



### ТЕХНИЧЕСКИЕ ДАННЫЕ

Рабочий диапазон: от 1 до 12 м<sup>3</sup> / ч с головкой до 11 метров.  
 Диапазон температур накачки жидкости: от -10 °С до + 110 °С.  
 Перекачанная жидкость: чистая, свободная от твердых веществ и минеральных масел, не вязкая, химически нейтральная, близкая к характеристикам воды (макс. 30% гликоль).  
 Максимальное рабочее давление: 10 бар (1000 кПа).  
 Уровень защиты: IP 44  
 Класс изоляции: F  
 Кабельный втулка: PG 11  
 Установка: с осью двигателя горизонталь.  
 Стандартное входное напряжение: однофазное 230 В / 50 Гц

**Трехфазная 400 В / 50 Гц**

**Этот продукт соответствует европейскому стандарту EN 60335-2-51**

### ПРИМЕНЕНИЕ

Насос для циркуляции горячей или холодной воды в системе центрального отопления в небольших общинах и системах кондиционирования воздуха как для гражданских и промышленных приложений, замкнутой замкнутой цепи и типа открытого цепи.

### КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ

Pump body in cast iron and motor in die cast aluminium.

Impeller in technopolymer, motor shaft in hardened stainless steel held in graphite bearings lubricated by the pumping medium.

Pump body with threaded ports.

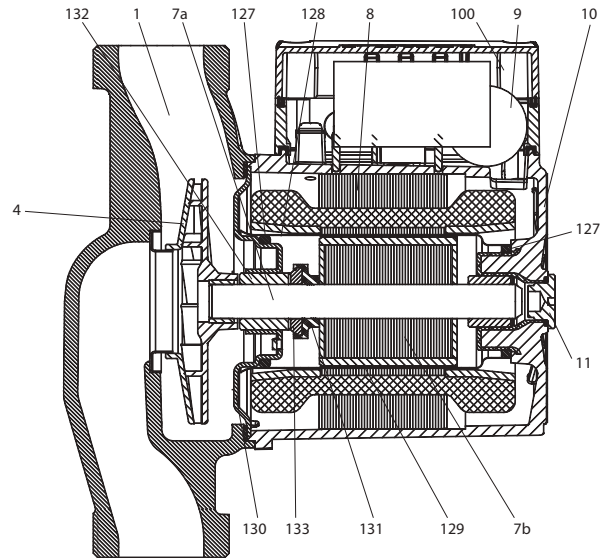
Rotor protective jacket, stator jacket, and closing flange in stainless steel.

The two-pole asynchronous wet rotor motor features three-speed operation.

Integral thermal probe in single-phase version.

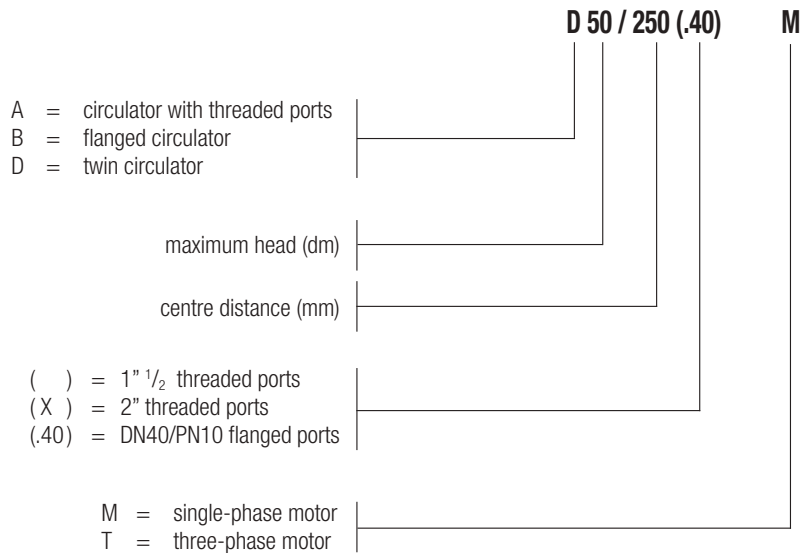
### MATERIALS

| N.  | PARTS               | MATERIALS          |
|-----|---------------------|--------------------|
| 1   | PUMP BODY           | CAST IRON          |
| 4   | IMPELLER            | TECHNOPOLYMER      |
| 7A  | MOTOR SHAFT         | STAINLESS STEEL    |
| 7B  | ROTOR               | -                  |
| 8   | STATOR              | -                  |
| 9   | CAPACITOR           | -                  |
| 10  | MOTOR CASING        | DIE CAST ALUMINIUM |
| 11  | BREATHER PLUG       | BRASS              |
| 100 | TERMINAL BOX        | -                  |
| 127 | SEAL RING           | ETHYLENE PROPYLENE |
| 128 | STATOR JACKET       | STAINLESS STEEL    |
| 129 | ROTOR JACKET        | STAINLESS STEEL    |
| 130 | CLOSING FLANGE      | STAINLESS STEEL    |
| 131 | THRUST RING SUPPORT | ETHYLENE PROPYLENE |
| 132 | BUSHINGS            | GRAPHITE           |
| 133 | THRUST RING         | CERAMIC            |



