | 48021451                                      | 28.8 |
| 06/06-06 B | 2,20                           | 7,12/4,09      | 48021452                                      | 29.1 |
| 06/07-07 B | 3,00                           | 9,57/5,51      | 48021453                                      | 37.3 |
| 06/08-08 B | 3,00                           | 9,57/5,51      | 48021454                                      | 37.6 |
| 06/09-09 B | 4,00                           | 12,80/7,34     | 48021455                                      | 41.3 |
| 06/10-10 B | 4,00                           | 12,80/7,34     | 48021456                                      | 41.6 |
| 06/11-11 B | 4,00                           | 12,80/7,34     | 48021457                                      | 42   |
| 06/12-12 B | 5,50                           | 17,10/9,86     | 48021458                                      | 67.3 |
| 06/14-14 B | 5,50                           | 17,10/9,86     | 48021459                                      | 68   |
| 06/16-16 B | 7,50                           | 22,90/13,20    | 48021460                                      | 74.2 |

| Size       | P <sub>N</sub>                 | I <sub>N</sub> | Version with seal code 56 (B/ESIC-Q7 VGG/Y10) |       |
|------------|--------------------------------|----------------|-----------------------------------------------|-------|
|            | P <sub>N</sub> ≥ 0,75 kW = IE3 | 3~230 / 400 V  |                                               |       |
|            | [kW]                           | [A]            | Mat. No.                                      | [kg]  |
| 06/18-18 B | 7,50                           | 22,90/13,20    | 48021461                                      | 74.9  |
| 06/18-20 B | 7,50                           | 22,90/13,20    | 48021462                                      | 75.3  |
| 06/18-22 B | 7,50                           | 22,90/13,20    | 48021463                                      | 75.6  |
| 06/18-24 B | 7,50                           | 22,90/13,20    | 48021464                                      | 76    |
| 06/18-26 B | 7,50                           | 22,90/13,20    | 48021465                                      | 76.3  |
| 06/18-28 B | 7,50                           | 22,90/13,20    | 48021466                                      | 76.6  |
| 06/18-30 B | 7,50                           | 22,90/13,20    | 48021467                                      | 77    |
| 10/01-02 B | 0,75                           | 2,87/1,65      | 48021191                                      | 21.1  |
| 10/02-02 B | 1,50                           | 5,01/2,88      | 48021192                                      | 31.1  |
| 10/03-03 B | 2,20                           | 7,12/4,09      | 48021193                                      | 34.1  |
| 10/04-04 B | 3,00                           | 9,57/5,51      | 48021194                                      | 42.5  |
| 10/05-05 B | 4,00                           | 12,80/7,34     | 48021195                                      | 43.2  |
| 10/06-06 B | 4,00                           | 12,80/7,34     | 48021196                                      | 47.2  |
| 10/07-07 B | 5,50                           | 17,10/9,86     | 48021197                                      | 73.7  |
| 10/08-08 B | 5,50                           | 17,10/9,86     | 48021198                                      | 74.4  |
| 10/09-09 B | 7,50                           | 22,90/13,20    | 48021199                                      | 80.6  |
| 10/10-10 B | 7,50                           | 22,90/13,20    | 48021200                                      | 81.3  |
| 10/11-11 B | 7,50                           | 22,90/13,20    | 48021201                                      | 81.9  |
| 10/13-13 B | 11,00                          | 33,20/19,10    | 48021202                                      | 134   |
| 10/15-15 B | 11,00                          | 33,20/19,10    | 48021203                                      | 135.3 |
| 10/15-17 B | 11,00                          | 33,20/19,10    | 48021204                                      | 136.1 |
| 10/15-19 B | 11,00                          | 33,20/19,10    | 48021205                                      | 136.9 |
| 10/15-21 B | 11,00                          | 33,20/19,10    | 48021206                                      | 137.7 |
| 15/01-02 C | 2,20                           | 7,10/4,10      | 05272017                                      | 34.9  |
| 15/02-02 C | 4,00                           | 12,50/7,20     | 05272018                                      | 50.9  |
| 15/03-03 C | 5,50                           | 17,0/9,80      | 05272020                                      | 82.7  |
| 15/04-04 C | 7,50                           | 22,50/13,0     | 05272022                                      | 84.1  |
| 15/05-05 C | 11,00                          | 32,90/19,0     | 05272024                                      | 154.8 |
| 15/06-06 C | 11,00                          | 32,90/19,0     | 05272026                                      | 156.2 |
| 15/07-07 C | 15,00                          | 44,30/25,60    | 05272028                                      | 168.1 |
| 15/08-08 C | 15,00                          | 44,30/25,60    | 05272030                                      | 170.4 |
| 15/09-09 C | 15,00                          | 44,30/25,60    | 05272032                                      | 171   |
| 15/10-10 C | 18,50                          | 54,60/31,50    | 05272034                                      | 182.3 |
| 15/11-11 C | 18,50                          | 54,60/31,50    | 05272036                                      | 183.7 |

