



PERFORMANCE RANGE

- Flow rate up to **6000 l/min** (360 m³/h)
- Head up to **95 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 60034-1
IEC 60034-1
CEI 2-3



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

CERTIFICATIONS



INSTALLATION AND USE

- Water supply
- Pressure boosting
- Irrigation
- Water circulation in climatisation sets
- Cleaning sets
- Firefighting sets
- Industrial applications
- Agricultural applications

The pumps must be installed in enclosed places, or at least protected against inclement weather.

OPTIONALS AVAILABLE ON REQUEST

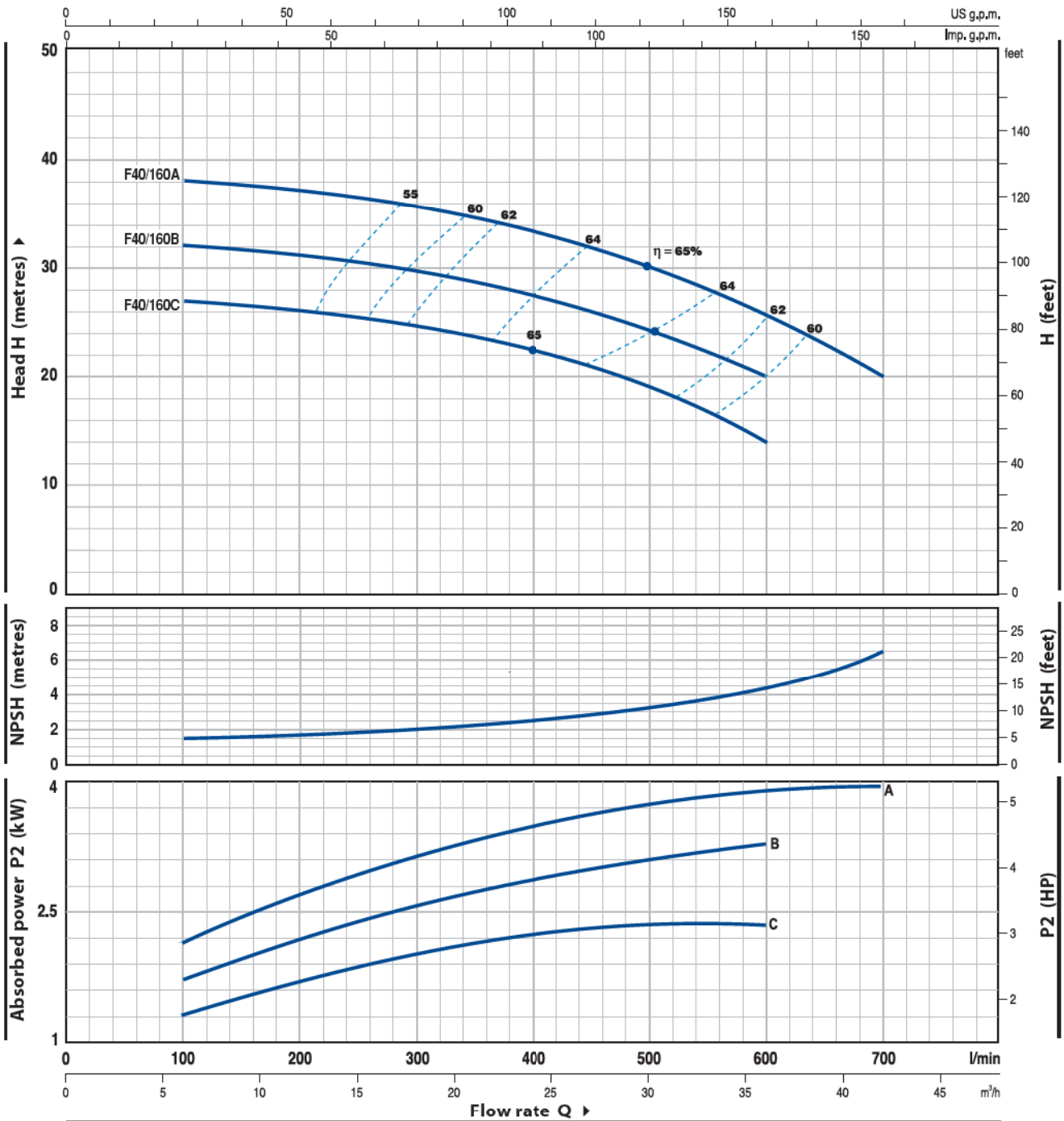
- Special mechanical seal
- Other voltages or 60 Hz frequency
- Compatibility with hotter or colder liquids
- Compatibility with hotter or colder ambients

