# F-I

## Standardised “EN 733” stainless steel pumps

Clean water

Industrial use

### PERFORMANCE RANGE

- Flow rate up to **2200 l/min** (132 m³/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**

CE

Pump body dimensions in compliance with **EN 733**

### CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY

### 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. Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

### OPTIONS AVAILABLE ON REQUEST

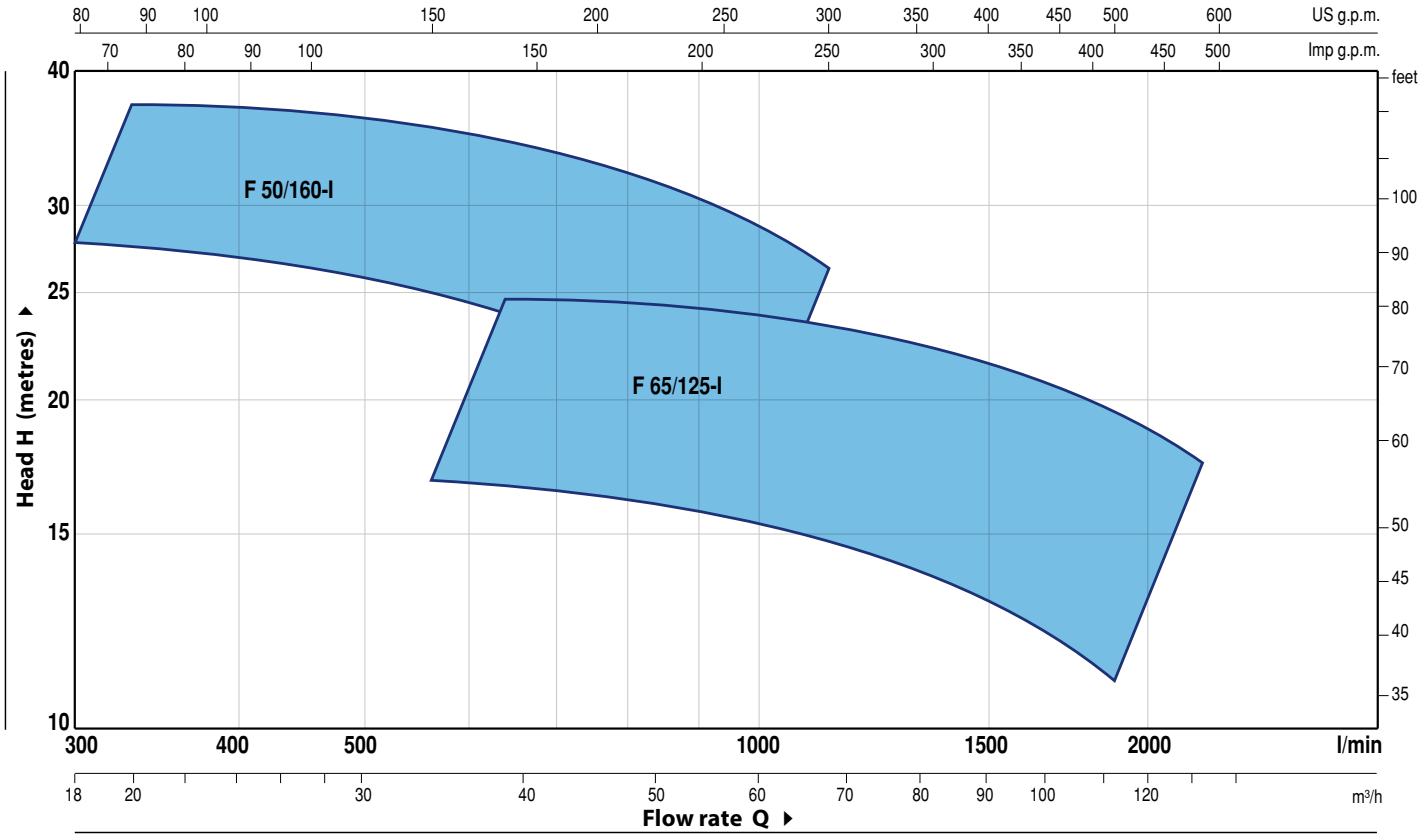
- Special mechanical seal
- Other voltages
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder environments