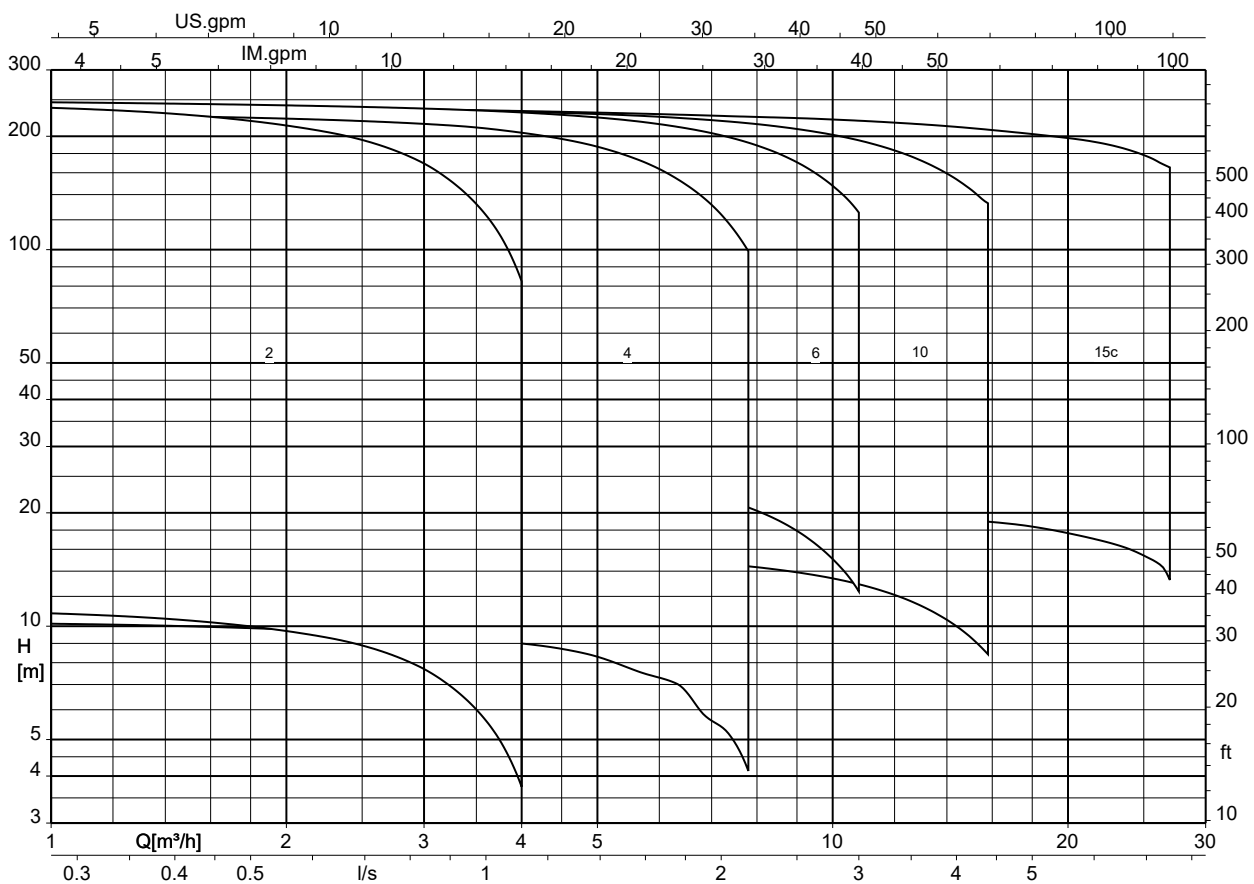
# Selection chart

Movitec VCI, n = 2900 rpm



1798.54/10-EN

Movitec VCI, n = 3500 rpm



# Characteristic curves

$n = 2900 \text{ rpm}$

Movitec VCI 2B,  $n = 2900 \text{ rpm}$

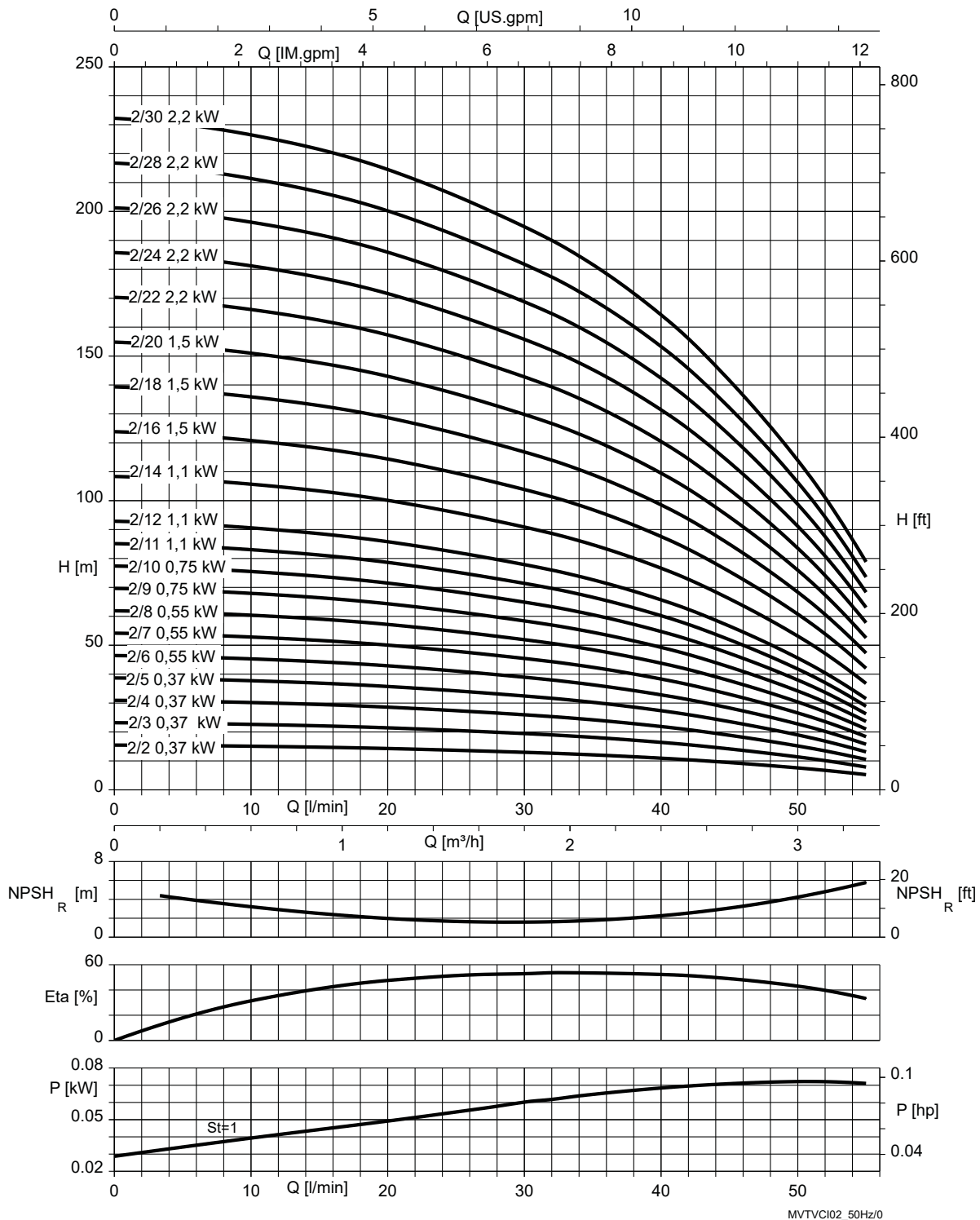


Fig. 4:  $\rho = 1000 \text{ kg/m}^3$

St = 1 P per stage

1798.54/10-EN

Movitec VCI 4B, n = 2900 rpm

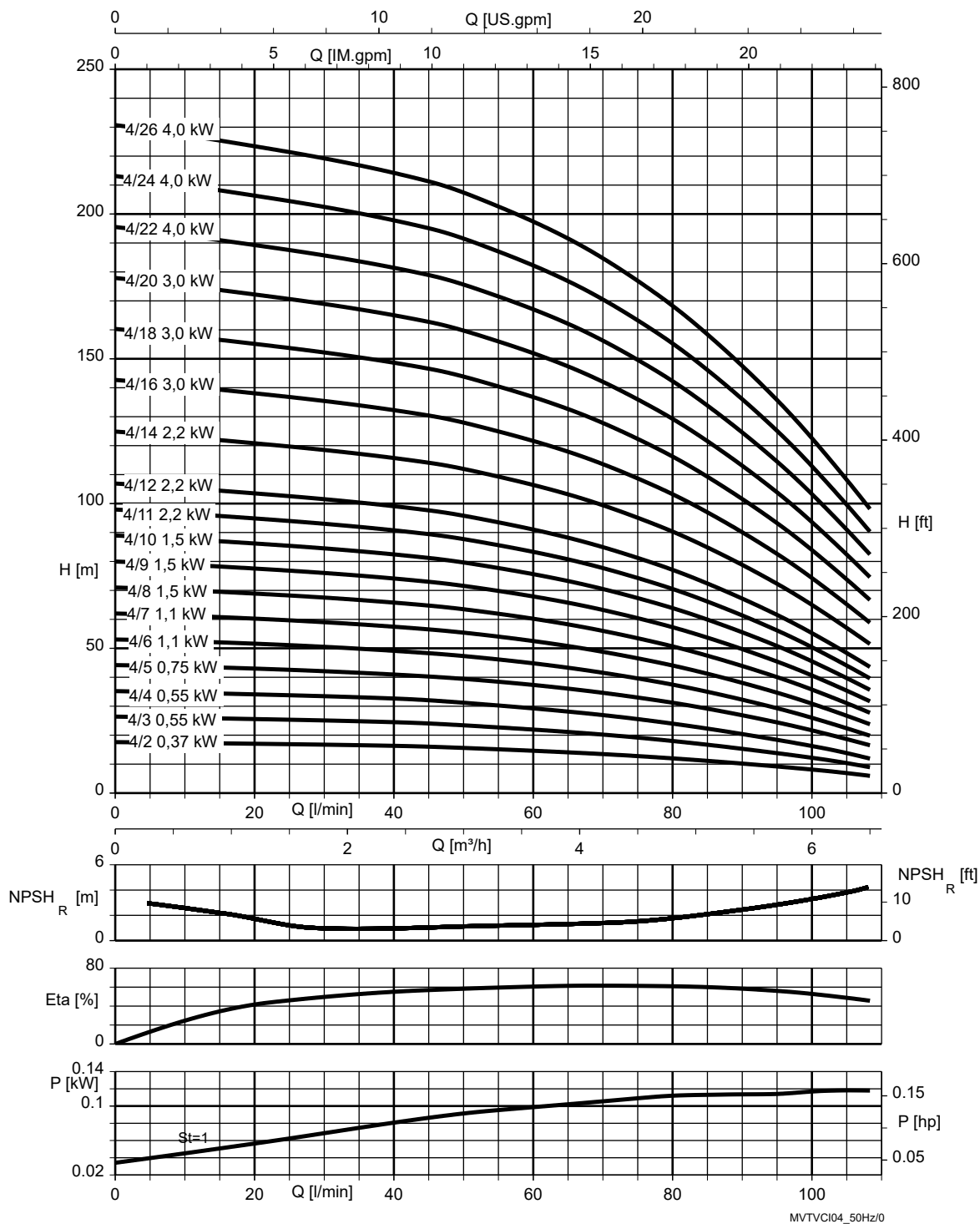


Fig. 5:  $\rho = 1000 \text{ kg/m}^3$

St = 1 | P per stage

Movitec VCI 6B, n = 2900 rpm