WET ROTOR CIRCULATORS

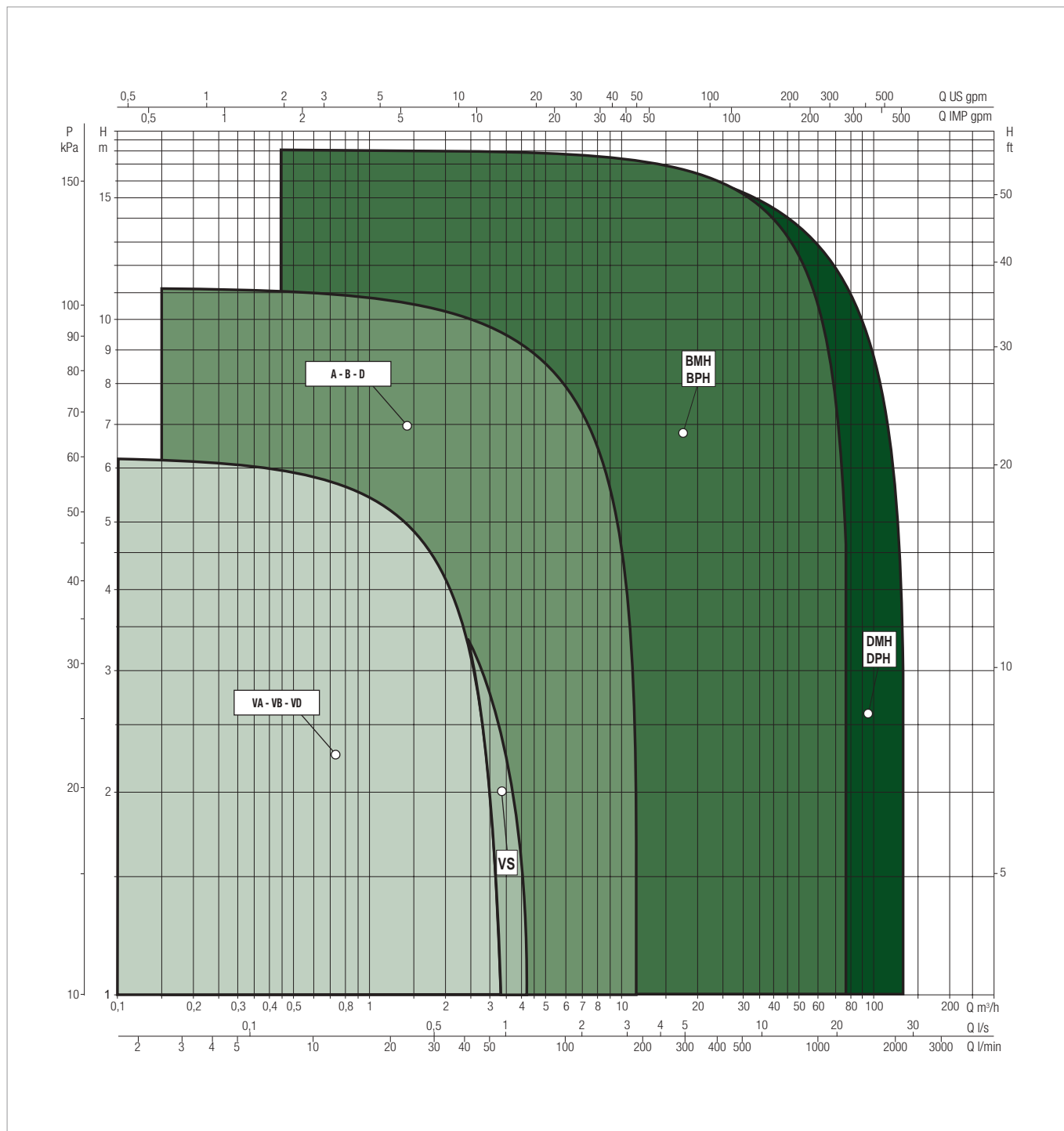
**- Legend:**  
**(example)**



### PERFORMANCE RANGE

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

### GRAPHIC SELECTION TABLE



### SELECTION TABLE - A SINGLE WITH UNIONS

| MODEL        | Q=m <sup>3</sup> /h | 0    | 0,6  | 1,2  | 1,8  | 2,4  | 3   | 4,2 | 7,2 | 12  |
|--------------|---------------------|------|------|------|------|------|-----|-----|-----|-----|
|              | Q=l/min             | 0    | 10   | 20   | 30   | 40   | 50  | 70  | 120 | 200 |
| A 50/180 M   | H<br>(m)            | 5,7  | 5,6  | 5,4  | 5,3  | 5,1  | 4,8 | 4,2 | 2,6 |     |
| A 50/180 XM  |                     | 5,7  | 5,6  | 5,4  | 5,3  | 5,1  | 4,8 | 4,2 | 2,6 |     |
| A 50/180 T   |                     | 5,6  | 5,6  | 5,6  | 5,5  | 5,43 | 5,4 | 4,9 | 2,8 |     |
| A 50/180 XT  |                     | 5,9  | 5,85 | 5,8  | 5,6  | 5,5  | 5,2 | 4,6 | 2,9 |     |
| A 56/180 M   |                     | 6,35 | 6,3  | 6,2  | 6,18 | 6    | 5,9 | 5,5 | 4,2 | 1,2 |
| A 56/180 XM  |                     | 6,35 | 6,3  | 6,2  | 6,18 | 6    | 5,9 | 5,5 | 4,2 | 1,2 |
| A 56/180 T   |                     | 6,42 | 6,42 | 6,41 | 6,4  | 6,4  | 6,4 | 6,1 | 4,8 |     |
| A 56/180 XT  |                     | 6,4  | 6,3  | 6,2  | 6,1  | 6    | 5,9 | 5,7 | 4,4 |     |
| A 80/180 M   |                     | 8,25 | 8    | 7,6  | 7,4  | 7,2  | 6,9 | 6,3 | 3,8 |     |
| A 80/180 XM  |                     | 8,25 | 8    | 7,6  | 7,4  | 7,2  | 6,9 | 6,3 | 3,8 |     |
| A 80/180 T   |                     | 8,2  | 7,9  | 7,6  | 7,3  | 7    | 6,8 | 6,1 | 3,7 |     |
| A 80/180 XT  |                     | 8,2  | 7,9  | 7,6  | 7,3  | 7    | 6,8 | 6,1 | 3,7 |     |
| A 110/180 M  |                     | 11,3 | 11   | 10,8 | 10,5 | 10   | 9,8 | 8,9 | 6,7 |     |
| A 110/180 XM |                     | 11,3 | 11   | 10,8 | 10,5 | 10   | 9,8 | 9,2 | 7   | 1,7 |
| A 110/180 T  |                     | 11,3 | 11   | 10,8 | 10,5 | 10   | 9,8 | 8,9 | 6,6 |     |
| A 110/180 XT |                     | 11,3 | 11   | 10,8 | 10,5 | 10   | 9,8 | 9,2 | 7   | 1,6 |