GUARANTEE

2 years subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min HS= 0 m

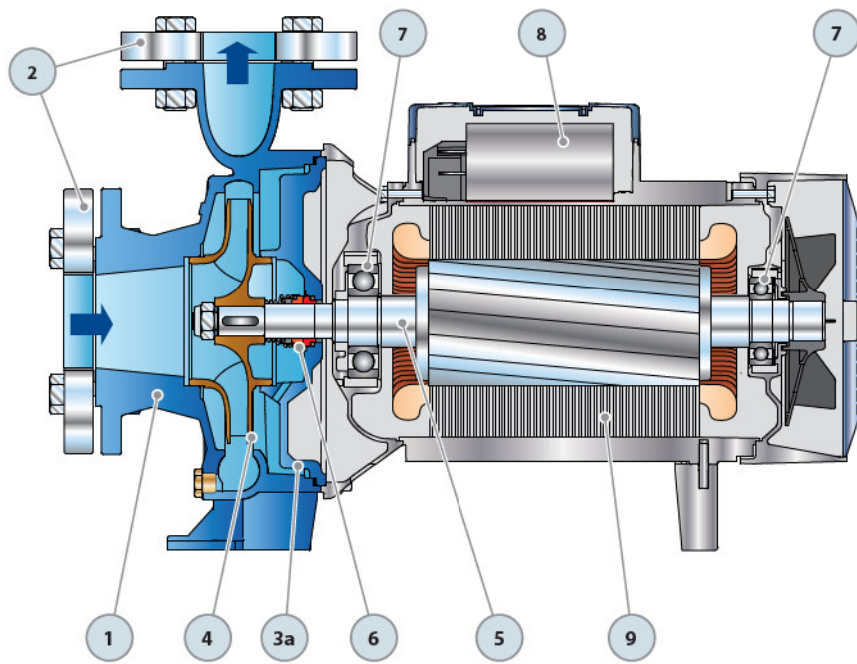


| MODEL | | POWER | | Q | Flow rate | | | | | | | | | | | |
|--------------|-------------|-------|-----|----------|-----------|-----|------|-----|------|-----|------|-----|-----|-----|----|--|
| Single-phase | Three-phase | kW | HP | | m³/h | 0 | 6 | 9 | 12 | 15 | 18 | 24 | 30 | 36 | 42 | |
| Fm 40/160C | F 40/160C | 2.2 | 3 | H metres | 0 | 100 | 150 | 200 | 250 | 300 | 400 | 500 | 600 | 700 | | |
| - | F 40/160B | 3 | 4 | | 27 | 27 | 26.5 | 26 | 25.5 | 25 | 22.5 | 19 | 14 | | | |
| - | F 40/160A | 4 | 5.5 | | 32 | 32 | 31.5 | 31 | 30.5 | 30 | 27.5 | 24 | 20 | | | |
| | | | | | 38 | 38 | 37.8 | 37 | 36.5 | 36 | 33.5 | 30 | 26 | 20 | | |