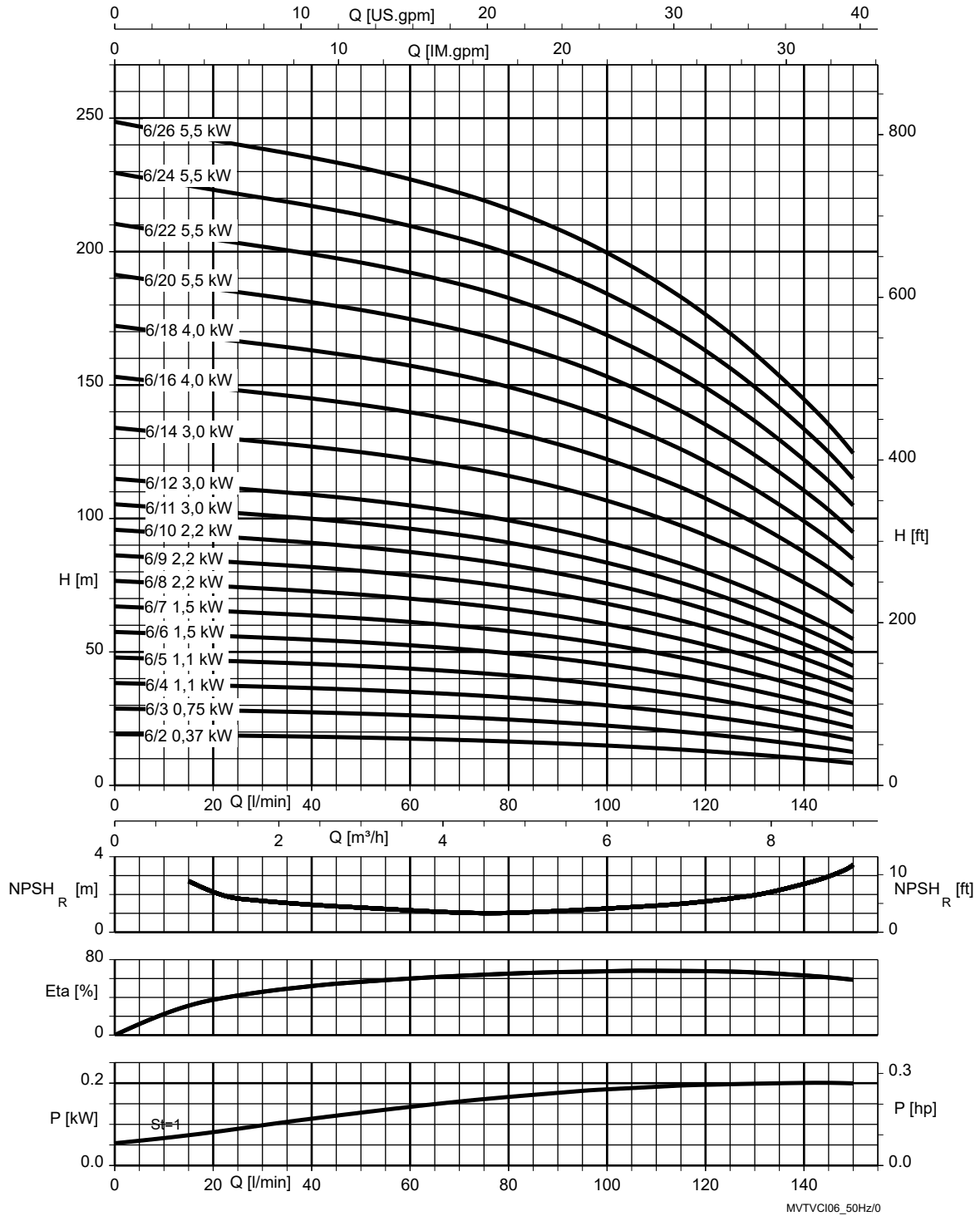


Fig. 6:  $\rho = 1000 \text{ kg/m}^3$

St = 1 | P per stage

Movitec VCI 10B, n = 2900 rpm

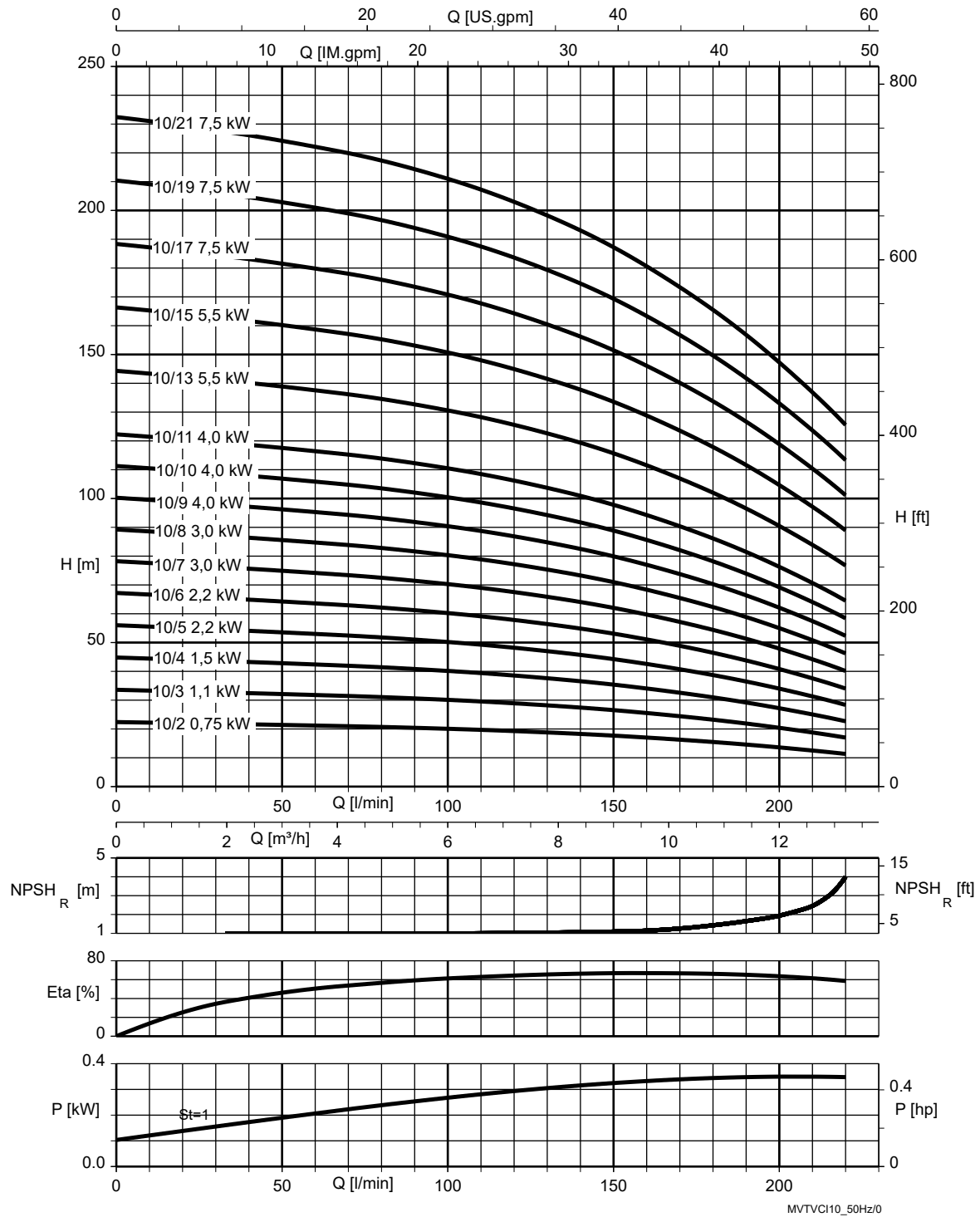


Fig. 7:  $\rho = 1000 \text{ kg/m}^3$

St = 1 | P per stage

Movitec VCI 15C, n = 2900 rpm

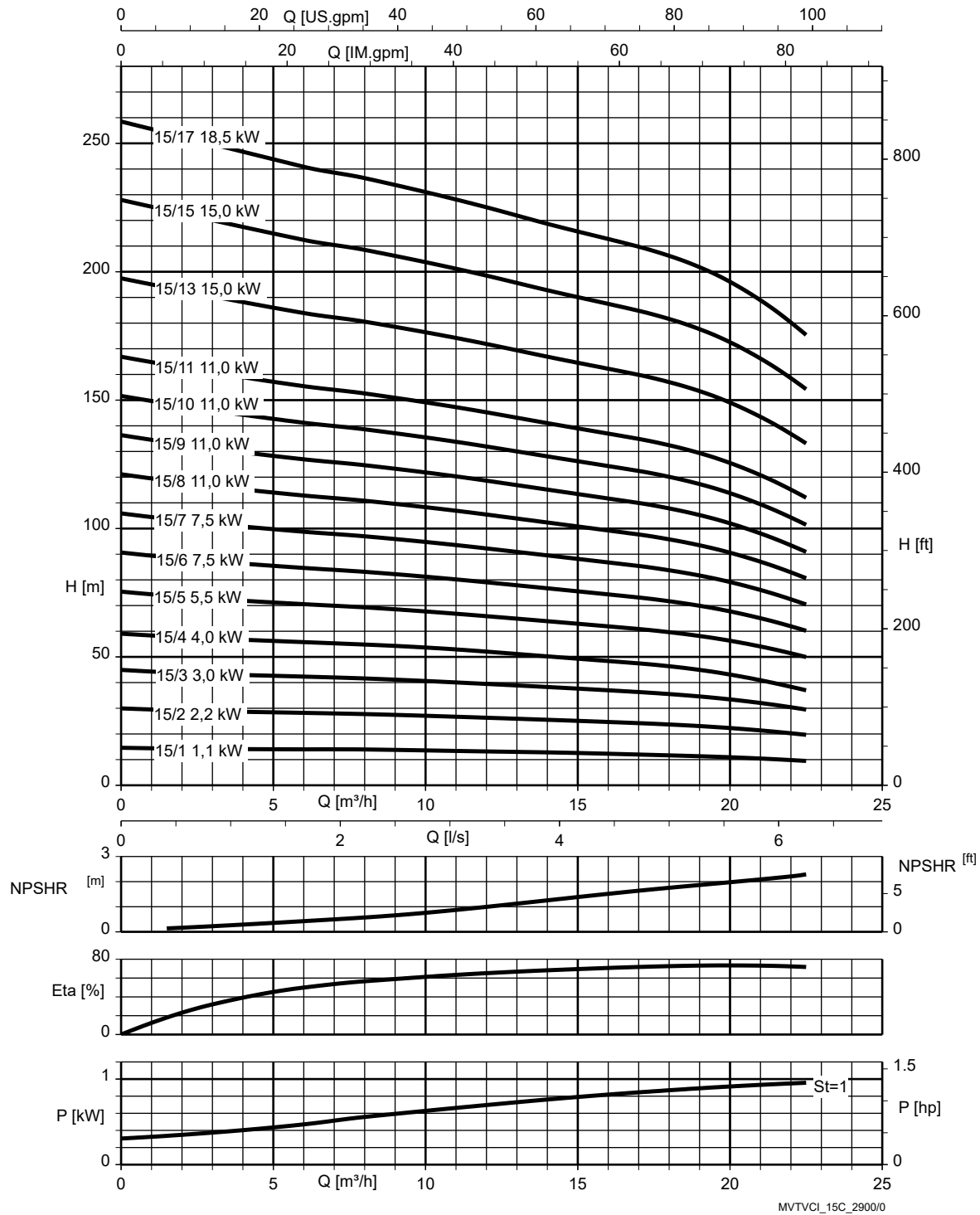


Fig. 8:  $\rho = 1000 \text{ kg/m}^3$

St = 1 | P per stage

$n = 3500 \text{ rpm}$

Movitec VCI 2B,  $n = 3500 \text{ rpm}$

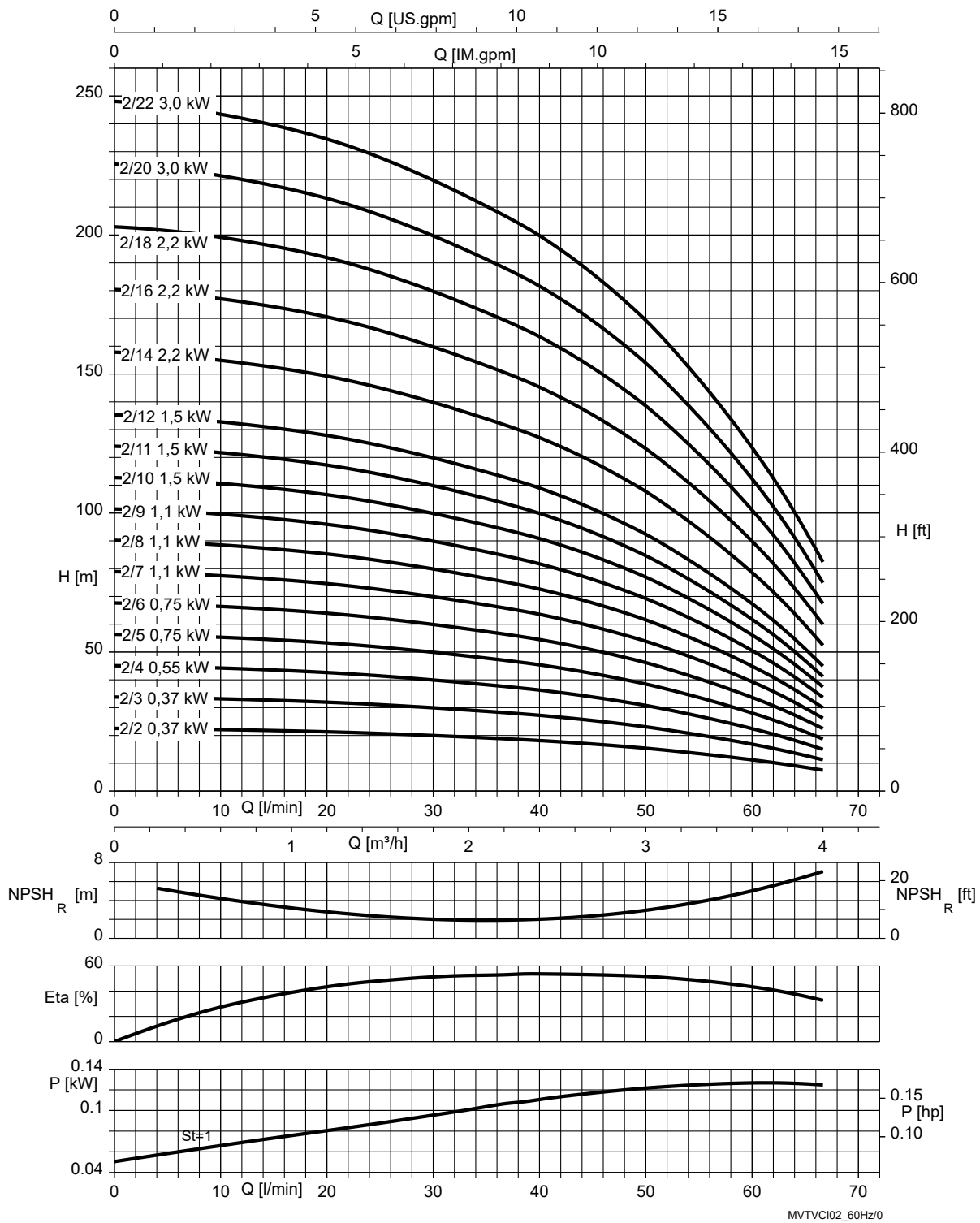


Fig. 9:  $\rho = 1000 \text{ kg/m}^3$

St = 1 P per stage