### SELECTION TABLE - B SINGLE WITH FLANGES

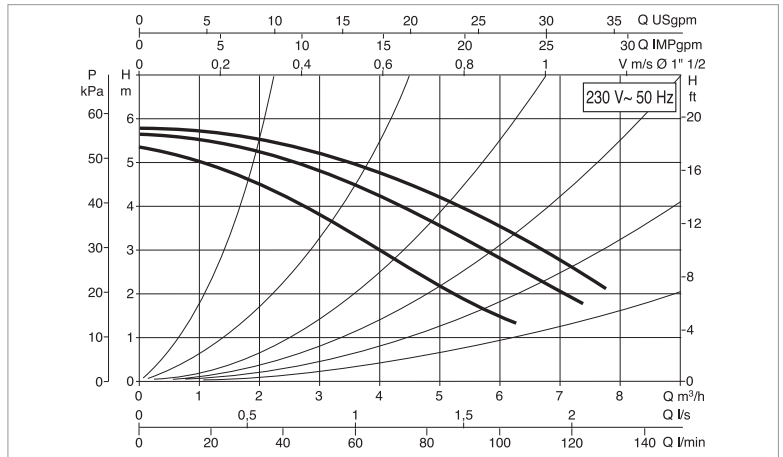
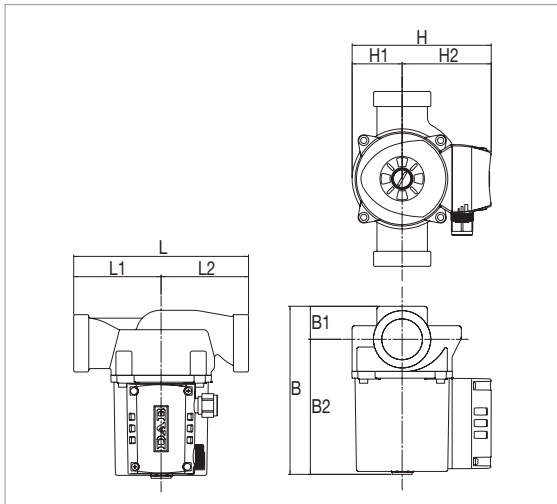
| MODEL          | Q=m <sup>3</sup> /h | 0    | 0,6  | 1,2  | 1,8  | 2,4 | 3   | 4,2 | 7,2 | 12  |
|----------------|---------------------|------|------|------|------|-----|-----|-----|-----|-----|
|                | Q=l/min             | 0    | 10   | 20   | 30   | 40  | 50  | 70  | 120 | 200 |
| B 50/250.40 M  | H<br>(m)            | 5,7  | 5,6  | 5,4  | 5,3  | 5,1 | 4,8 | 4,2 | 2,6 |     |
| B 50/250.40 T  |                     | 5,9  | 5,85 | 5,8  | 5,6  | 5,5 | 5,2 | 4,6 | 2,9 |     |
| B 56/250.40 M  |                     | 6,35 | 6,3  | 6,2  | 6,18 | 6   | 5,9 | 5,5 | 4,2 | 1,2 |
| B 56/250.40 T  |                     | 6,4  | 6,3  | 6,2  | 6,1  | 6   | 5,9 | 5,7 | 4,4 |     |
| B 80/250.40 M  |                     | 8,25 | 8    | 7,6  | 7,4  | 7,2 | 6,9 | 6,3 | 3,8 |     |
| B 80/250.40 T  |                     | 8,2  | 7,9  | 7,6  | 7,3  | 7   | 6,8 | 6,1 | 3,7 |     |
| B 110/250.40 M |                     | 11,3 | 11   | 10,8 | 10,5 | 10  | 9,8 | 9,2 | 7   | 1,7 |
| B 110/250.40 T |                     | 11,3 | 11   | 10,8 | 10,5 | 10  | 9,8 | 9,2 | 7   | 1,6 |

### SELECTION TABLE - D TWIN WITH FLANGES

| MODEL          | Q=m <sup>3</sup> /h | 0    | 0,6  | 1,2  | 1,8  | 2,4 | 3   | 4,2 | 7,2 | 12  |
|----------------|---------------------|------|------|------|------|-----|-----|-----|-----|-----|
|                | Q=l/min             | 0    | 10   | 20   | 30   | 40  | 50  | 70  | 120 | 200 |
| D 50/250.40 M  | H<br>(m)            | 5,7  | 5,6  | 5,4  | 5,3  | 5,1 | 4,8 | 4,2 | 2,6 |     |
| D 50/250.40 T  |                     | 5,9  | 5,85 | 5,8  | 5,6  | 5,5 | 5,2 | 4,6 | 2,9 |     |
| D 56/250.40 M  |                     | 6,35 | 6,3  | 6,2  | 6,18 | 6   | 5,9 | 5,5 | 4,2 | 1,2 |
| D 56/250.40 T  |                     | 5,9  | 5,85 | 5,8  | 5,6  | 5,5 | 5,2 | 4,6 | 2,9 |     |
| D 80/250.40 M  |                     | 8,25 | 8    | 7,6  | 7,4  | 7,2 | 6,9 | 6,3 | 3,8 |     |
| D 80/250.40 T  |                     | 8,2  | 7,9  | 7,6  | 7,3  | 7   | 6,8 | 6,1 | 3,7 |     |
| D 110/250.40 M |                     | 11,3 | 11   | 10,8 | 10,5 | 10  | 9,8 | 9,2 | 7   | 1,7 |
| D 110/250.40 T |                     | 11,3 | 11   | 10,8 | 10,5 | 10  | 9,8 | 9,2 | 7   | 1,6 |