### GUARANTEE

2 years subject to terms and conditions

## PERFORMANCE RANGE

**60 Hz n= 3450 min⁻¹**




## PERFORMANCE DATA

**60 Hz n= 3450 min⁻¹**

| MODEL | POWER (P2) | | | PERFORMANCE | |
|---|---|---|---|---|---|
| **Three-phase** | **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

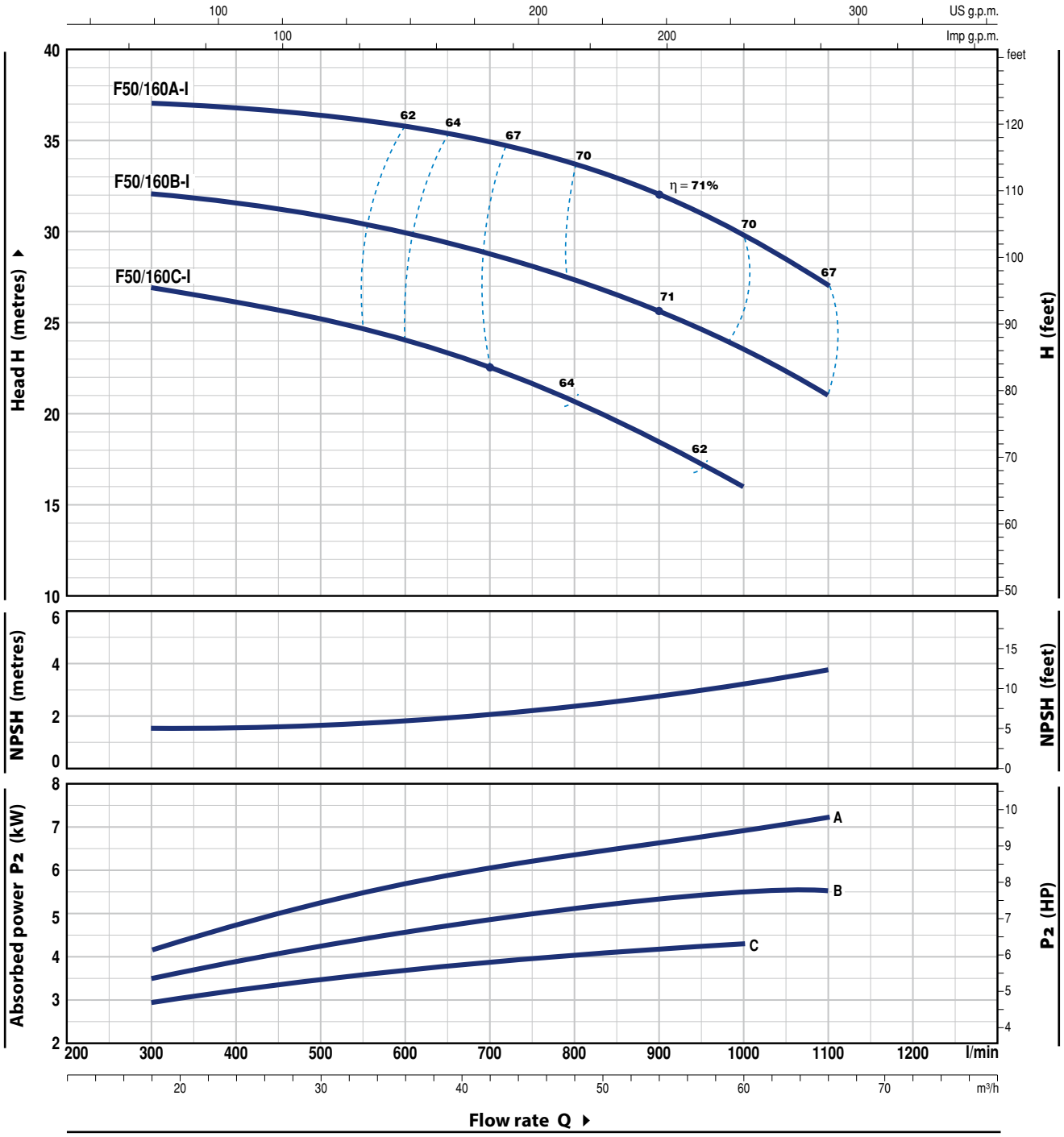
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Three-phase motor efficiency class (IEC 60034-30-1)