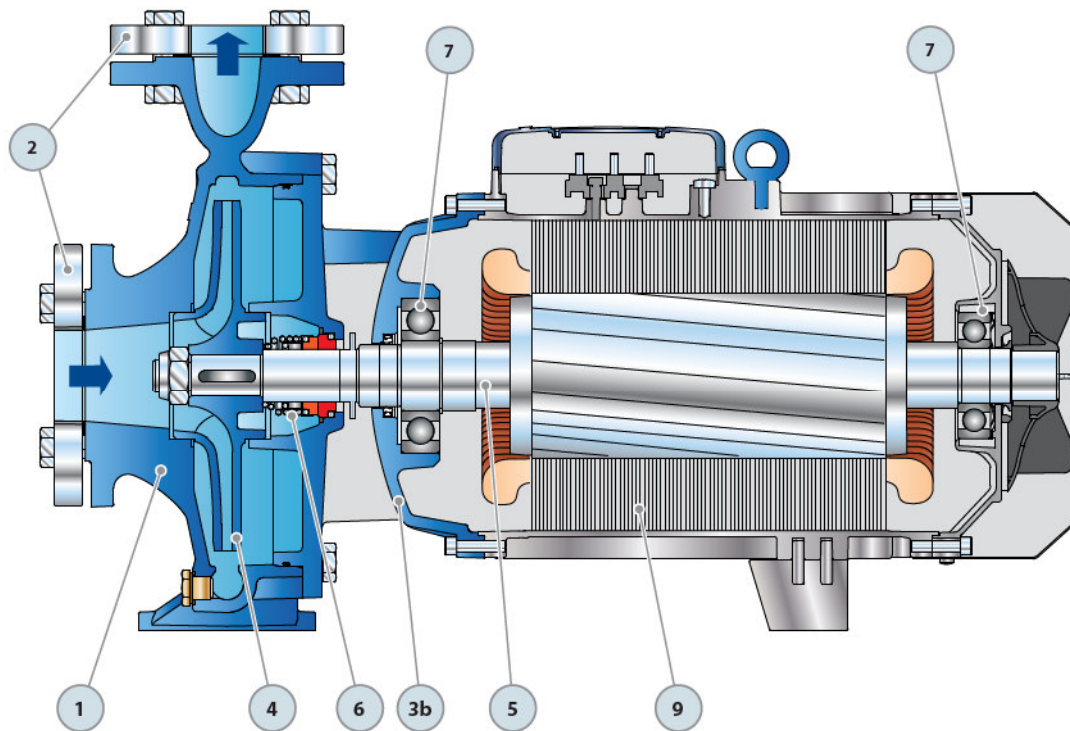
Q = Flow rate H = Total manometric head HS = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 App. A.

