

## Standardised “EN 733” stainless steel pumps



### PERFORMANCE RANGE

- Flow rate up to **2200 l/min** (132 m<sup>3</sup>/h)
- Head up to **38 m**

### APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C**
- Max. pressure in pump body **10 bar** (PN10)
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



Pump body dimensions in compliance with **EN 733**  
**EU REGULATION N. 547/2012**

### INSTALLATION AND USE

- Water supply
- Pressure boosting
- Irrigation
- Water circulation in air-conditioning units
- Cleaning sets
- Firefighting sets
- Industrial applications
- Agricultural applications

Suitable for use with clean, aggressive liquids that are chemically compatible with the materials from which the pump is made. The pump should be installed in an enclosed environment or sheltered from inclement weather.

### OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder environments

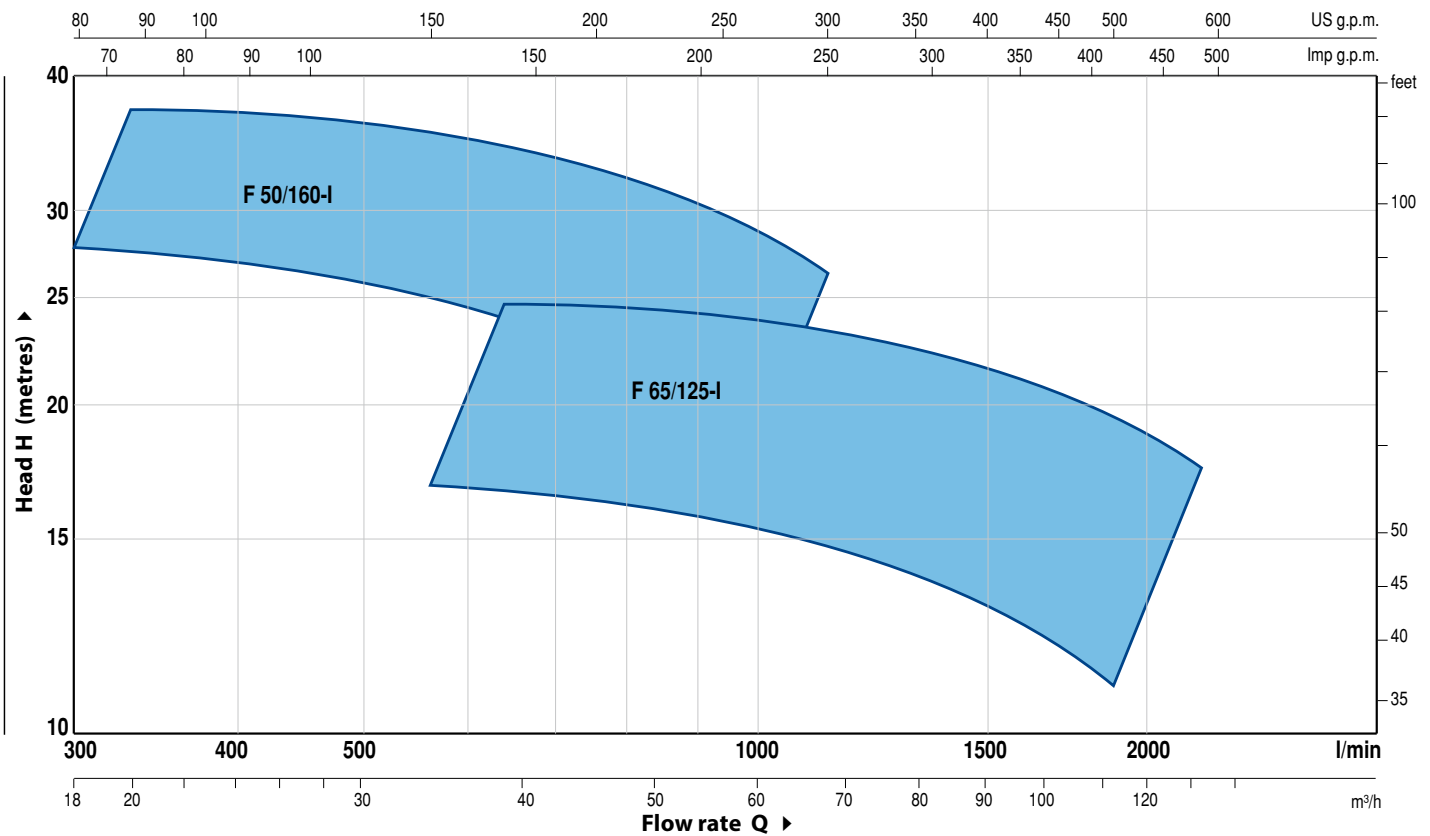
### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY  
ISO 14001: ENVIRONMENT