## A 50/180 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



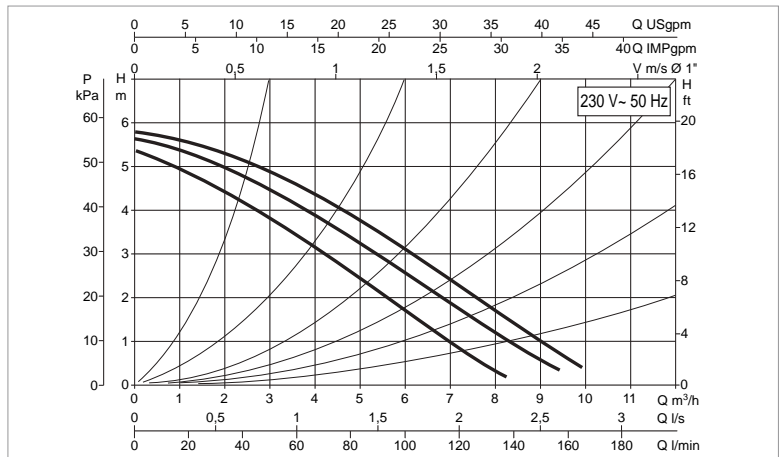
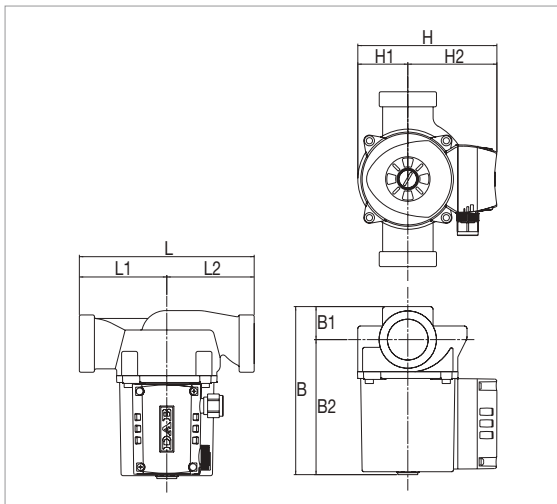
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|            |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
|            |                    |                   |                   |                 |            |          |      | μF        | Vc  |                          |     |
| A 50/180 M | 180                | 1x230 V ~         | 1"                | 3               | 2766       | 195      | 0,95 | 4         | 400 | m.c.a.                   | 1,5 |
|            |                    |                   |                   | 2               | 2616       | 194      | 0,95 |           |     |                          |     |
|            |                    |                   |                   | 1               | 2215       | 180      | 0,85 |           |     |                          |     |

| MODEL      | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F      | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|------------|-----|----|----|-----|----|-----|-----|----|----|--------|--------------------|-----|-----|-----------------------|-----------|
|            |     |    |    |     |    |     |     |    |    |        | L                  | B   | H   |                       |           |
| A 50/180 M | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 1" 1/2 | 206                | 170 | 180 | 0,066                 | 5         |

## A 50/180 XM - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



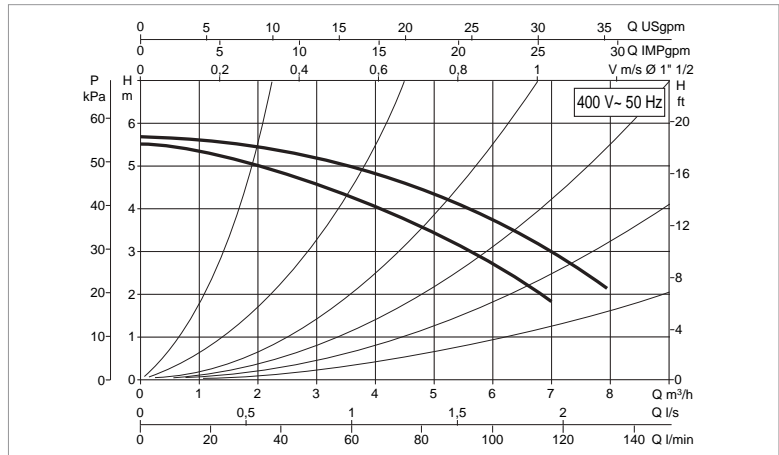
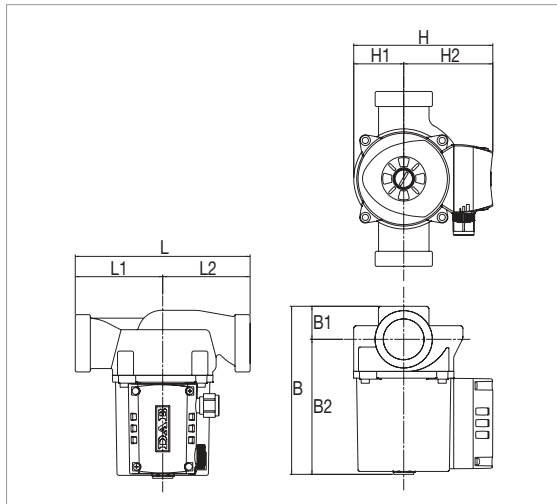
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
|             |                    |                   |                   |                 |            |          |      | μF        | Vc  |                          |     |
| A 50/180 XM | 180                | 1x230 V ~         | 1 1/2"            | 3               | 2791       | 184      | 0,92 | 4         | 400 | m.c.a.                   | 1,5 |
|             |                    |                   |                   | 2               | 2651       | 189      | 0,92 |           |     |                          |     |
|             |                    |                   |                   | 1               | 2297       | 168      | 0,80 |           |     |                          |     |

| MODEL       | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|-------------|-----|----|----|-----|----|-----|-----|----|----|------|--------------------|-----|-----|-----------------------|-----------|
|             |     |    |    |     |    |     |     |    |    |      | L                  | B   | H   |                       |           |
| A 50/180 XM | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 2" G | 206                | 170 | 180 | 0,066                 | 5,3       |