| POS. | COMPONENT | CONSTRUCTION CHARACTERISTICS | | | | | |
|------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------|
| 1 | PUMP BODY | Cast iron, complete with flanged suction and delivery ports | | | | | |
| 2 | COUNTERFLANGES | Steel, complete with ISO 228/1 thread | | | | | |
| 3a | BODY BACKPLATE | Cast iron | | | | | |
| 3b | MOTOR BRACKET | Cast iron | | | | | |
| 4 | IMPELLER | Brass for F32/160, F32/200, F40/160, F40/200, F50/125, F50/160 Cast iron for F40/250, F50/200, F50/250, F65/125, F65/160, F65/200, F65/250, F80/160, F80/200, F80/250, F100/160, F100/200, F100/250 | | | | | |
| 5 | MOTOR SHAFT | Stainless steel EN 10088-3 - 1.4104 | | | | | |
| 6 | MECHANICAL SEAL | Pump Model | | Seal Model | Shaft Diameter | Materials Stationary ring Rotational ring Elastomer | |
| | | F32/160 F50/125 | F40/160 | FN-20 | Ø 20 mm | Graphite | Ceramic NBR |
| | | F32/200 F50/160 | F40/200 F65/125 | FN-24 | Ø 24 mm | Graphite | Ceramic NBR |
| | | F50/200 F65/200 F100/160 | F65/160 F80/160 | FN-32 NU | Ø 32 mm | Graphite | Ceramic NBR |
| | | F40/250 F65/250 | F50/250 F80/200 | FN-38 | Ø 38 mm | Graphite | Ceramic NBR |
| | | F80/250B F80/250A | F100/200 F100/250 | FN-40 FH-45 NU | Ø 40 mm Ø 45 mm | Graphite | Ceramic NBR Ceramic NBR |
| 7 | BEARINGS | Pump Model | | Pump Model | | | |
| | | Fm32/160C F32/160C F32/160B F40/160C F50/125C | 6206 ZZ - C3 / 6204 ZZ | F32/200 F40/200 F50/160 F65/125 | 6307 ZZ - C3 / 6206 ZZ - C3 | | |
| | | Fm32/160B F32/160A Fm40/160C F40/160B Fm50/125C F50/125B | 6206 ZZ - C3 / 6205 ZZ | F40/250 F50/200 F50/250 F65/160 F65/200 F80/160 F100/160 | 6310 ZZ - C3 / 6308 ZZ - C3 | | |
| | | F40/160A F50/125A | 6306 ZZ - C3 / 6206 ZZ - C3 | F65/250 F80/200 F80/250B F100/200 F80/250A F100/250 | 6312 ZZ - C3 / 6212 ZZ - C3 6314 ZZ - C3 / 6314 ZZ - C3 | | |
| 8 | CAPACITOR | Pump Single-phase | Capacitance (230 V or 240 V) | | | | |
| | | Fm32/160C | 45 µF 450 VL | | | | |
| | | Fm32/160B | 70 µF 450 VL | | | | |
| | | Fm40/160C | 70 µF 450 VL | | | | |
| | | Fm50/125C | 70 µF 450 VL | | | | |
| 9 | ELECTRIC MOTOR | Fm: single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding (up to 1.5 kW) F: three-phase 230/400 V - 50 Hz up to 4 kW 400/690 V - 50 Hz from 5.5 to 75 kW ⇒ Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance – Insulation: F class – Protection: IP 55 | | | | | |