Movitec VCI 4B, n = 3500 rpm

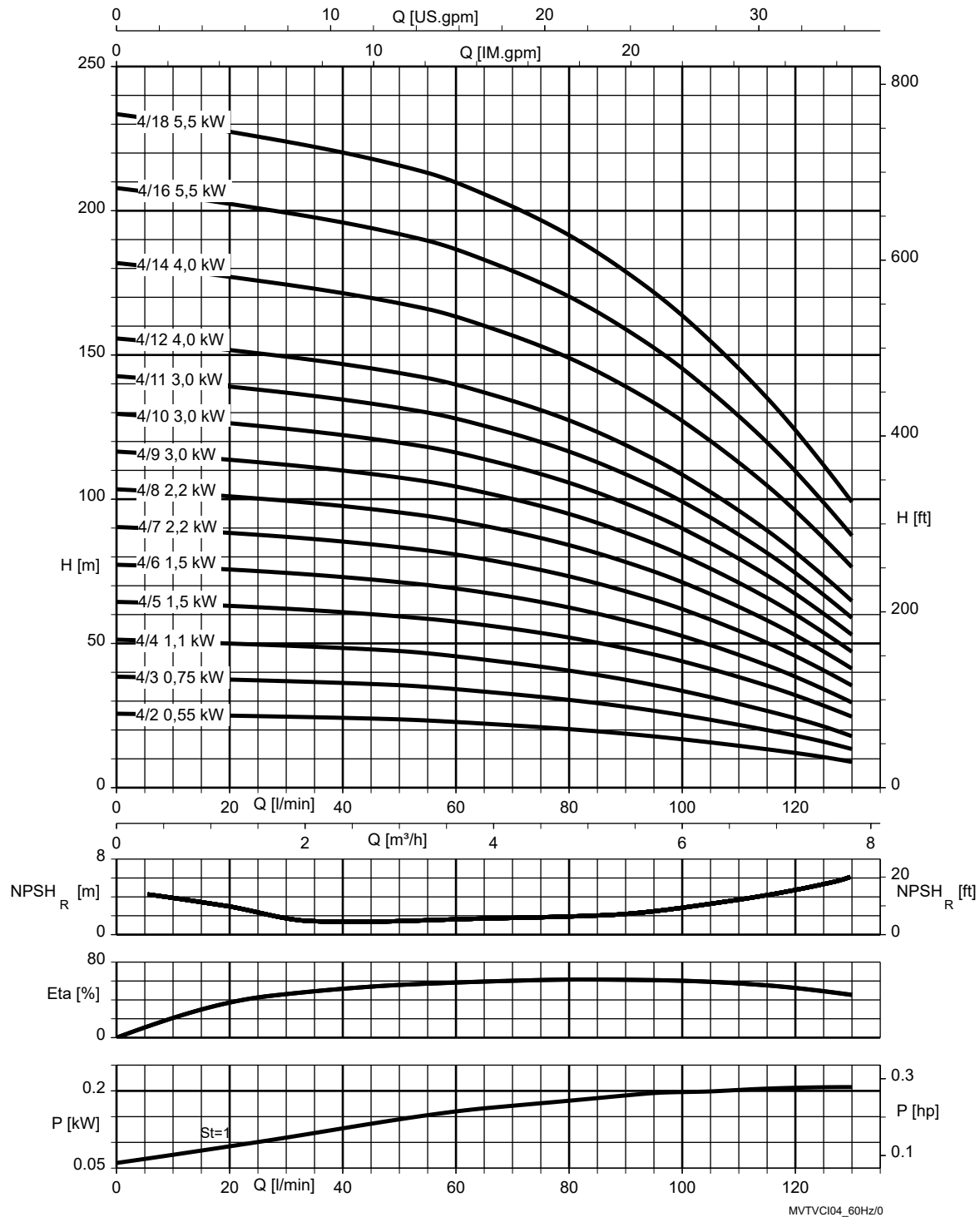


Fig. 10:  $\rho = 1000 \text{ kg/m}^3$

St = 1 | P per stage

Movitec VCI 6B, n = 3500 rpm

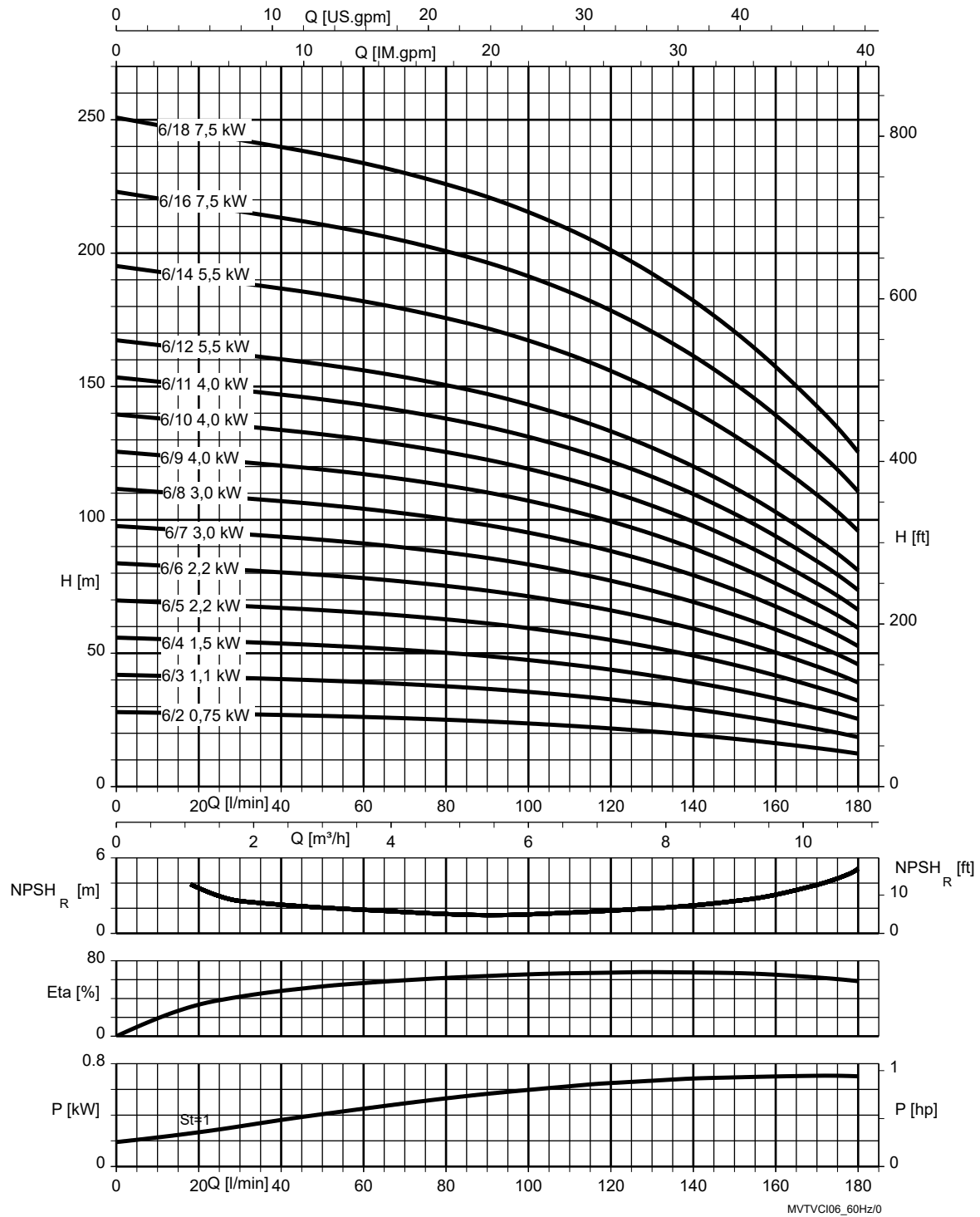


Fig. 11:  $\rho = 1000 \text{ kg/m}^3$

St = 1 P per stage

Movitec VCI 10B, n = 3500 rpm

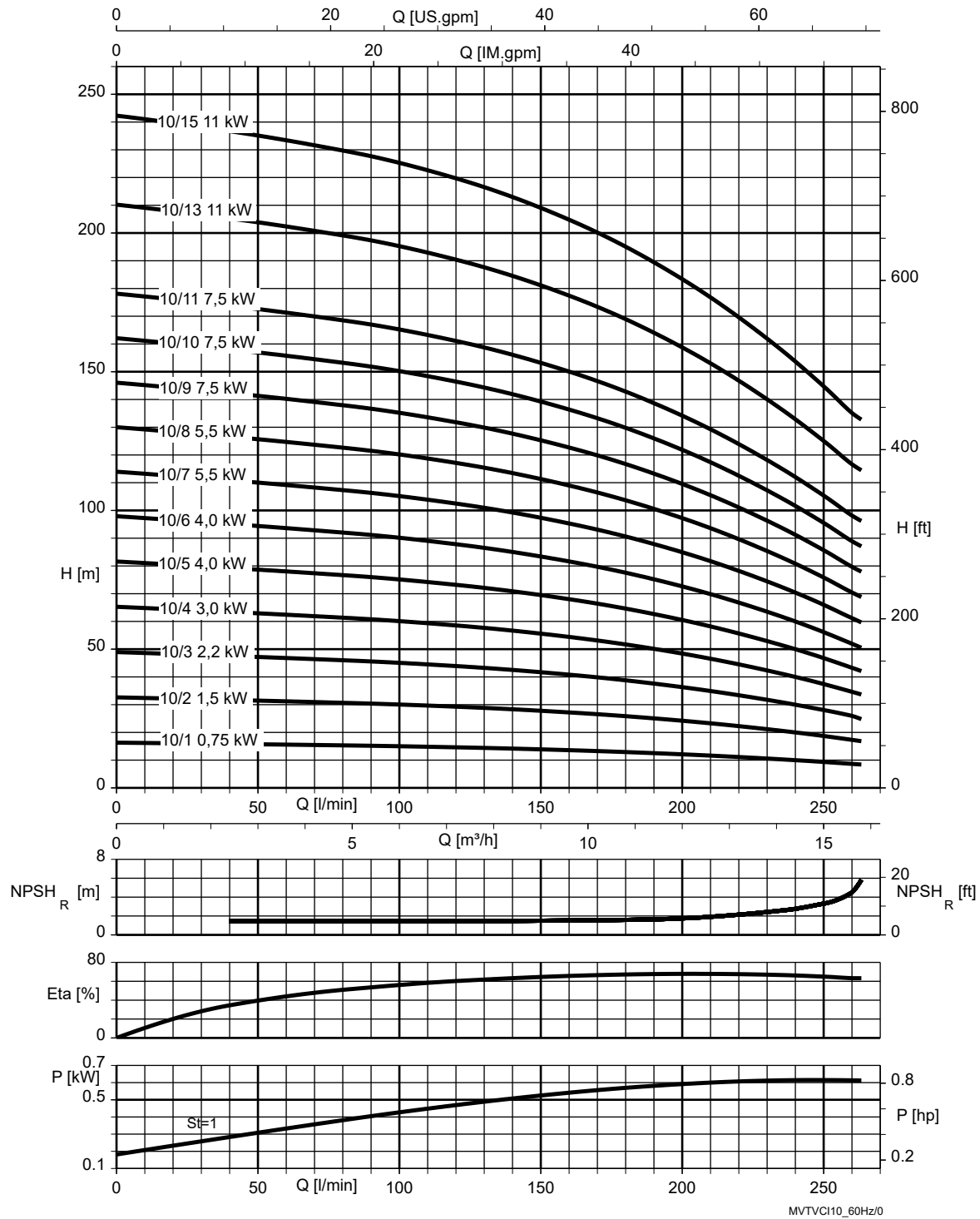


Fig. 12:  $\rho = 1000 \text{ kg/m}^3$

St = 1 P per stage

Movitec VCI 15C, n = 3500 rpm

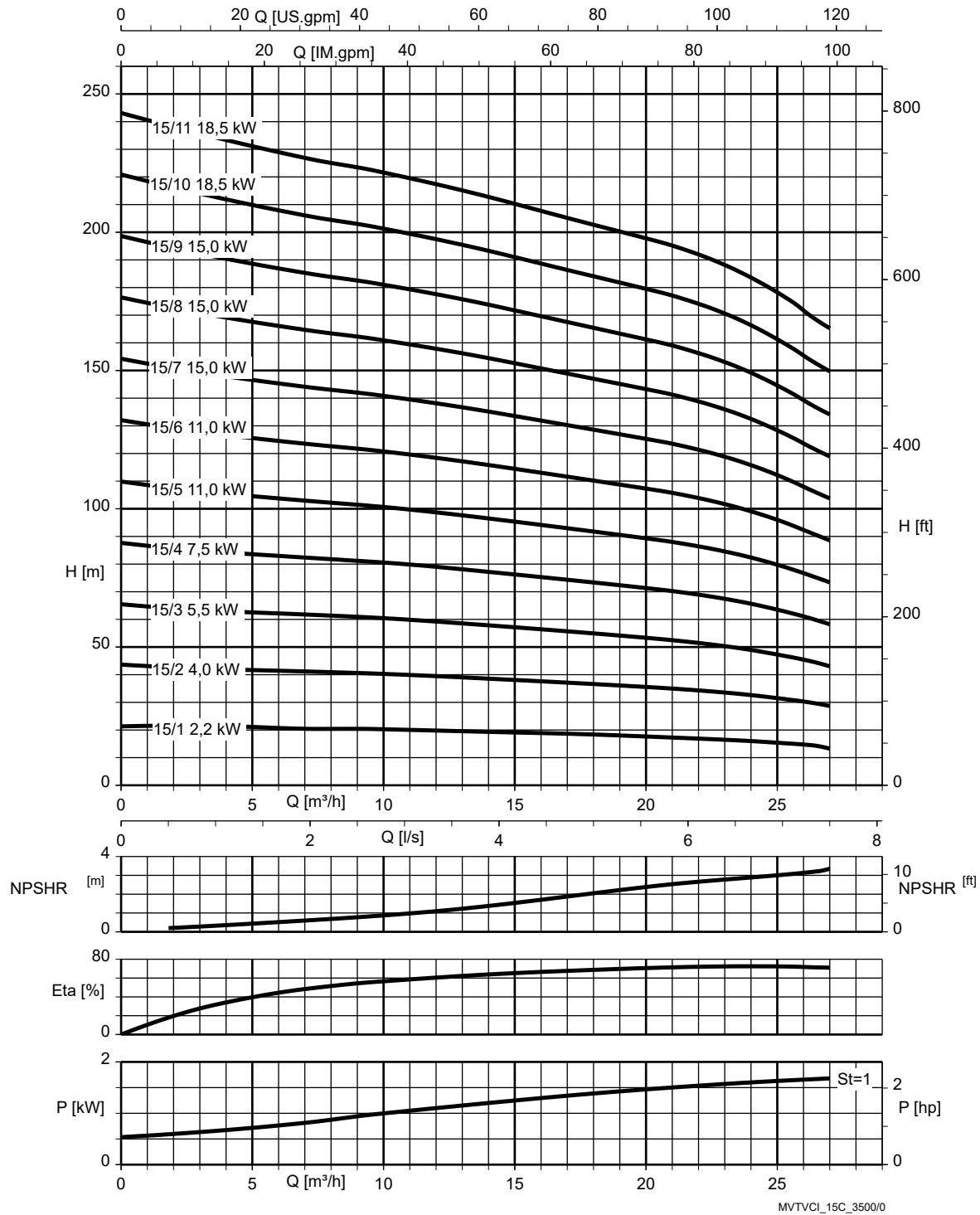
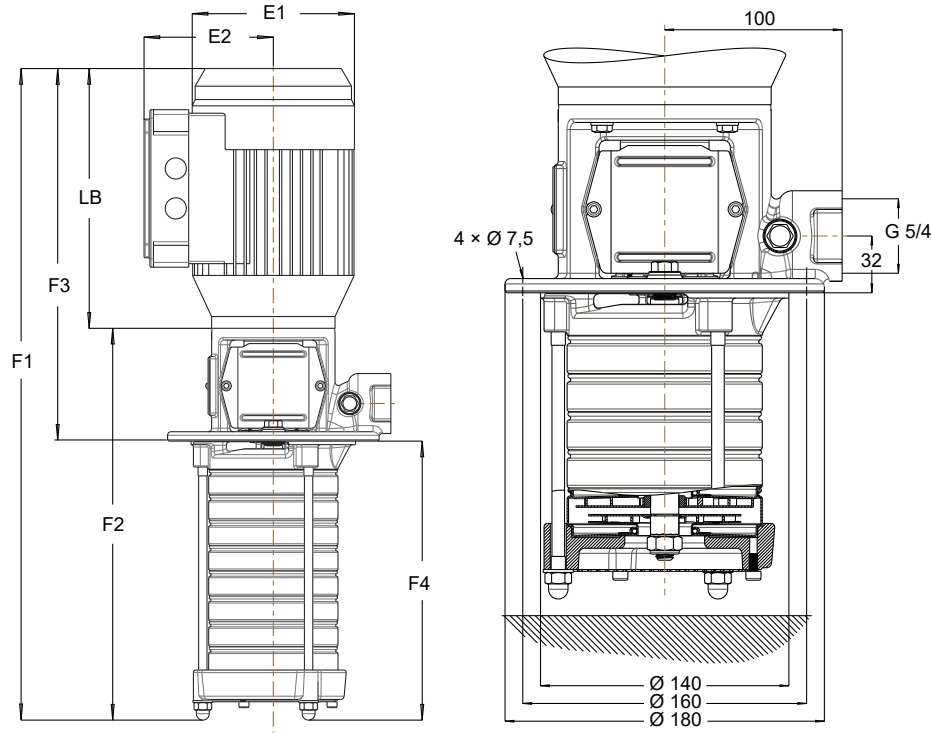