# F50/160-I

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

**60 Hz** **n= 3450 min⁻¹** HS= 0 m



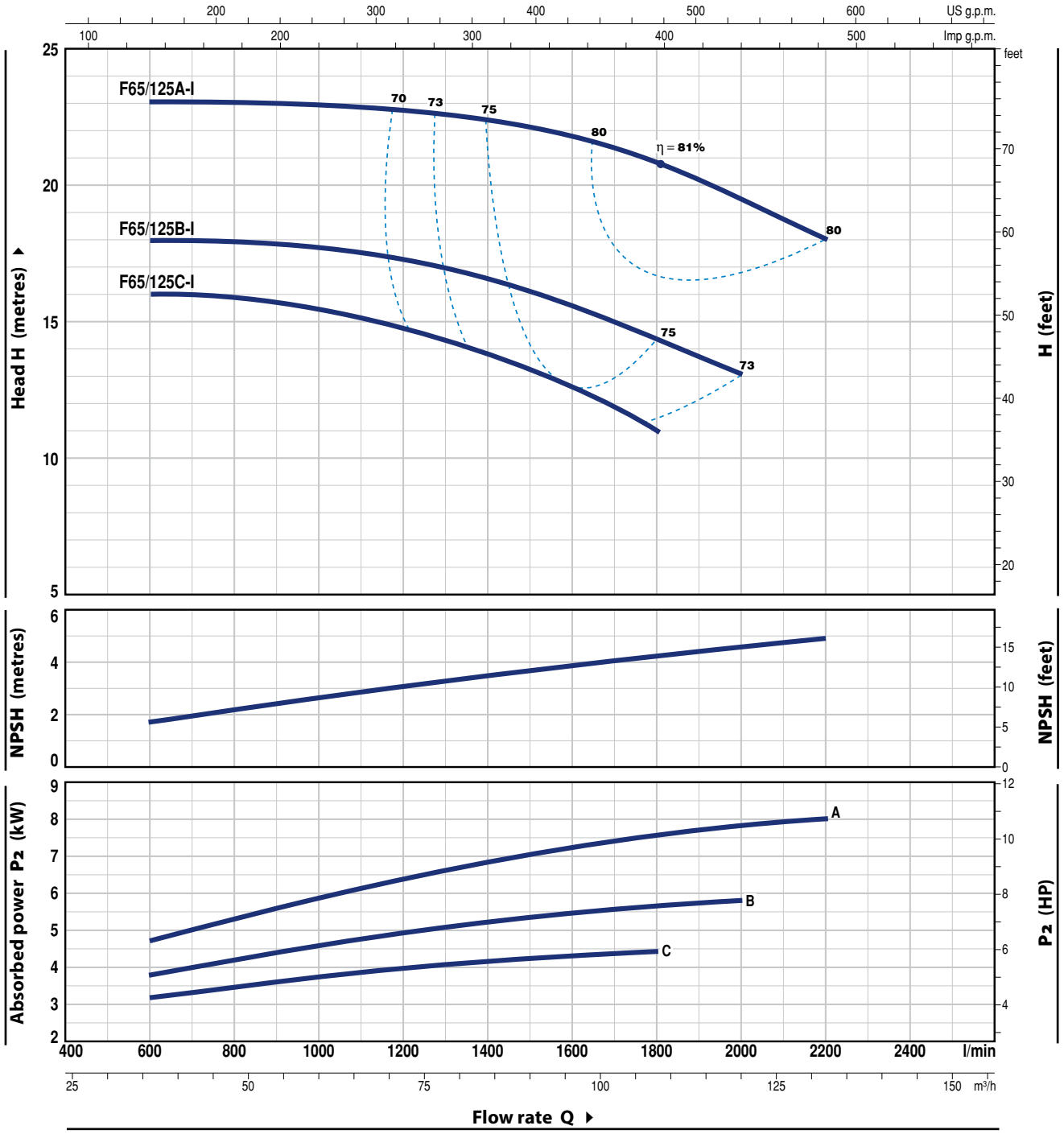

| MODEL | POWER (P2) | | Q | m³/h | 0 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Three-phase | kW | HP | | l/min | **0** | **300** | **400** | **500** | **600** | **700** | **800** | **900** | **1000** | **1100** |
| **F 50/160C-I** | 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

**60 Hz** **n= 3450 min$^{-1}$** HS= 0 m




| MODEL | POWER (P2) | | Q | m³/h | 0 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Three-phase | kW | HP | | l/min | **0** | **600** | **800** | **1000** | **1200** | **1400** | **1600** | **1800** | **2000** | **2200** |
| **F 65/125C-I** | 4 | 5.5 | | | 16 | 16 | 16 | 15.5 | 14.5 | 13.5 | 12.5 | 11 | | |