## PERFORMANCE RANGE

50 Hz n = 2900 rpm



## PERFORMANCE DATA

50 Hz n = 2900 rpm

| MODEL       | POWER (P <sub>2</sub> ) |     | ▲   | PERFORMANCE |          |
|-------------|-------------------------|-----|-----|-------------|----------|
|             | kW                      | HP  |     | Q l/min     | H metres |
| F 50/160C-I | 4                       | 5.5 | IE3 | 300 ÷ 1000  | 27 ÷ 16  |
| F 50/160B-I | 5.5                     | 7.5 |     | 300 ÷ 1100  | 32 ÷ 21  |
| F 50/160A-I | 7.5                     | 10  |     | 300 ÷ 1100  | 37 ÷ 27  |
| F 65/125C-I | 4                       | 5.5 | IE3 | 600 ÷ 1800  | 16 ÷ 11  |
| F 65/125B-I | 5.5                     | 7.5 |     | 600 ÷ 2000  | 18 ÷ 13  |
| F 65/125A-I | 7.5                     | 10  |     | 600 ÷ 2200  | 23 ÷ 18  |

Q = Flow rate

H = Total manometric head

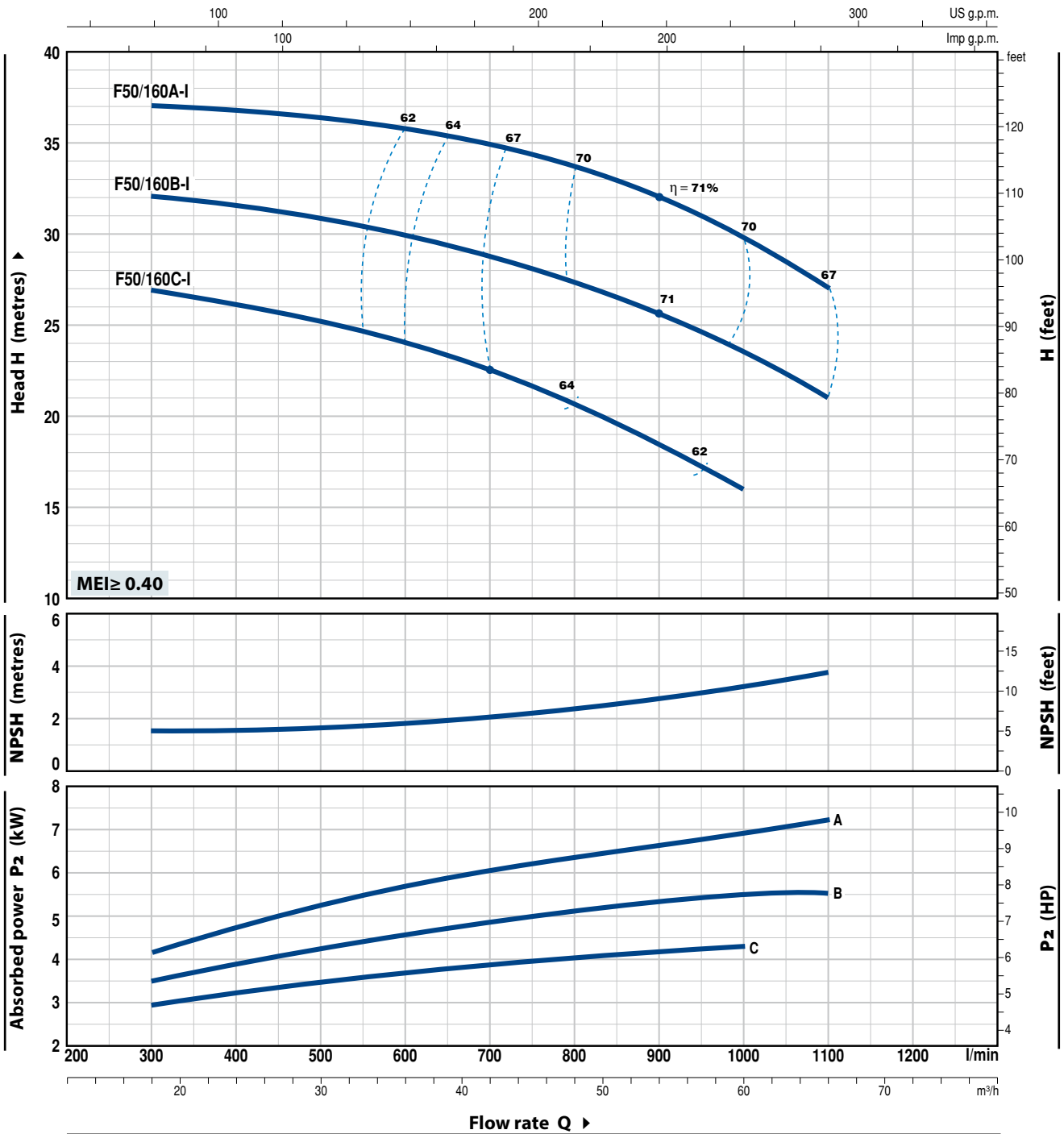
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Performance class of the three-phase motor (IEC-60034-30)