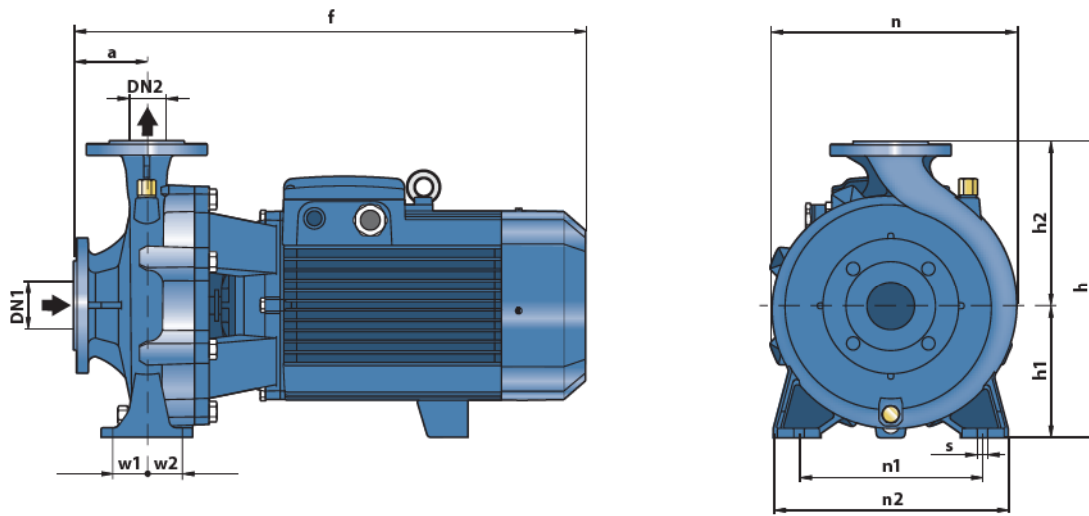


Single-phase version



Three-phase version

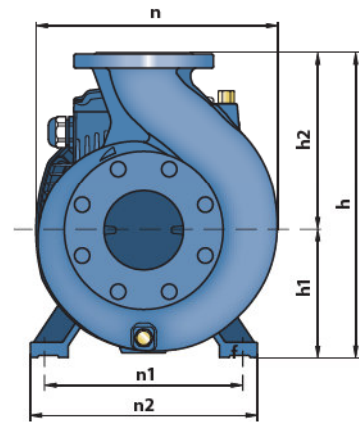
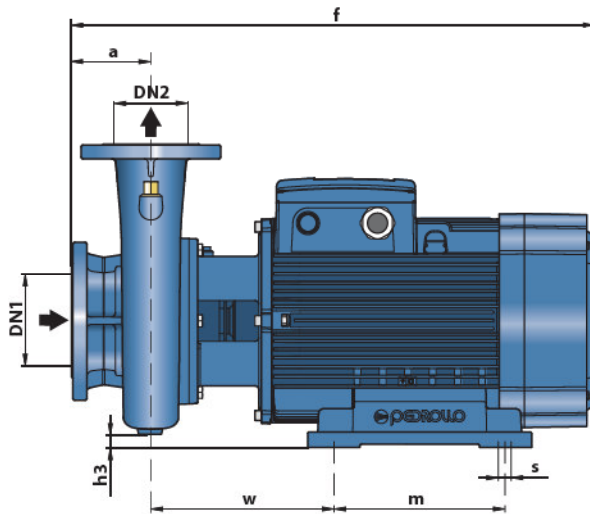
DIMENSIONS AND WEIGHT



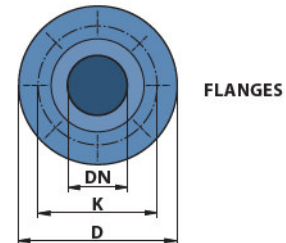
| MODEL | | PORTS | | DIMENSIONS mm | | | | | | | | | | | kg * | | | | | | | | | | | | | |
|--------------|-------------|-------|-------|---------------|------|-------|-----|-----|-----|-----|-----|------|------|----|-------|-------|-----|-----|-----|-----|-----|-----|-----|------|------|----|------|------|
| Single-phase | Three-phase | DN1 | DN2 | a | f | h | h1 | h2 | n | n1 | n2 | w1 | w2 | s | 1~ | 3~ | | | | | | | | | | | | |
| Fm 32/160C | F 32/160C | 50 | 32 | 80 | 412 | 292 | 132 | 160 | 242 | 190 | 240 | 35 | 35 | 14 | 39.2 | 37.0 | | | | | | | | | | | | |
| Fm 32/160B | F 32/160B | | | | 42.6 | | | | | | | | | | 38.5 | | | | | | | | | | | | | |
| - | F 32/160A | | | | - | | | | | | | | | | 42.6 | | | | | | | | | | | | | |
| - | F 32/200C | | | | - | | | | | | | | | | 52.0 | | | | | | | | | | | | | |
| - | F 32/200B | | | | - | | | | | | | | | | 57.0 | | | | | | | | | | | | | |
| - | F 32/200A | | | | - | | | | | | | | | | 61.0 | | | | | | | | | | | | | |
| - | F 32/200BH | | | | - | | | | | | | | | | 47.9 | | | | | | | | | | | | | |
| - | F 32/200AH | | | | - | | | | | | | | | | 51.1 | | | | | | | | | | | | | |
| Fm 40/160C | F 40/160C | | | | 65 | | | | | | | | | | 40 | 80 | 412 | 292 | 132 | 160 | 240 | 212 | 265 | 47.5 | 47.5 | 14 | 43.9 | 40.0 |
| - | F 40/160B | | | | | | | | | | | | | | | | - | | | | | | | | | | 44.0 | |
| - | F 40/160A | - | 50.1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 40/200B | - | 61.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 40/200A | - | 67.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 40/250C | - | 103.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 40/250B | - | 109.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 40/250A | - | 125.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fm 50/125C | F 50/125C | 65 | 50 | 100 | | 431 | 292 | 132 | 160 | 242 | 190 | 240 | 35 | 35 | | | 14 | | | | | | | | | | 44.2 | 40.1 |
| - | F 50/125B | | | | | - | | | | | | | | | | | | | | | | | | | | | 44.1 | |