## A 50/180 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



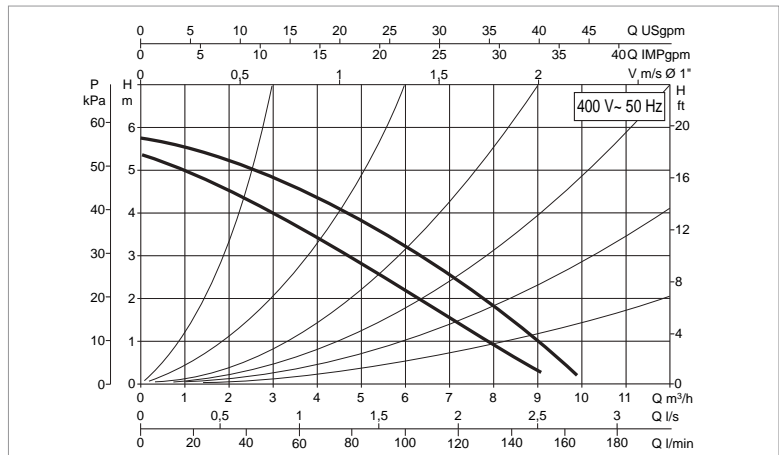
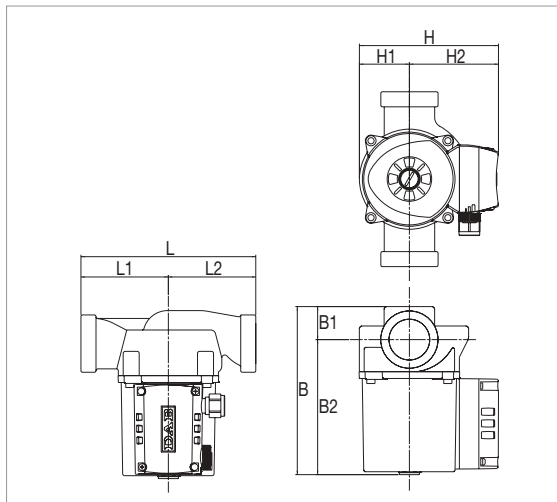
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|            |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| A 50/180 T | 180                | 3x400 V ~         | 1"                | 2               | 2827       | 197      | 0,52 | -         | - | m.c.a.                   | 1,5 |
|            |                    |                   |                   | 1               | 2502       | 139      | 0,25 |           |   |                          |     |

| MODEL      | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F      | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|------------|-----|----|----|-----|----|-----|-----|----|----|--------|--------------------|-----|-----|-----------|-----------|
|            |     |    |    |     |    |     |     |    |    |        | L                  | B   | H   |           |           |
| A 50/180 T | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 1 1/2" | 206                | 170 | 180 | 0,066     | 5,3       |

## A 50/180 XT - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



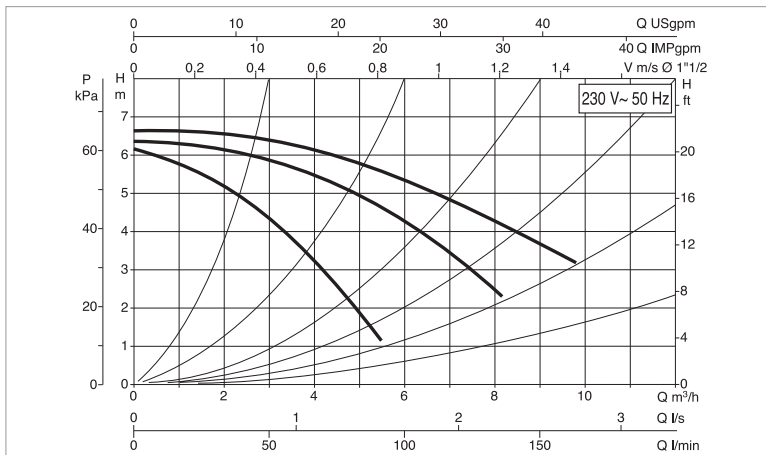
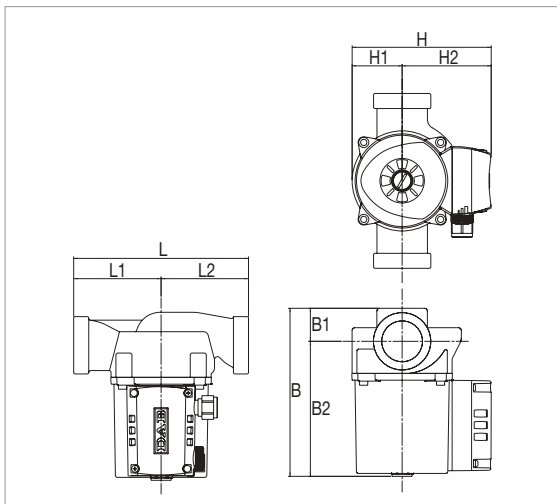
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| A 50/180 XT | 180                | 3x400 V ~         | 1 1/4"            | 2               | 2838       | 201      | 0,50 | -         | - | m.c.a.                   | 1,5 |
|             |                    |                   |                   | 1               | 2520       | 129      | 0,23 |           |   |                          |     |

| MODEL       | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|-------------|-----|----|----|-----|----|-----|-----|----|----|------|--------------------|-----|-----|-----------|-----------|
|             |     |    |    |     |    |     |     |    |    |      | L                  | B   | H   |           |           |
| A 50/180 XT | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 2" G | 206                | 170 | 180 | 0,066     | 5,2       |

## A 56/180 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



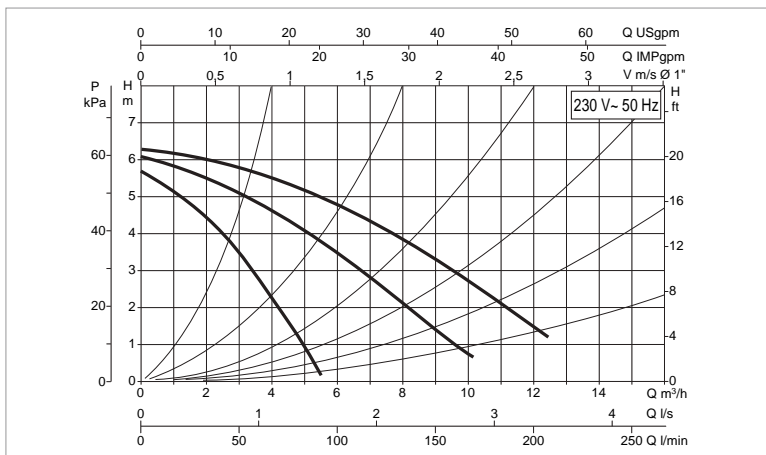
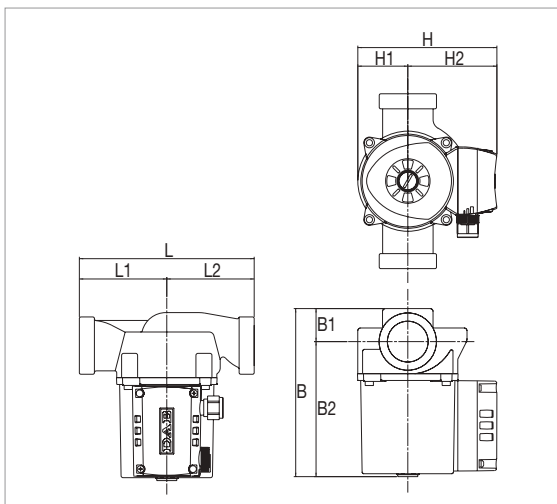
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|            |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| A 56/180 M | 180                | 1x230 V ~         | 1"                | 3               | 2636       | 282      | 1,23 | 7         | 400 | m.c.a.                   | 1,5 |
|            |                    |                   |                   | 2               | 2226       | 287      | 1,30 |           |     |                          |     |
|            |                    |                   |                   | 1               | 1485       | 228      | 1,06 |           |     |                          |     |