# F50/160-I

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



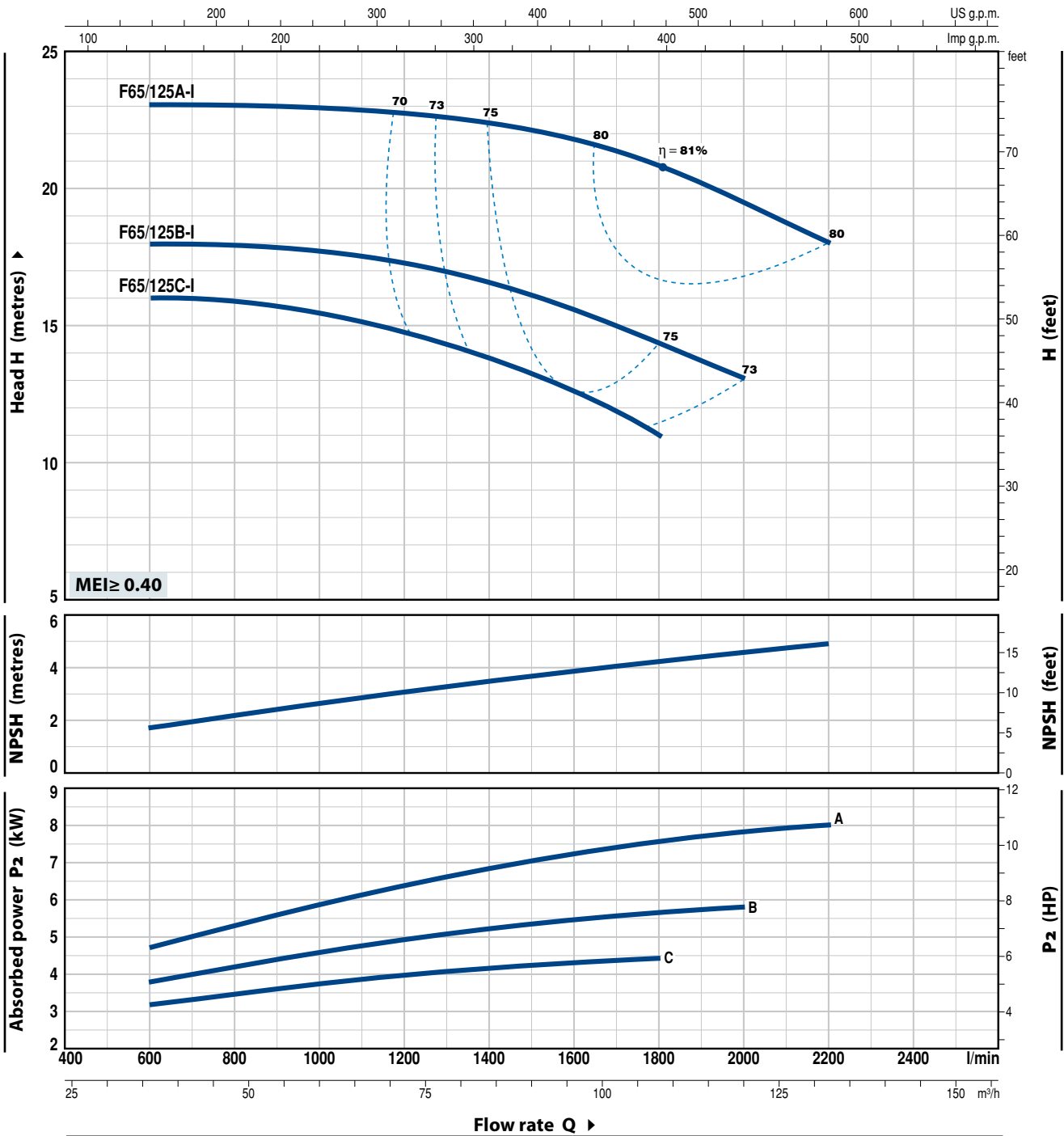
| MODEL       | POWER (P <sub>2</sub> ) |     | Q        | Flow rate |     |      |      |      |     |     |      |      |      |  |  |
|-------------|-------------------------|-----|----------|-----------|-----|------|------|------|-----|-----|------|------|------|--|--|
|             | kW                      | HP  |          | 0         | 18  | 24   | 30   | 36   | 42  | 48  | 54   | 60   | 66   |  |  |
| Three-phase |                         |     | l/min    | 0         | 300 | 400  | 500  | 600  | 700 | 800 | 900  | 1000 | 1100 |  |  |
| F 50/160C-I | 4                       | 5.5 | H metres | 27        | 27  | 26.5 | 25   | 24.5 | 23  | 20  | 18.5 | 16   |      |  |  |
| F 50/160B-I | 5.5                     | 7.5 |          | 33        | 32  | 31.7 | 31   | 30   | 29  | 27  | 26   | 24   | 21   |  |  |
| F 50/160A-I | 7.5                     | 10  |          | 38        | 37  | 36.8 | 36.5 | 36   | 34  | 33  | 32   | 30   | 27   |  |  |

Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



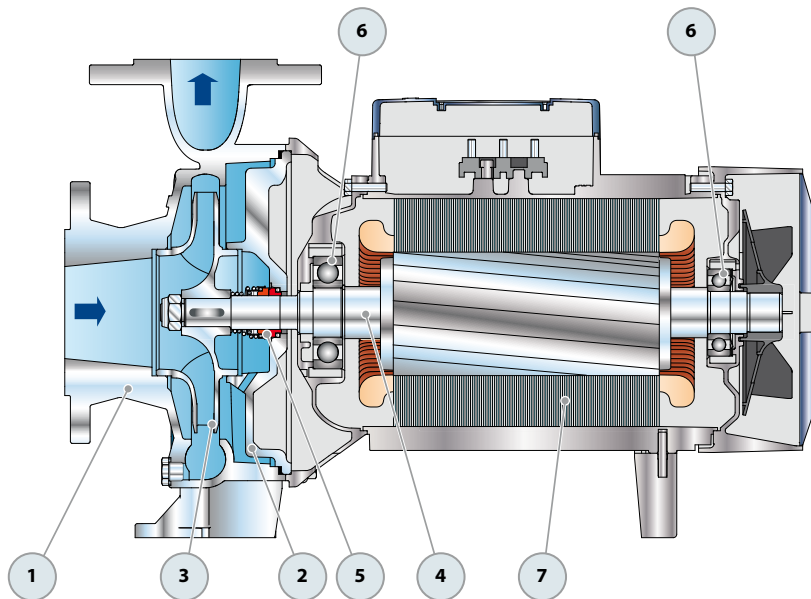
| MODEL       | POWER (P <sub>2</sub> ) |     | Q        | Flow rate         |     |     |      |      |      |      |      |      |      |     |  |
|-------------|-------------------------|-----|----------|-------------------|-----|-----|------|------|------|------|------|------|------|-----|--|
|             | kW                      | HP  |          | m <sup>3</sup> /h | 0   | 36  | 48   | 60   | 72   | 84   | 96   | 108  | 120  | 132 |  |
| Three-phase |                         |     | l/min    | 0                 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 |     |  |
| F 65/125C-I | 4                       | 5.5 | H metres | 16                | 16  | 16  | 15.5 | 14.5 | 13.5 | 12.5 | 11   |      |      |     |  |
| F 65/125B-I | 5.5                     | 7.5 |          | 18                | 18  | 18  | 18   | 17   | 16.5 | 15.5 | 14.5 | 13   |      |     |  |
| F 65/125A-I | 7.5                     | 10  |          | 23                | 23  | 23  | 23   | 22.5 | 22.5 | 22   | 21   | 19.5 | 18   |     |  |