| - | F 50/125A | | | | - | 50.7 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/160C | | | | - | 55.0 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/160B | | | | - | 60.6 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/160A | | | | - | 64.7 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/200C | | | | - | 106.0 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/200B | | | | - | 128.0 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/200A | | | | - | 135.0 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/200AR | | | | - | 147.0 | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/250D | - | 106.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/250C | - | 113.4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/250B | - | 129.6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/250A | - | 146.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 50/250AR | - | 155.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | F 65/125C | 80 | 65 | 100 | 511 | 340 | 160 | 180 | 291 | 212 | 280 | 47.5 | 47.5 | 14 | - | 62.7 | | | | | | | | | | | | |
| - | F 65/125B | | | | - | | | | | | | | | | 66.8 | | | | | | | | | | | | | |
| - | F 65/125A | | | | - | | | | | | | | | | 74.0 | | | | | | | | | | | | | |
| - | F 65/160C | | | | - | | | | | | | | | | 100.0 | | | | | | | | | | | | | |
| - | F 65/160B | | | | - | | | | | | | | | | 106.5 | | | | | | | | | | | | | |
| - | F 65/160A | | | | - | | | | | | | | | | 123.0 | | | | | | | | | | | | | |
| - | F 65/200B | | | | - | | | | | | | | | | 128.0 | | | | | | | | | | | | | |
| - | F 65/200A | | | | - | | | | | | | | | | 125.0 | | | | | | | | | | | | | |
| - | F 65/200AR | | | | - | | | | | | | | | | 153.1 | | | | | | | | | | | | | |
| - | F 80/160D | | | | - | | | | | | | | | | 111.5 | | | | | | | | | | | | | |
| - | F 80/160C | 100 | 80 | 125 | 652 | 405 | 180 | 225 | 330 | 250 | 320 | 60 | 60 | 18 | - | 126.0 | | | | | | | | | | | | |
| - | F 80/160B | | | | - | | | | | | | | | | 143.5 | | | | | | | | | | | | | |
| - | F 80/160A | | | | - | | | | | | | | | | 153.0 | | | | | | | | | | | | | |
| - | F 100/160C | | | | - | | | | | | | | | | 139.0 | | | | | | | | | | | | | |
| - | F 100/160B | | | | - | | | | | | | | | | 153.7 | | | | | | | | | | | | | |
| - | F 100/160A | | | | - | | | | | | | | | | 165.0 | | | | | | | | | | | | | |