| MODEL      | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F      | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|------------|-----|----|----|-----|----|-----|-----|----|----|--------|--------------------|-----|-----|-----------------------|-----------|
|            |     |    |    |     |    |     |     |    |    |        | L                  | B   | H   |                       |           |
| A 56/180 M | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 1 1/2" | 206                | 170 | 180 | 0,066                 | 5,3       |

## A 56/180 XM - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



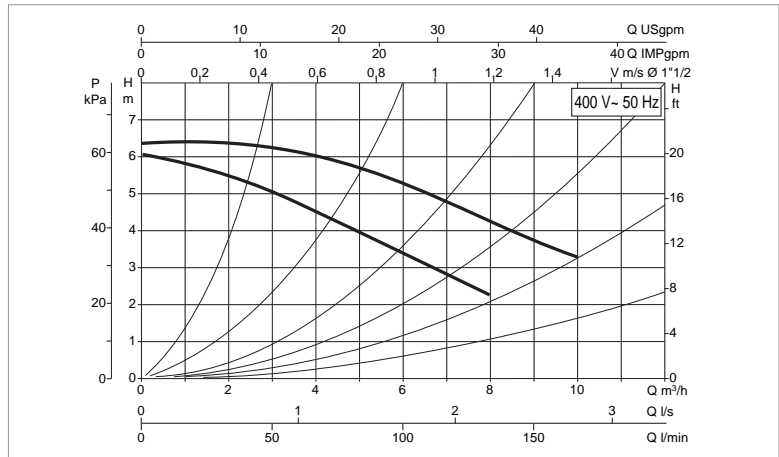
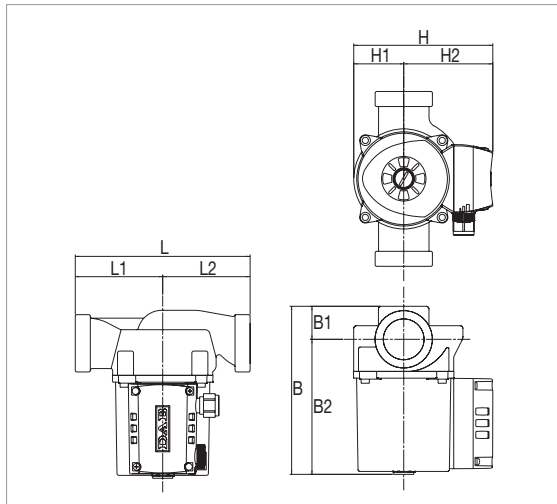
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| A 56/180 XM | 180                | 1x230 V ~         | 1 1/4"            | 3               | 2658       | 271      | 1,18 | 7         | 400 | m.c.a.                   | 1,5 |
|             |                    |                   |                   | 2               | 2117       | 294      | 1,32 |           |     |                          |     |
|             |                    |                   |                   | 1               | 1394       | 224      | 1,00 |           |     |                          |     |

| MODEL       | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|-------------|-----|----|----|-----|----|-----|-----|----|----|------|--------------------|-----|-----|-----------------------|-----------|
|             |     |    |    |     |    |     |     |    |    |      | L                  | B   | H   |                       |           |
| A 56/180 XM | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 2" G | 206                | 170 | 180 | 0,066                 | 5,3       |

## A 56/180 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



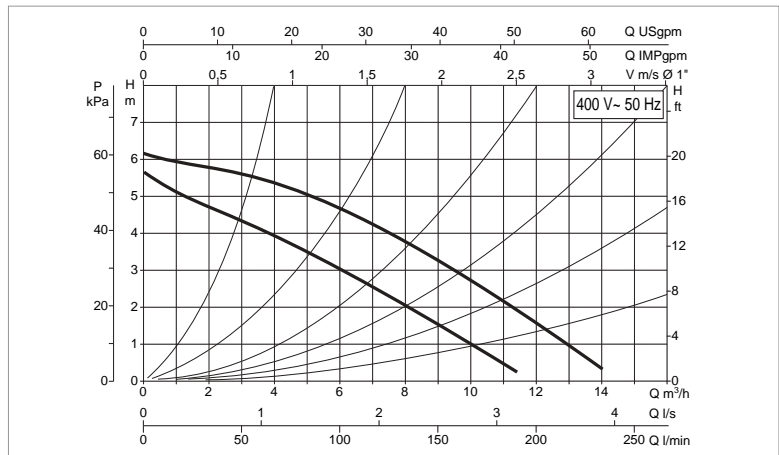
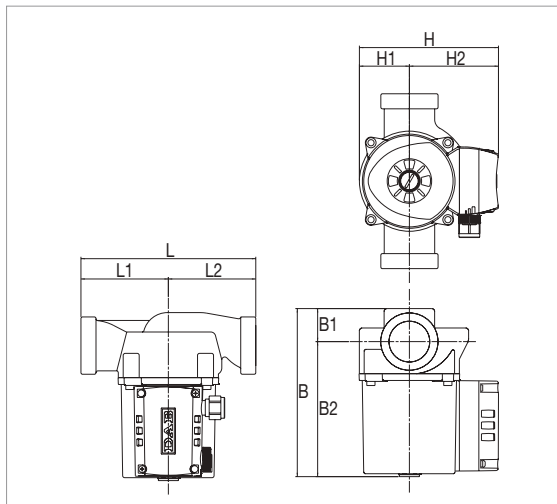
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL      | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|            |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| A 56/180 T | 180                | 3x400 V ~         | 1"                | 2               | 2704       | 294      | 0,60 | -         | - | m.c.a.                   | 1,5 |
|            |                    |                   |                   | 1               | 2178       | 200      | 0,33 |           |   |                          |     |