Fig. 13:  $\rho = 1000 \text{ kg/m}^3$

St = 1 P per stage

## Dimensions and connections

### Movitec VCI 2B, n = 2900 rpm



**Fig. 14:** Movitec VCI 2B dimensions / connections

**Table 16:** Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

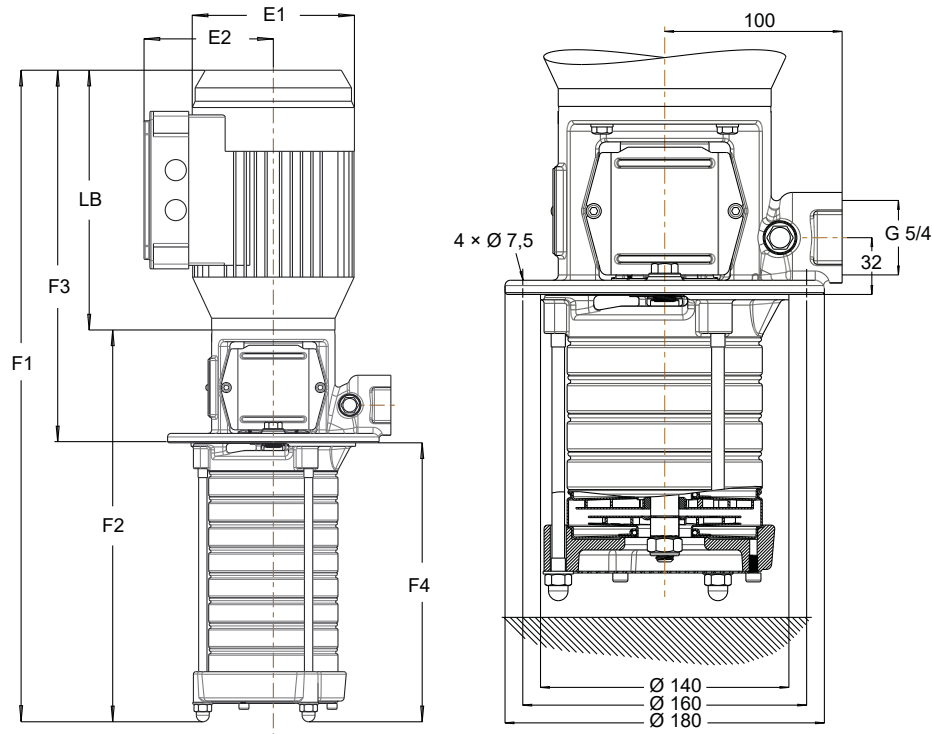
Example: size 2/16-22: F3 = 373 mm, F4 = 560 mm

**Table 17:** Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 02/02-02 B | 138  | 109  | 221  | 447  | 226  | 317  | 130  |
| 02/03-03 B | 138  | 109  | 221  | 468  | 247  | 317  | 151  |
| 02/04-04 B | 138  | 109  | 221  | 490  | 269  | 317  | 173  |
| 02/05-05 B | 138  | 109  | 221  | 511  | 290  | 317  | 194  |
| 02/06-06 B | 138  | 109  | 221  | 533  | 312  | 317  | 216  |
| 02/07-07 B | 138  | 109  | 221  | 554  | 333  | 317  | 237  |
| 02/08-08 B | 138  | 109  | 221  | 576  | 355  | 317  | 259  |
| 02/09-09 B | 157  | 133  | 257  | 643  | 386  | 363  | 280  |
| 02/10-10 B | 157  | 133  | 257  | 665  | 408  | 363  | 302  |
| 02/11-11 B | 157  | 133  | 257  | 686  | 429  | 363  | 323  |
| 02/12-12 B | 157  | 133  | 257  | 708  | 451  | 363  | 345  |
| 02/14-14 B | 157  | 133  | 257  | 751  | 494  | 363  | 388  |
| 02/16-16 B | 180  | 145  | 257  | 804  | 547  | 373  | 431  |
| 02/18-18 B | 180  | 145  | 257  | 847  | 590  | 373  | 474  |
| 02/20-20 B | 180  | 145  | 257  | 890  | 633  | 373  | 517  |
| 02/22-22 B | 180  | 145  | 310  | 986  | 676  | 426  | 560  |
| 02/24-24 B | 180  | 145  | 310  | 1029 | 719  | 426  | 603  |

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 02/26-26 B | 180  | 145  | 310  | 1072 | 762  | 426  | 646  |
| 02/28-28 B | 180  | 145  | 310  | 1115 | 805  | 426  | 689  |
| 02/30-30 B | 180  | 145  | 310  | 1158 | 848  | 426  | 732  |

**Movitec VCI 2B, n = 3500 rpm**



**Fig. 15:** Dimensions / connections Movitec VCI 2B

**Table 18:** Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Sizes 2/16-22: F3 = 426 mm, F4 = 560 mm

**Table 19:** Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 02/02-02 B | 138  | 109  | 221  | 447  | 226  | 317  | 130  |
| 02/03-03 B | 138  | 109  | 221  | 468  | 247  | 317  | 151  |
| 02/04-04 B | 138  | 109  | 221  | 490  | 269  | 317  | 173  |
| 02/05-05 B | 157  | 133  | 257  | 557  | 300  | 363  | 194  |
| 02/06-06 B | 157  | 133  | 257  | 579  | 322  | 363  | 216  |
| 02/07-07 B | 157  | 133  | 257  | 600  | 343  | 363  | 237  |
| 02/08-08 B | 157  | 133  | 257  | 622  | 365  | 363  | 259  |
| 02/09-09 B | 180  | 145  | 257  | 643  | 386  | 363  | 280  |
| 02/10-10 B | 180  | 145  | 257  | 675  | 418  | 373  | 302  |
| 02/11-11 B | 180  | 145  | 257  | 696  | 439  | 373  | 323  |
| 02/12-12 B | 180  | 145  | 257  | 718  | 461  | 373  | 345  |
| 02/14-14 B | 180  | 145  | 310  | 814  | 504  | 426  | 388  |
| 02/16-16 B | 180  | 145  | 310  | 857  | 547  | 426  | 431  |
| 02/18-18 B | 180  | 145  | 310  | 900  | 590  | 426  | 474  |
| 02/20-20 B | 200  | 155  | 318  | 961  | 643  | 444  | 517  |
| 02/22-22 B | 200  | 155  | 318  | 1004 | 686  | 444  | 560  |
| 02/22-24 B | 200  | 155  | 318  | 1047 | 729  | 444  | 603  |
| 02/22-26 B | 200  | 155  | 318  | 1090 | 772  | 444  | 646  |
| 02/22-28 B | 200  | 155  | 318  | 1133 | 815  | 444  | 689  |
| 02/22-30 B | 200  | 155  | 318  | 1176 | 856  | 444  | 732  |

Movitec VCI 4B, n = 2900 rpm

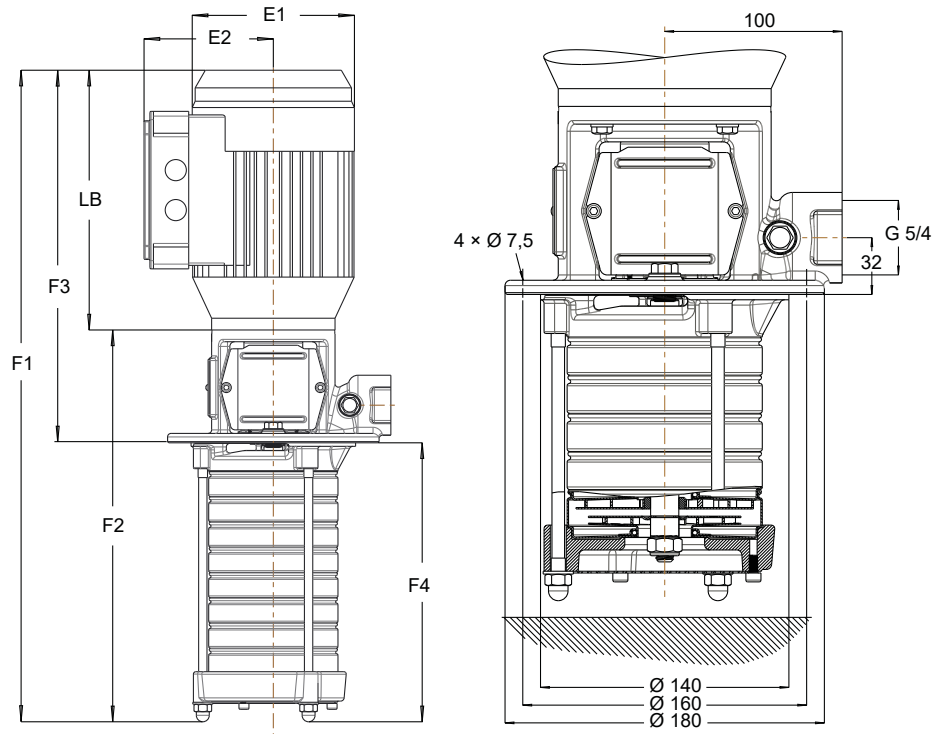


Fig. 16: Movitec VCI 4B dimensions / connections

Table 20: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: size 4/16-22: F3 = 444 mm, F4 = 560 mm

Table 21: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 04/02-02 B | 138  | 109  | 221  | 447  | 226  | 317  | 130  |
| 04/03-03 B | 138  | 109  | 221  | 468  | 247  | 317  | 151  |
| 04/04-04 B | 138  | 109  | 221  | 490  | 269  | 317  | 173  |
| 04/05-05 B | 157  | 133  | 257  | 557  | 300  | 363  | 194  |
| 04/06-06 B | 157  | 133  | 257  | 579  | 322  | 363  | 216  |
| 04/07-07 B | 157  | 133  | 257  | 600  | 343  | 363  | 237  |
| 04/08-08 B | 180  | 145  | 257  | 632  | 375  | 373  | 259  |
| 04/09-09 B | 180  | 145  | 257  | 653  | 396  | 373  | 280  |
| 04/10-10 B | 180  | 145  | 257  | 675  | 418  | 373  | 302  |
| 04/11-11 B | 180  | 145  | 310  | 749  | 439  | 426  | 323  |
| 04/12-12 B | 180  | 145  | 310  | 771  | 461  | 426  | 345  |
| 04/14-14 B | 180  | 145  | 310  | 814  | 504  | 426  | 388  |
| 04/16-16 B | 200  | 155  | 318  | 875  | 557  | 444  | 431  |
| 04/18-18 B | 200  | 155  | 318  | 918  | 600  | 444  | 474  |
| 04/20-20 B | 200  | 155  | 318  | 961  | 643  | 444  | 517  |
| 04/22-22 B | 223  | 166  | 325  | 1011 | 686  | 451  | 560  |
| 04/24-24 B | 223  | 166  | 325  | 1054 | 729  | 451  | 603  |
| 04/26-26 B | 223  | 166  | 325  | 1097 | 772  | 451  | 646  |
| 04/26-28 B | 223  | 166  | 325  | 1140 | 815  | 451  | 689  |
| 04/26-30 B | 223  | 166  | 325  | 1183 | 858  | 451  | 732  |

Movitec VCI 4B, n = 3500 rpm

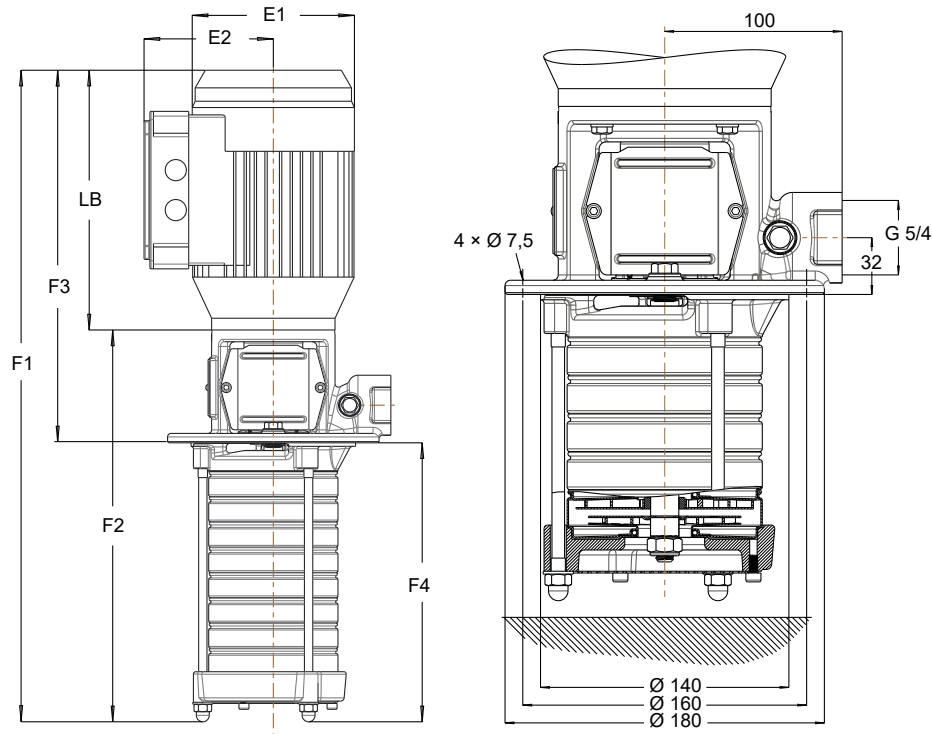


Fig. 17: Dimensions / connections Movitec VCI 4B

Table 22: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Sizes 4/16-22: F3 = 552 mm, F4 = 560 mm