(*weight includes counterflanges)

DIMENSIONS AND WEIGHT



| DN FLANGES | D mm | K mm | HOLES | |
|---------------|---------|---------|-------|--------|
| | | | N° | Ø (mm) |
| 32 | 140 | 100 | 4 | 18 |
| 40 | 150 | 110 | | |
| 50 | 165 | 125 | | |
| 65 | 185 | 145 | | |
| 80 | 200 | 160 | 8 | 18 |
| 100 | 220 | 180 | | |
| 125 | 250 | 210 | | |

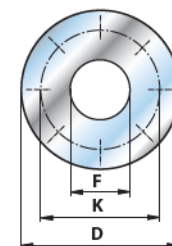


| MODEL | PORTS | | DIMENSIONS mm | | | | | | | | | | | kg * | |
|-------------|-------|-----|---------------|------|-----|-----|-----|----|-----|-----|-----|-------|-----|------|-------|
| | DN1 | DN2 | a | f | h | h1 | h2 | h3 | n | n1 | n2 | w | m | | s |
| Three-phase | | | | | | | | | | | | | | | 3~ |
| F 65/250C | 80 | 65 | 100 | 796 | 450 | 200 | 250 | 15 | 369 | 318 | 360 | 269.5 | 305 | 18.5 | 210.0 |
| F 65/250B | | | | 847 | | | | | | | | | | | 230.0 |
| F 65/250A | | | | 847 | | | | | | | | | | | 230.0 |
| F 80/200B | 100 | 80 | 125 | 824 | 430 | 250 | 280 | 25 | 360 | 400 | 490 | 294 | 350 | 24 | 212.0 |
| F 80/200A | | | | 875 | | | | | | | | | | | 222.5 |
| F 80/250B | | | | 872 | | | | | | | | | | | 245.0 |
| F 80/250A | | | | 1015 | 620 | 250 | 280 | 55 | 490 | 400 | 490 | 294 | 350 | 24 | 497.0 |
| F 100/200C | 125 | 100 | 140 | 824 | 480 | 200 | 280 | 0 | 391 | 318 | 360 | 269.5 | 305 | 18.5 | 208.5 |
| F 100/200B | | | | 875 | | | | | | | | | | | 239.0 |
| F 100/200A | | | | 875 | | | | | | | | | | | 240.0 |
| F 100/250B | | | | | 620 | 250 | 280 | 45 | 490 | 400 | 490 | 300 | 350 | 24 | 498.5 |
| F 100/250A | | | | 1036 | 210 | 250 | 280 | 45 | 490 | 400 | 490 | 300 | 350 | 24 | 498.5 |

(*weight includes counterflanges)

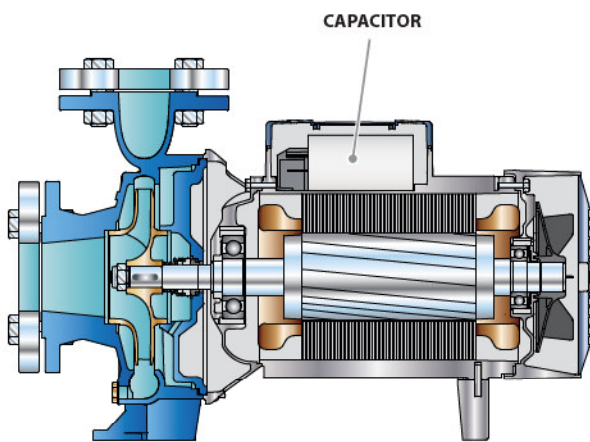
COUNTERFLANGES

| DN FLANGES | F COUNTERFLANGES | D mm | K mm | HOLES | |
|---------------|---------------------|---------|---------|-------|--------|
| | | | | N° | Ø (mm) |
| 32 | 1¼" | 140 | 100 | 4 | 18 |
| 40 | 1½" | 150 | 110 | | |
| 50 | 2" | 165 | 125 | | |
| 65 | 2½" | 185 | 145 | | |
| 80 | 3" | 200 | 160 | 8 | 18 |
| 100 | 4" | 220 | 180 | | |
| 125 | 5" | 250 | 210 | | |

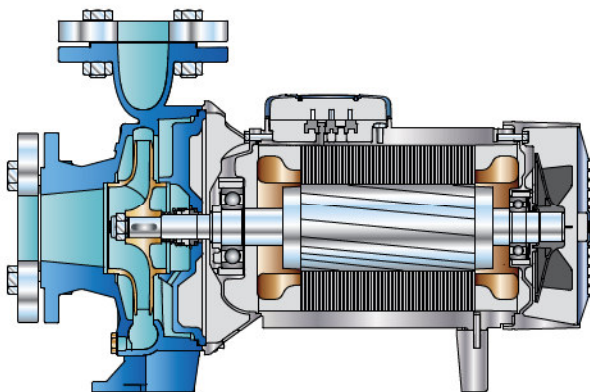


ABSORPTION

| MODEL | VOLTAGE (single-phase) | |
|--------------|------------------------|--------|
| | 230 V | 240 V |
| Single-phase | | |
| Fm 32/160C | 11.0 A | 10.0 A |
| Fm 32/160B | 15.0 A | 13.8 A |
| Fm 40/160C | 15.0 A | 13.8 A |
| Fm 50/125C | 15.0 A | 13.8 A |