| **F 65/125B-I** | 5.5 | 7.5 | **H** | metres | 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 | **PUMP BODY** | Stainless steel AISI 316 complete with flanged suction and delivery ports |
| 2 | **BODY BACKPLATE** | Stainless steel AISI 316 |
| 3 | **IMPELLER** | Stainless steel AISI 316 |
| 4 | **MOTOR SHAFT** | Stainless steel AISI 316L |

**5 MECHANICAL SEAL**

| ***Pump*** | ***Seal*** | ***Shaft*** | *Materials* | | |
|---|---|---|---|---|---|
| ***Model*** | ***Model*** | ***Diameter*** | *Stationary ring* | *Rotational ring* | *Elastomer* |
| **F50/160-I**<br>**F65/125-I** | **FN-24SV** | **Ø 24** mm | Silicon carbide | Silicon carbide | Viton |

**6 BEARINGS**

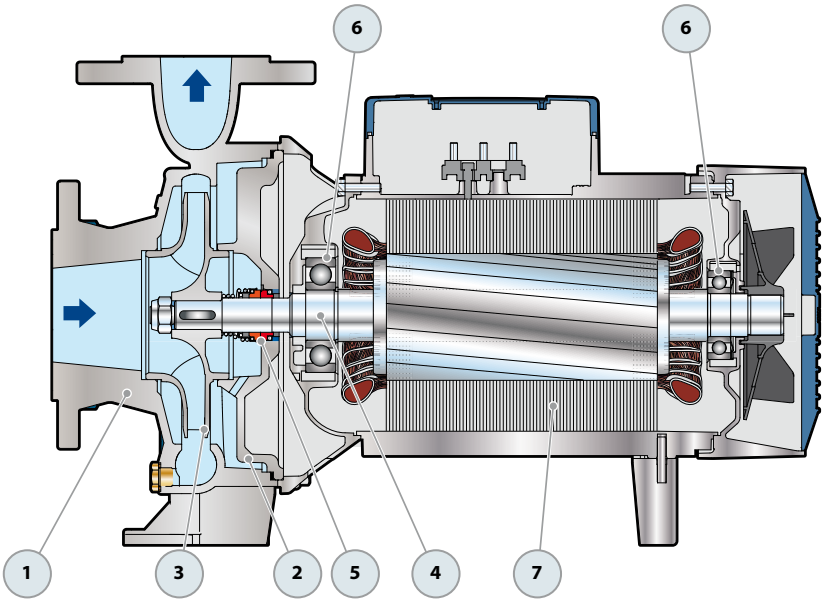
| ***Pump*** | ***Model*** |
|---|---|
| **F50/160-I**<br>**F65/125-I** | **6307 ZZ-C3 / 6206 ZZ-C3** |