Table 23: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 04/02-02 B | 138  | 109  | 221  | 447  | 226  | 317  | 130  |
| 04/03-03 B | 157  | 133  | 257  | 514  | 257  | 363  | 151  |
| 04/04-04 B | 157  | 133  | 257  | 536  | 279  | 363  | 173  |
| 04/05-05 B | 180  | 145  | 257  | 567  | 310  | 373  | 194  |
| 04/06-06 B | 180  | 145  | 257  | 589  | 332  | 373  | 216  |
| 04/07-07 B | 180  | 145  | 310  | 663  | 353  | 426  | 237  |
| 04/08-08 B | 180  | 145  | 310  | 685  | 375  | 426  | 259  |
| 04/09-09 B | 200  | 155  | 318  | 724  | 406  | 444  | 280  |
| 04/10-10 B | 200  | 155  | 318  | 746  | 428  | 444  | 302  |
| 04/11-11 B | 200  | 155  | 318  | 767  | 449  | 444  | 323  |
| 04/12-12 B | 223  | 166  | 325  | 796  | 471  | 451  | 345  |
| 04/14-14 B | 223  | 166  | 325  | 839  | 514  | 451  | 388  |
| 04/16-16 B | 260  | 190  | 350  | 983  | 633  | 552  | 431  |
| 04/18-18 B | 260  | 190  | 350  | 1026 | 676  | 552  | 474  |
| 04/18-20 B | 260  | 190  | 350  | 1069 | 719  | 552  | 517  |
| 04/18-22 B | 260  | 190  | 350  | 1112 | 762  | 552  | 560  |
| 04/18-24 B | 260  | 190  | 350  | 1155 | 805  | 552  | 603  |
| 04/18-26 B | 260  | 190  | 350  | 1198 | 848  | 552  | 646  |
| 04/18-28 B | 260  | 190  | 350  | 1241 | 891  | 552  | 689  |
| 04/18-30 B | 260  | 190  | 350  | 1284 | 934  | 552  | 732  |

Movitec VCI 6B, n = 2900 rpm

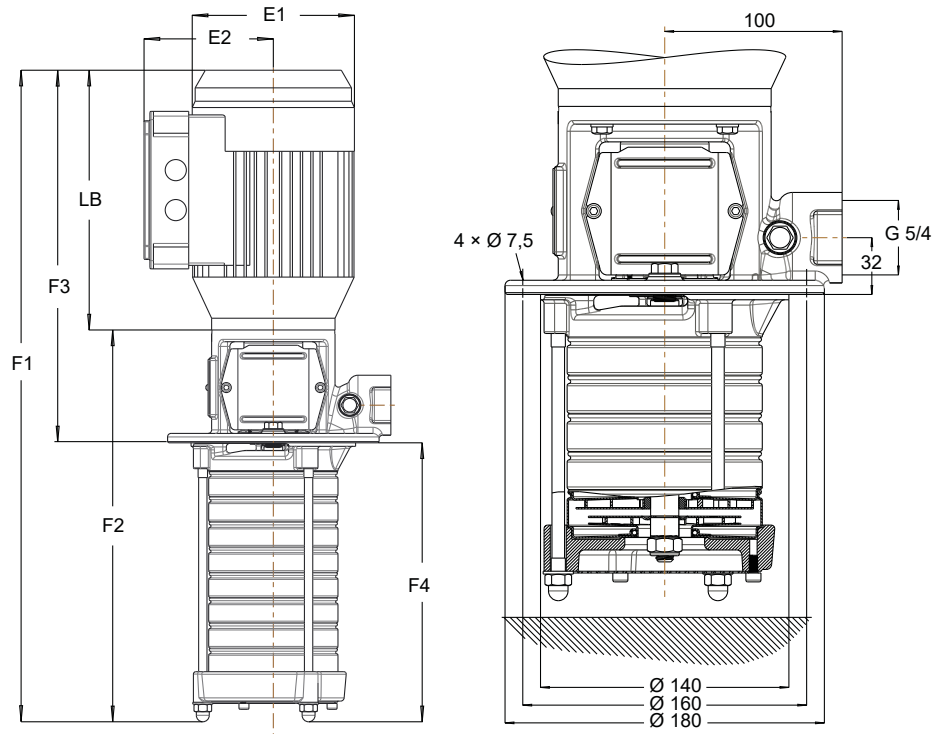


Fig. 18: Movitec VCI 6B dimensions / connections

Table 24: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: size 6/16-22: F3 = 451 mm, F4 = 640 mm

Table 25: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 06/02-02 B | 138  | 109  | 221  | 457  | 236  | 317  | 140  |
| 06/03-03 B | 157  | 133  | 257  | 528  | 271  | 363  | 165  |
| 06/04-04 B | 157  | 133  | 257  | 553  | 296  | 363  | 190  |
| 06/05-05 B | 157  | 133  | 257  | 578  | 321  | 363  | 215  |
| 06/06-06 B | 180  | 145  | 257  | 613  | 356  | 373  | 240  |
| 06/07-07 B | 180  | 145  | 257  | 638  | 381  | 373  | 265  |
| 06/08-08 B | 180  | 145  | 310  | 716  | 406  | 426  | 290  |
| 06/09-09 B | 180  | 145  | 310  | 741  | 431  | 426  | 315  |
| 06/10-10 B | 180  | 145  | 310  | 766  | 456  | 426  | 340  |
| 06/11-11 B | 200  | 155  | 318  | 809  | 491  | 444  | 365  |
| 06/12-12 B | 200  | 155  | 318  | 834  | 516  | 444  | 390  |
| 06/14-14 B | 200  | 155  | 318  | 884  | 566  | 444  | 440  |
| 06/16-16 B | 223  | 166  | 325  | 941  | 616  | 451  | 490  |
| 06/18-18 B | 223  | 166  | 325  | 991  | 666  | 451  | 540  |
| 06/20-20 B | 260  | 190  | 350  | 1142 | 792  | 552  | 590  |
| 06/22-22 B | 260  | 190  | 350  | 1192 | 842  | 552  | 640  |
| 06/24-24 B | 260  | 190  | 350  | 1242 | 892  | 552  | 690  |
| 06/26-26 B | 260  | 190  | 350  | 1292 | 942  | 552  | 740  |
| 06/28-28 B | 260  | 190  | 350  | 1342 | 992  | 552  | 790  |
| 06/26-30 B | 260  | 190  | 350  | 1392 | 1042 | 552  | 840  |

Movitec VCI 6B, n = 3500 rpm

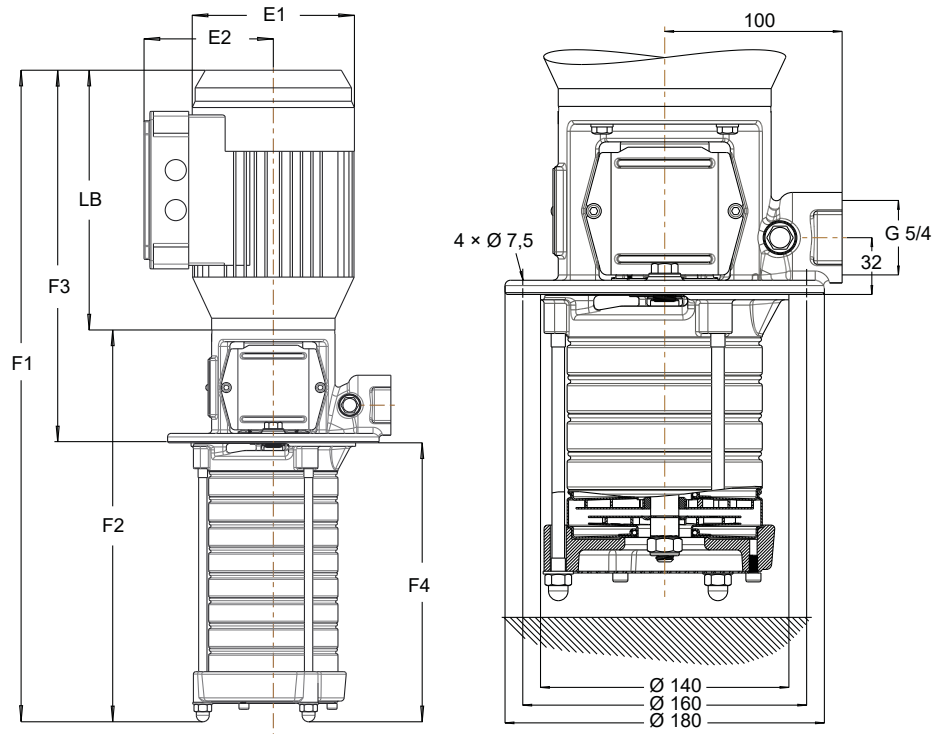


Fig. 19: Dimensions / connections Movitec VCI 6B

Table 26: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Sizes 6/16-22: F3 = 589 mm, F4 = 640 mm

Table 27: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 06/02-02 B | 157  | 133  | 257  | 503  | 246  | 363  | 140  |
| 06/03-03 B | 157  | 133  | 257  | 528  | 271  | 363  | 165  |
| 06/04-04 B | 180  | 145  | 257  | 563  | 306  | 373  | 190  |
| 06/05-05 B | 180  | 145  | 310  | 641  | 331  | 426  | 215  |
| 06/06-06 B | 180  | 145  | 310  | 666  | 356  | 426  | 240  |
| 06/07-07 B | 200  | 155  | 318  | 709  | 391  | 444  | 265  |
| 06/08-08 B | 200  | 155  | 318  | 734  | 416  | 444  | 290  |
| 06/09-09 B | 223  | 166  | 325  | 766  | 441  | 451  | 315  |
| 06/10-10 B | 223  | 166  | 325  | 791  | 466  | 451  | 340  |
| 06/11-11 B | 223  | 166  | 325  | 816  | 491  | 451  | 365  |
| 06/12-12 B | 260  | 190  | 350  | 942  | 592  | 552  | 390  |
| 06/14-14 B | 260  | 190  | 350  | 992  | 642  | 552  | 440  |
| 06/16-16 B | 260  | 190  | 387  | 1079 | 692  | 589  | 490  |
| 06/18-18 B | 260  | 190  | 387  | 1129 | 742  | 589  | 540  |
| 06/18-20 B | 260  | 190  | 387  | 1179 | 792  | 589  | 590  |
| 06/18-22 B | 260  | 190  | 387  | 1229 | 842  | 589  | 640  |
| 06/18-24 B | 260  | 190  | 387  | 1279 | 892  | 589  | 690  |
| 06/18-26 B | 260  | 190  | 387  | 1329 | 942  | 589  | 740  |
| 06/18-28 B | 260  | 190  | 387  | 1379 | 992  | 589  | 790  |
| 06/18-30 B | 260  | 190  | 387  | 1429 | 1042 | 589  | 840  |