Single-phase version



Three-phase version

| MODEL | VOLTAGE (three-phase) | | |
|-------------|-----------------------|-----------|-----------|
| | 230÷240 V | 400÷415 V | 690÷720 V |
| Three-phase | | | |
| F 32/160C | 7.5 A | 4.3 A | 2.5 A |
| F 32/160B | 10.0 A | 5.8 A | 3.4 A |
| F 32/160A | 12.0 A | 7.3 A | 4.2 A |
| F 32/200C | 17.9 A | 10.3 A | 5.9 A |
| F 32/200B | - | 11.7 A | 6.7 A |
| F 32/200A | - | 14.9 A | 8.6 A |
| F 32/200BH | 12.6 A | 7.3 A | 4.2 A |
| F 32/200AH | 15.4 A | 8.9 A | 5.1 A |
| F 40/160C | 9.9 A | 5.7 A | 3.3 A |
| F 40/160B | 12.0 A | 6.9 A | 4.0 A |
| F 40/160A | 17.2 A | 9.9 A | 5.7 A |
| F 40/200B | - | 12.6 A | 7.3 A |
| F 40/200A | - | 15.6 A | 9.0 A |
| F 40/250C | - | 21.0 A | 12.1 A |
| F 40/250B | - | 23.5 A | 13.6 A |
| F 40/250A | - | 30.5 A | 17.6 A |
| F 50/125C | 9.4 A | 5.4 A | 3.1 A |
| F 50/125B | 12.0 A | 6.9 A | 4.0 A |
| F 50/125A | 16.3 A | 9.4 A | 5.4 A |
| F 50/160C | 15.8 A | 9.1 A | 5.3 A |
| F 50/160B | - | 12.3 A | 7.1 A |
| F 50/160A | - | 15.5 A | 8.9 A |
| F 50/200C | - | 23 A | 13.3 A |
| F 50/200B | - | 29.5 A | 17 A |
| F 50/200A | - | 34.5 A | 20 A |
| F 50/200AR | - | 41.5 A | 24 A |
| F 50/250D | - | 17.2 A | 9.9 A |
| F 50/250C | - | 21.0 A | 12.0 A |
| F 50/250B | - | 27.0 A | 15.6 A |
| F 50/250A | - | 34.0 A | 19.6 A |
| F 50/250AR | - | 41.0 A | 24.0 A |
| F 65/125C | 17.5 A | 10.0 A | 5.8 A |
| F 65/125B | - | 12.0 A | 7.0 A |
| F 65/125A | - | 16.5 A | 9.5 A |
| F 65/160C | - | 19.0 A | 11.0 A |
| F 65/160B | - | 23.0 A | 13.5 A |
| F 65/160A | - | 27.5 A | 16.0 A |
| F 65/200B | - | 30.0 A | 17.3 A |
| F 65/200A | - | 35.0 A | 20.2 A |
| F 65/200AR | - | 41.0 A | 24.0 A |
| F 65/250C | - | 53.0 A | 31.0 A |
| F 65/250B | - | 65.0 A | 38.0 A |
| F 65/250A | - | 79.0 A | 46.0 A |
| F 80/160D | - | 22.0 A | 13.0 A |
| F 80/160C | - | 29.0 A | 17.0 A |
| F 80/160B | - | 34.5 A | 20.0 A |
| F 80/160A | - | 39.0 A | 22.5 A |
| F 80/200B | - | 53.0 A | 31.0 A |
| F 80/200A | - | 65.0 A | 38.0 A |
| F 80/250B | - | 79.0 A | 46.0 A |
| F 80/250A | - | 98.0 A | 57.0 A |
| F 100/160C | - | 31.0 A | 18.0 A |
| F 100/160B | - | 36.0 A | 21.0 A |
| F 100/160A | - | 42.0 A | 24.0 A |
| F 100/200C | - | 53.0 A | 31.0 A |
| F 100/200B | - | 65.0 A | 38.0 A |
| F 100/200A | - | 79.0 A | 46.0 A |
| F 100/250B | - | 98.0 A | 57.0 A |
| F 100/250A | - | 126.0A | 73.0 A |