**7 ELECTRIC MOTOR**

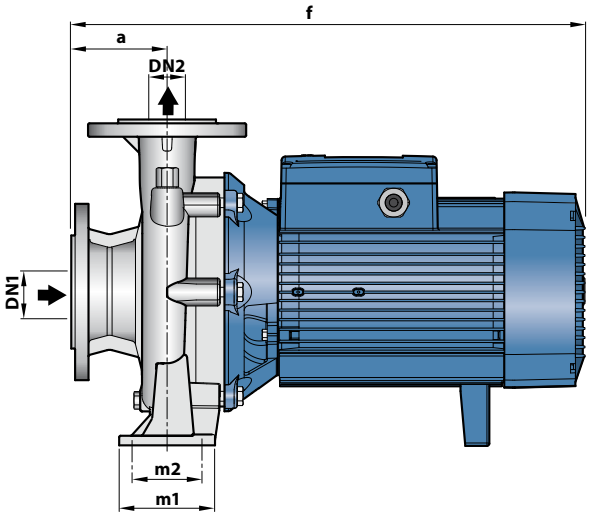
**F**: three-phase 220/380 V - 60 Hz or 220/240 V - 60 Hz

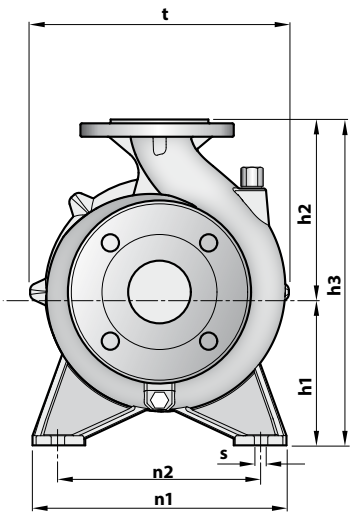
➠ **The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30-1)**

– Insulation: class F
– Protection: IP 55



## DIMENSIONS AND WEIGHT




| MODEL | DIMENSIONS mm | | | | | | | | | | | | kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Three-phase | DN1 | DN2 | a | f | h3 | h1 | h2 | t | n2 | n1 | m1 | m2 | s | 3~ |
| F 50/160C-I | 65 | 50 | 100 | 489 | 340 | 160 | 180 | 269 | 212 | 265 | 100 | 70 | 14 | 50.2 |
| F 50/160B-I | | | | 535 | | | | | | | | | | 54.0 |
| F 50/160A-I | | | | | | | | | | | | | | 65.5 |
| F 65/125C-I | 80 | 65 | | 511 | | | | 291 | | 280 | 125 | 95 | | 62.6 |
| F 65/125B-I | | | | 557 | | | | | | | | | | 67.7 |
| F 65/125A-I | | | | | | | | | | | | | | 72.9 |

## ABSORPTION

| MODEL | VOLTAGE | | | |
|---|---|---|---|---|
| Three-phase | 220 V | 380 V | 220 V | 440 V |
| F 50/160C-I | **17.7** A | **10.3** A | **16.4** A | **12.5** A |
| F 50/160B-I | **21.0** A | **12.0** A | **20.8** A | **13.5** A |
| F 50/160A-I | **28.0** A | **16.5** A | **26.7** A | **17.5** A |
| F 65/125C-I | **18.0** A | **10.4** A | **19.5** A | **12.5** A |
| F 65/125B-I | **22.5** A | **13.0** A | **22.0** A | **13.8** A |
| F 65/125A-I | **28.8** A | **16.6** A | **32.0** A | **19.5** A |