Q = Flow rate H = Total manometric head HS = Suction height

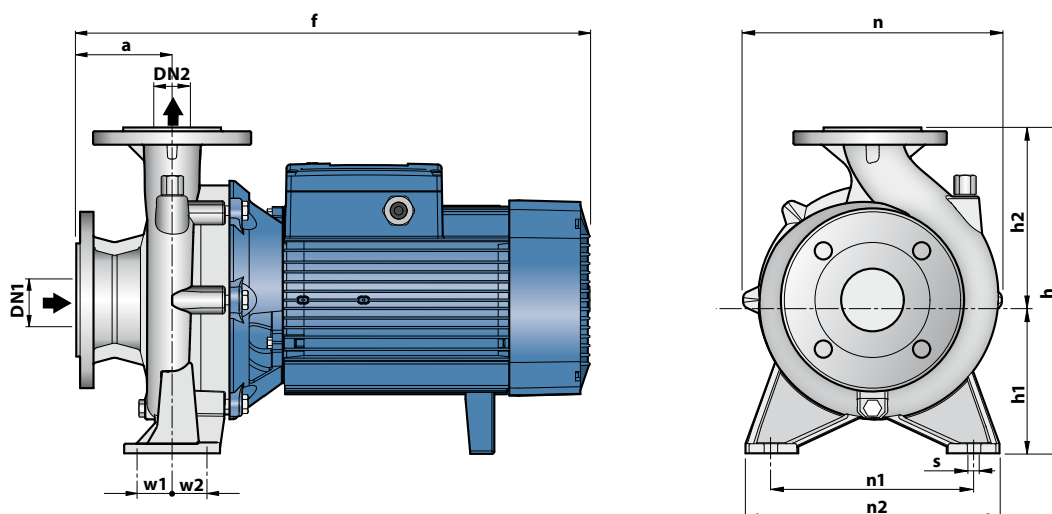
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

|   |                        |  |                         |                       |                        |  |                  |
|---|------------------------|--|-------------------------|-----------------------|------------------------|--|------------------|
| 1 | <b>PUMP BODY</b>       | Stainless steel AISI 316 complete with flanged suction and delivery ports  |                         |                       |                        |  |                  |
| 2 | <b>BODY BACKPLATE</b>  | Stainless steel AISI 316   |                         |                       |                        |  |                  |
| 3 | <b>IMPELLER</b>        | Stainless steel AISI 316   |                         |                       |                        |  |                  |
| 4 | <b>MOTOR SHAFT</b>     | Stainless steel AISI 316   |                         |                       |                        |  |                  |
| 5 | <b>MECHANICAL SEAL</b> | <i>Pump Model</i>  | <i>Seal Model</i>       | <i>Shaft Diameter</i> | <i>Stationary ring</i> | <i>Materials</i><br><i>Rotational ring</i> | <i>Elastomer</i> |
|   |                        | F50/160-I<br>F65/125-I   | FN-24SV                 | Ø 24 mm               | Silicon carbide        | Silicon carbide                            | Viton            |
| 6 | <b>BEARINGS</b>        | <i>Pump Model</i>  | <i>Model</i>            |                       |                        |  |                  |
|   |                        | F50/160-I<br>F65/125-I   | 6307 ZZ-C3 / 6206 ZZ-C3 |                       |                        |  |                  |
| 7 | <b>ELECTRIC MOTOR</b>  | <p>F: three-phase 230/400 V - 50 Hz for 4 kW<br/>400/690 V - 50 Hz from 5.5 to 7.5 kW</p> <p>⇒ <b>The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30)</b></p> <p>– Insulation: class F<br/>– Protection: IP 55</p> |                         |                       |                        |  |                  |



## DIMENSIONS AND WEIGHT



| MODEL       | DIMENSIONS mm |     |     |     |     |     |     |     |     |     |      |      | kg<br>3~ |      |
|-------------|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|----------|------|
|             | DN1           | DN2 | a   | f   | h   | h1  | h2  | n   | n1  | n2  | w1   | w2   |          | s    |
| F 50/160C-I | 65            | 50  | 100 | 489 | 340 | 160 | 180 | 269 | 212 | 265 | 35   | 35   | 14       | 50.2 |
| F 50/160B-I |               |     |     | 535 |     |     |     |     |     |     |      |      |          | 62.6 |
| F 50/160A-I |               |     |     | 511 |     |     |     |     |     |     |      |      |          | 65.5 |
| F 65/125C-I | 80            | 65  | 100 | 511 | 340 | 160 | 180 | 291 | 212 | 280 | 47.5 | 47.5 | 14       | 62.6 |
| F 65/125B-I |               |     |     | 557 |     |     |     |     |     |     |      |      |          | 67.7 |
| F 65/125A-I |               |     |     | 557 |     |     |     |     |     |     |      |      |          | 72.9 |

## ABSORPTION

| MODEL       | VOLTAGE   |           |           |
|-------------|-----------|-----------|-----------|
|             | 230÷240 V | 400÷415 V | 690÷720 V |
| F 50/160C-I | 15.8 A    | 9.1 A     | 5.3 A     |
| F 50/160B-I | -         | 12.3 A    | 7.1 A     |
| F 50/160A-I | -         | 15.5 A    | 8.9 A     |
| F 65/125C-I | 17.5 A    | 10.0 A    | 5.8 A     |
| F 65/125B-I | -         | 12.0 A    | 7.0 A     |
| F 65/125A-I | -         | 16.5 A    | 9.5 A     |