Movitec VCI 10B, n = 2900 rpm

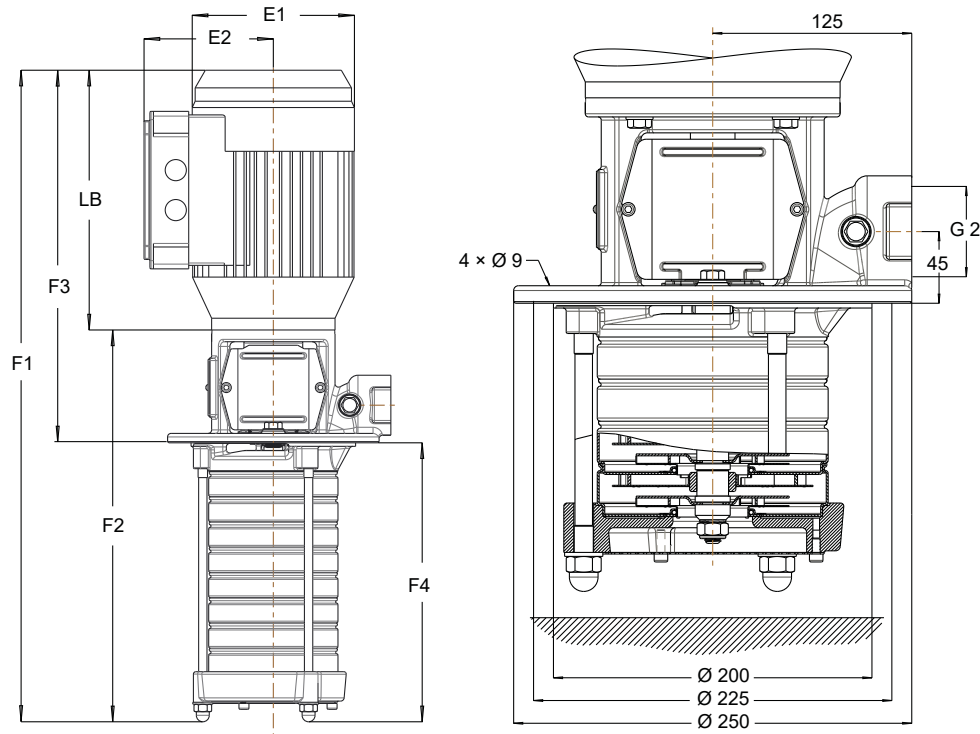


Fig. 20: Movitec VCI 10B dimensions / connections

Table 28: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: size 10/15-21: F3 = 597 mm, F4 = 657 mm

Table 29: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 10/01-02 B | 157  | 133  | 257  | 520  | 263  | 366  | 154  |
| 10/02-02 B | 157  | 133  | 257  | 520  | 263  | 366  | 154  |
| 10/03-03 B | 157  | 133  | 257  | 547  | 290  | 366  | 181  |
| 10/04-04 B | 180  | 145  | 257  | 583  | 326  | 376  | 207  |
| 10/05-05 B | 180  | 145  | 310  | 663  | 353  | 429  | 234  |
| 10/06-06 B | 180  | 145  | 310  | 716  | 406  | 429  | 260  |
| 10/07-07 B | 200  | 155  | 318  | 734  | 416  | 447  | 287  |
| 10/08-08 B | 200  | 155  | 318  | 760  | 442  | 447  | 313  |
| 10/09-09 B | 223  | 166  | 325  | 793  | 468  | 454  | 339  |
| 10/10-10 B | 223  | 166  | 325  | 820  | 495  | 454  | 366  |
| 10/11-11 B | 223  | 166  | 325  | 846  | 521  | 454  | 392  |
| 10/13-13 B | 260  | 190  | 350  | 1005 | 655  | 560  | 445  |
| 10/15-15 B | 260  | 190  | 350  | 1058 | 708  | 560  | 498  |
| 10/17-17 B | 260  | 190  | 387  | 1148 | 761  | 597  | 551  |
| 10/19-19 B | 260  | 190  | 387  | 1201 | 814  | 597  | 604  |
| 10/21-21 B | 260  | 190  | 387  | 1254 | 867  | 597  | 657  |

Movitec VCI 10B, n = 3500 rpm

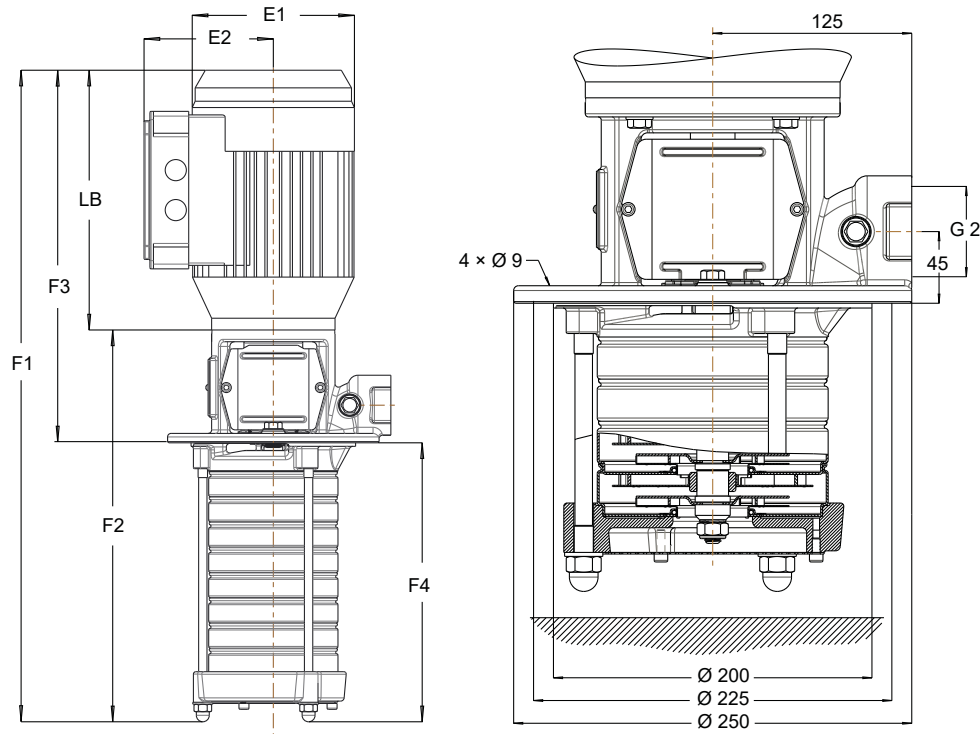


Fig. 21: Dimensions / connections Movitec VCI 10B

Table 30: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Sizes 10/15-21: F3 = 744 mm, F4 = 657 mm

Table 31: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 10/01-02 B | 157  | 133  | 257  | 520  | 263  | 366  | 154  |
| 10/02-02 B | 180  | 145  | 257  | 530  | 272  | 376  | 154  |
| 10/03-03 B | 180  | 145  | 310  | 610  | 300  | 429  | 181  |
| 10/04-04 B | 200  | 155  | 318  | 654  | 336  | 447  | 207  |
| 10/05-05 B | 223  | 166  | 325  | 688  | 363  | 454  | 234  |
| 10/06-06 B | 223  | 166  | 325  | 741  | 416  | 454  | 260  |
| 10/07-07 B | 260  | 190  | 350  | 847  | 497  | 560  | 287  |
| 10/08-08 B | 260  | 190  | 350  | 873  | 523  | 560  | 313  |
| 10/09-09 B | 260  | 190  | 387  | 938  | 549  | 597  | 339  |
| 10/10-10 B | 260  | 190  | 387  | 963  | 576  | 597  | 366  |
| 10/11-11 B | 260  | 190  | 387  | 989  | 602  | 597  | 392  |
| 10/13-13 B | 315  | 260  | 504  | 1189 | 685  | 744  | 445  |
| 10/15-15 B | 315  | 260  | 504  | 1242 | 738  | 744  | 498  |
| 10/15-17 B | 315  | 260  | 504  | 1295 | 791  | 744  | 551  |
| 10/15-19 B | 315  | 260  | 504  | 1348 | 844  | 744  | 604  |
| 10/15-21 B | 315  | 260  | 504  | 1401 | 897  | 744  | 657  |

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Movitec VCI 15C, n = 2900 rpm

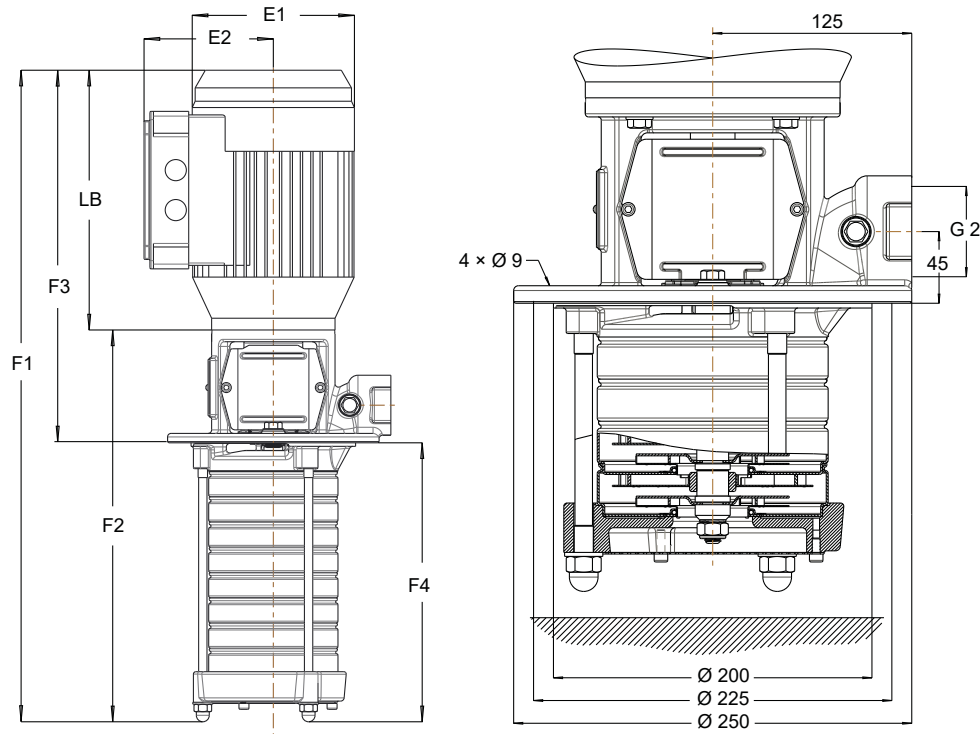


Fig. 22: Movitec VCI 15C dimensions / connections

Table 32: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: size 15/06-09: F3 = 663 mm, F4 = 471 mm

Table 33: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 15/01-02 C | 150  | 115  | 264  | 578  | 314  | 394  | 184  |
| 15/02-02 C | 200  | 148  | 281  | 605  | 324  | 421  | 184  |
| 15/03-03 C | 215  | 157  | 317  | 692  | 375  | 467  | 225  |
| 15/04-04 C | 248  | 168  | 356  | 772  | 416  | 506  | 266  |
| 15/05-05 C | 288  | 197  | 432  | 970  | 538  | 663  | 307  |
| 15/06-06 C | 288  | 197  | 432  | 1011 | 579  | 663  | 348  |
| 15/07-07 C | 288  | 197  | 432  | 1052 | 620  | 663  | 389  |
| 15/08-08 C | 340  | 223  | 533  | 1194 | 661  | 764  | 430  |
| 15/09-09 C | 340  | 223  | 533  | 1235 | 702  | 764  | 471  |
| 15/10-10 C | 340  | 223  | 533  | 1276 | 743  | 764  | 512  |
| 15/11-11 C | 340  | 223  | 533  | 1317 | 784  | 764  | 553  |
| 15/13-13 C | 340  | 223  | 533  | 1399 | 866  | 764  | 635  |
| 15/15-15 C | 340  | 223  | 533  | 1481 | 948  | 764  | 717  |
| 15/17-17 C | 340  | 223  | 533  | 1563 | 1030 | 764  | 799  |

Movitec VCI 15C, n = 3500 rpm

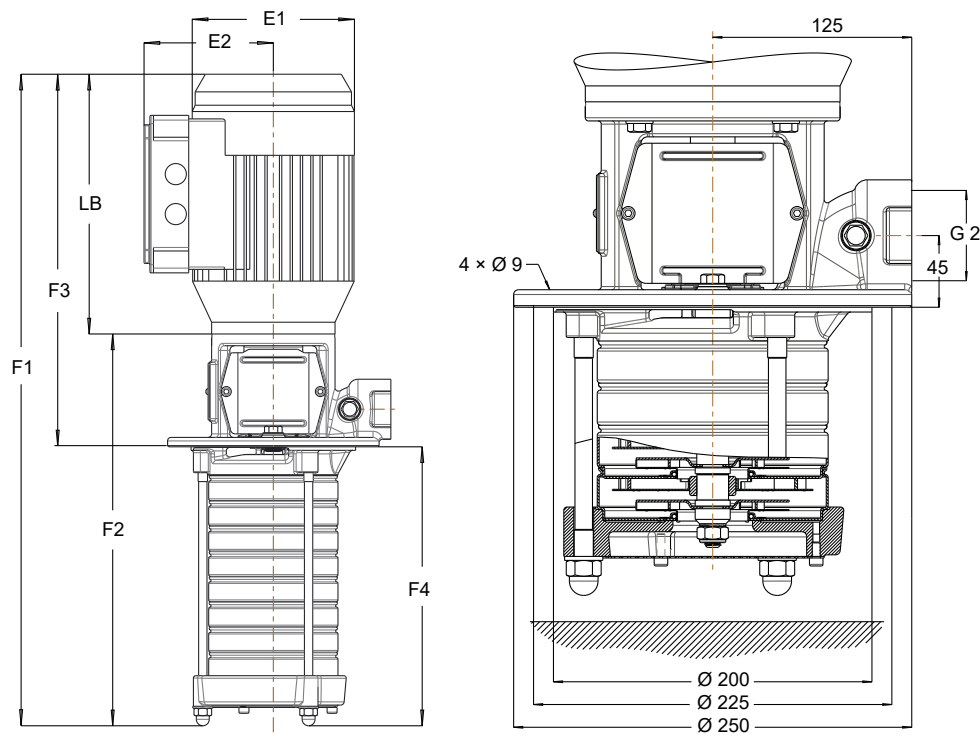


Fig. 23: Dimensions / connections Movitec VCI 15C

Table 34: Calculation of pump (set) length

| Feature                  | Pump length | Pump set length |
|--------------------------|-------------|-----------------|
| Pump without blind stage | F1          | F2              |
| Pump with blind stage    | F3 + F4     | F3 + F4 - LB    |