| MODEL      | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F      | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|------------|-----|----|----|-----|----|-----|-----|----|----|--------|--------------------|-----|-----|-----------|-----------|
|            |     |    |    |     |    |     |     |    |    |        | L                  | B   | H   |           |           |
| A 56/180 T | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 1" 1/2 | 206                | 170 | 180 | 0,066     | 5,2       |

## A 56/180 XT - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

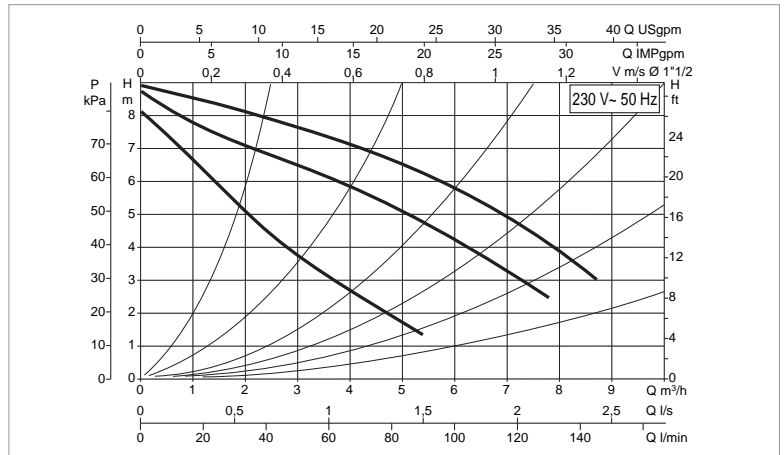
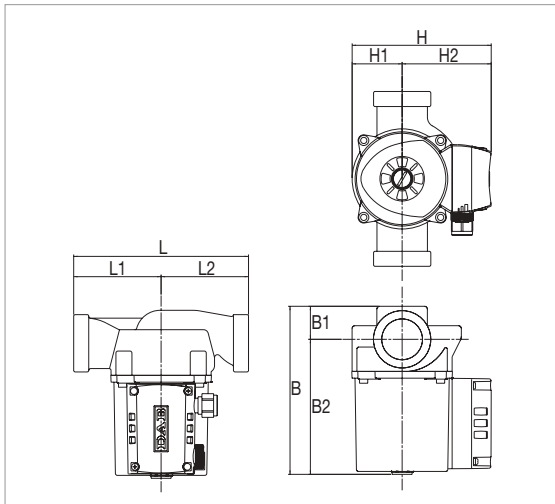
| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| A 56/180 XT | 180                | 3x400 V ~         | 1" 1/4            | 2               | 2708       | 291      | 0,60 | -         | - | m.c.a.                   | 1,5 |
|             |                    |                   |                   | 1               | 2178       | 200      | 0,32 |           |   |                          |     |

| MODEL       | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|-------------|-----|----|----|-----|----|-----|-----|----|----|------|--------------------|-----|-----|-----------|-----------|
|             |     |    |    |     |    |     |     |    |    |      | L                  | B   | H   |           |           |
| A 56/180 XT | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 2" G | 206                | 170 | 180 | 0,066     | 5,3       |



## A 80/180 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



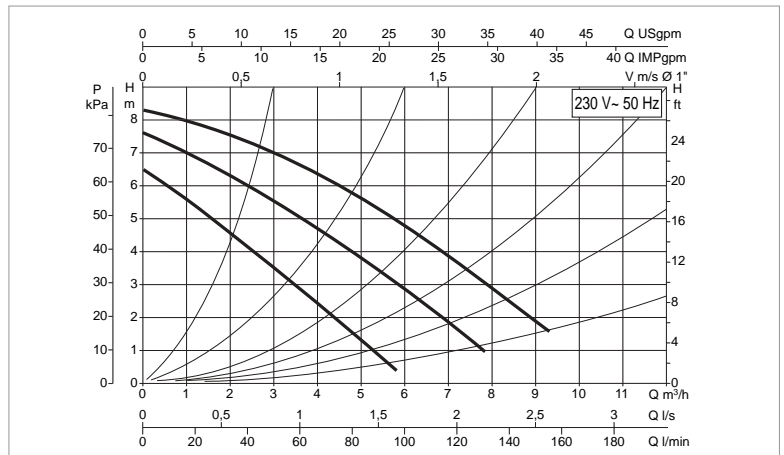
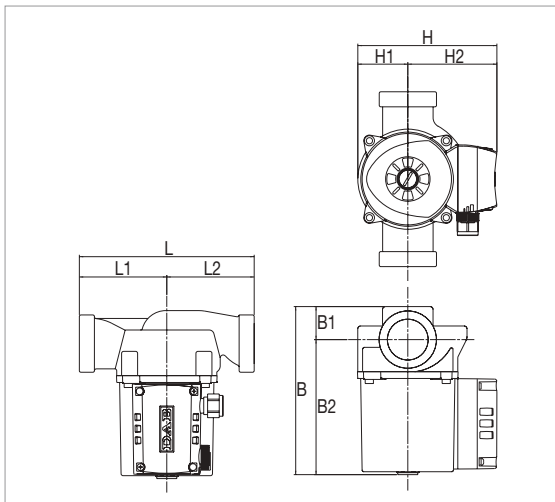
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|            |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| A 80/180 M | 180                | 1x230 V ~         | 1"                | 3               | 2674       | 264      | 1,15 | 7         | 400 | m.c.a.                   | 2,5 |
|            |                    |                   |                   | 2               | 2356       | 262      | 1,20 |           |     |                          |     |
|            |                    |                   |                   | 1               | 1615       | 223      | 1,00 |           |     |                          |     |

| MODEL      | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F      | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|------------|-----|----|----|-----|----|-----|-----|----|----|--------|--------------------|-----|-----|-----------------------|-----------|
|            |     |    |    |     |    |     |     |    |    |        | L                  | B   | H   |                       |           |
| A 80/180 M | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 1" 1/2 | 206                | 170 | 180 | 0,066                 | 5,3       |