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Sizes 15/06-09: F3 = 764 mm, F4 = 339 mm

Table 35: Dimensions

| Size       | E1   | E2   | LB   | F1   | F2   | F3   | F4   |
|------------|------|------|------|------|------|------|------|
|            | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] |
| 15/01-02 C | 200  | 148  | 281  | 605  | 324  | 421  | 184  |
| 15/02-02 C | 248  | 168  | 356  | 690  | 334  | 506  | 184  |
| 15/03-03 C | 288  | 197  | 432  | 888  | 456  | 663  | 225  |
| 15/04-04 C | 288  | 197  | 432  | 929  | 497  | 663  | 266  |
| 15/05-05 C | 340  | 223  | 533  | 1071 | 538  | 764  | 307  |
| 15/06-06 C | 340  | 223  | 533  | 1112 | 579  | 764  | 348  |
| 15/07-07 C | 340  | 223  | 533  | 1153 | 620  | 764  | 389  |
| 15/08-08 C | 340  | 223  | 533  | 1194 | 661  | 764  | 430  |
| 15/09-09 C | 340  | 223  | 533  | 1235 | 702  | 764  | 471  |
| 15/10-10 C | 340  | 223  | 533  | 1276 | 743  | 764  | 512  |
| 15/11-11 C | 340  | 223  | 533  | 1317 | 784  | 764  | 553  |

## General arrangement drawings with list of components

### Movitec VCI 2B, 4B, 6B, 10B

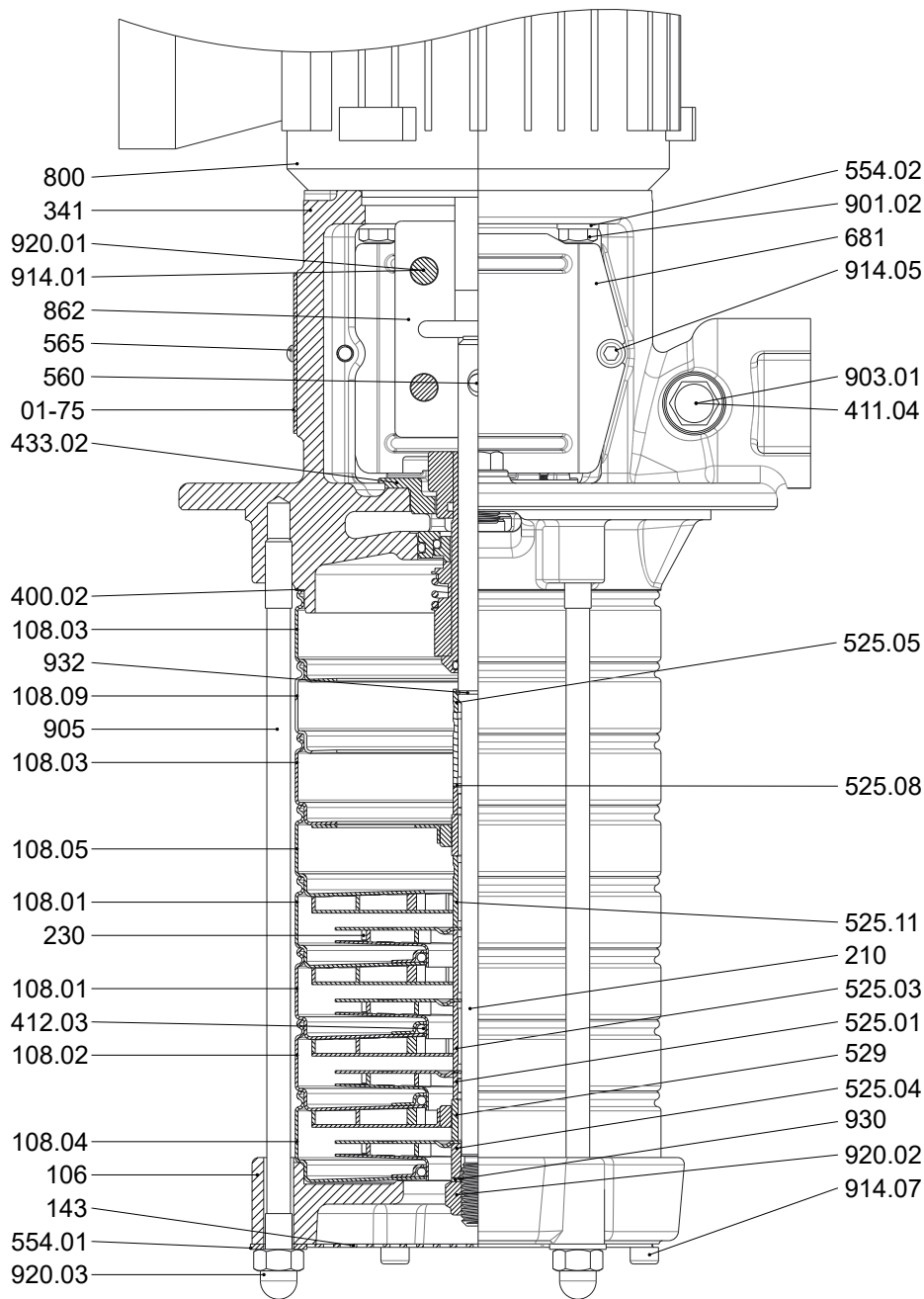


Fig. 24: General assembly drawing

Table 36: List of components

| Part No.                   | Description      | Part No.       | Description                   |
|----------------------------|------------------|----------------|-------------------------------|
| 01-75                      | Name plate       | 554.01/.02     | Washer                        |
| 106                        | Suction casing   | 560            | Pin                           |
| 108.01/.02/.03/.04/.05/.09 | Stage casing     | 565            | Rivet                         |
| 143                        | Suction strainer | 681            | Coupling guard                |
| 210                        | Shaft            | 800            | Motor                         |
| 230                        | Impeller         | 862            | Coupling shell                |
| 341                        | Drive lantern    | 901.02         | Hexagon head bolt             |
| 400.02                     | Gasket           | 903.01         | Screw plug                    |
| 411.04                     | Joint ring       | 905            | Tie bolt                      |
| 412.03                     | O-ring           | 914.01/.05/.07 | Hexagon socket head cap screw |

| Part No.                   | Description     | Part No.   | Description   |
|----------------------------|-----------------|------------|---------------|
| 433.02                     | Mechanical seal | 920.01/.03 | Nut           |
| 525.01/.03/.04/.05/.08/.11 | Spacer sleeve   | 930.02     | Safety device |
| 529                        | Bearing sleeve  | 932        | Circlip       |

Movitec VCI 15C

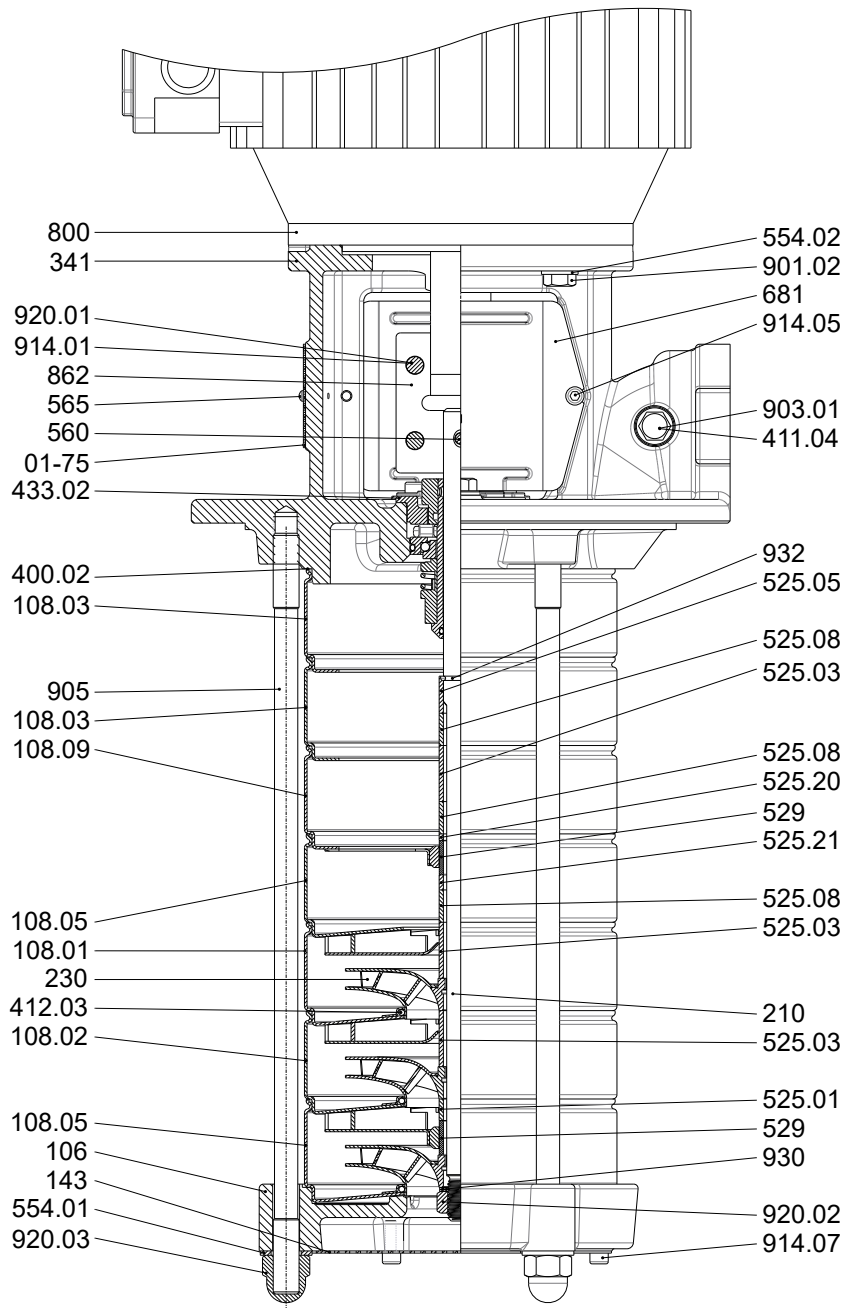


Fig. 25: General assembly drawing

Table 37: List of components

| Part No.               | Description      | Part No.       | Description                   |
|------------------------|------------------|----------------|-------------------------------|
| 01-75                  | Name plate       | 554.01/.02     | Washer                        |
| 106                    | Suction casing   | 560            | Pin                           |
| 108.01/.02/.03/.05/.09 | Stage casing     | 565            | Rivet                         |
| 143                    | Suction strainer | 681            | Coupling guard                |
| 210                    | Shaft            | 800            | Motor                         |
| 230                    | Impeller         | 862            | Coupling shell                |
| 341                    | Drive lantern    | 901.02         | Hexagon head bolt             |
| 400.02                 | Gasket           | 903.01         | Screw plug                    |
| 411.04                 | Joint ring       | 905            | Tie bolt                      |
| 412.03                 | O-ring           | 914.01/.05/.07 | Hexagon socket head cap screw |

| Part No.                   | Description     | Part No.       | Description   |
|----------------------------|-----------------|----------------|---------------|
| 433.02                     | Mechanical seal | 920.01/.02/.03 | Nut           |
| 525.01/.03/.05/.08/.20/.21 | Spacer sleeve   | 930            | Safety device |
| 529                        | Bearing sleeve  | 932            | Circlip       |





**KSB SE & Co. KGaA**  
Johann-Klein-Straße 9 • 67227 Frankenthal (Germany)  
Tel. +49 6233 86-0  
[www.ksb.com](http://www.ksb.com)