## A 80/180 XM - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



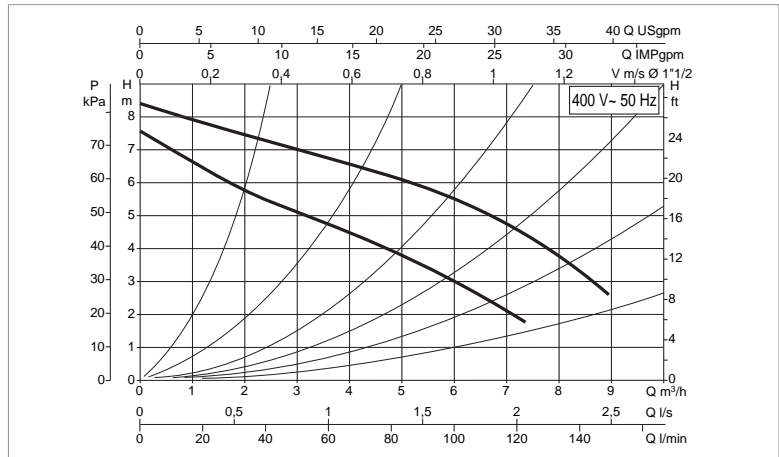
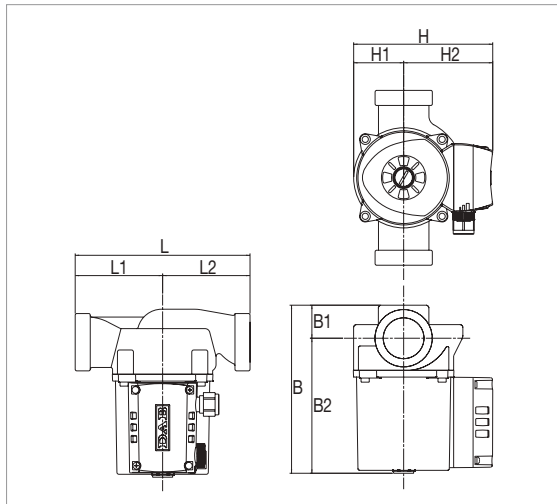
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| A 80/180 XM | 180                | 1x230 V ~         | 1" 1/4            | 3               | 2683       | 256      | 1,12 | 7         | 400 | m.c.a.                   | 2,5 |
|             |                    |                   |                   | 2               | 2374       | 260      | 1,17 |           |     |                          |     |
|             |                    |                   |                   | 1               | 1688       | 218      | 1,00 |           |     |                          |     |

| MODEL       | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|-------------|-----|----|----|-----|----|-----|-----|----|----|------|--------------------|-----|-----|-----------------------|-----------|
|             |     |    |    |     |    |     |     |    |    |      | L                  | B   | H   |                       |           |
| A 80/180 XM | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 2" G | 206                | 170 | 180 | 0,066                 | 5,2       |

## A 80/180 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



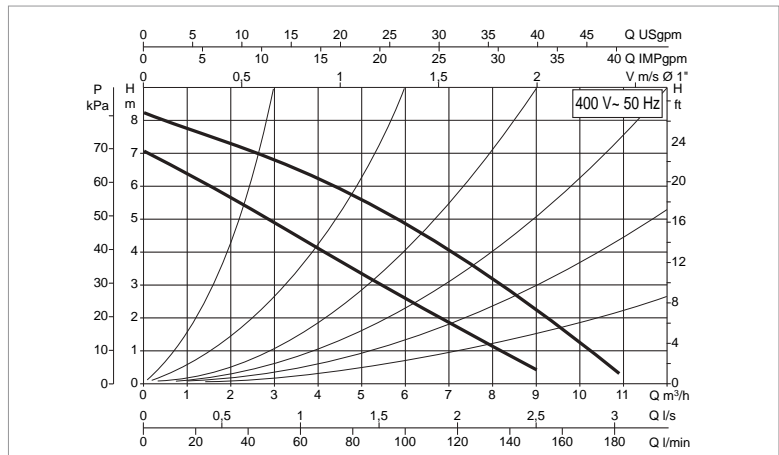
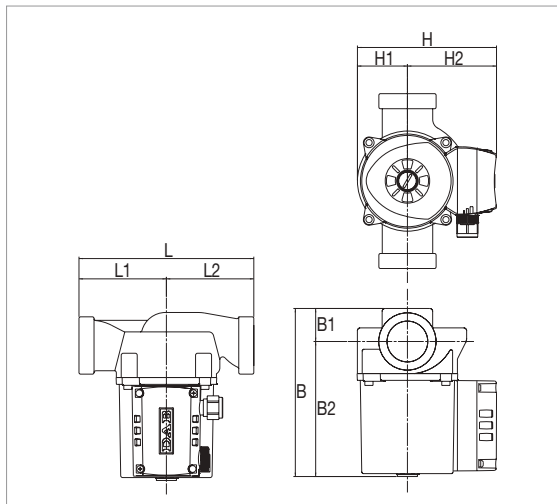
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL      | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|            |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| A 80/180 T | 180                | 3x400 V ~         | 1"                | 2               | 2724       | 271      | 0,57 | -         | - | m.c.a.                   | 2,5 |
|            |                    |                   |                   | 1               | 2226       | 187      | 0,31 |           |   |                          |     |

| MODEL      | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F     | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|------------|-----|----|----|-----|----|-----|-----|----|----|-------|--------------------|-----|-----|-----------------------|-----------|
|            |     |    |    |     |    |     |     |    |    |       | L                  | B   | H   |                       |           |
| A 80/180 T | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 1 1/2 | 206                | 170 | 180 | 0,066                 | 5,3       |

## A 80/180 XT - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



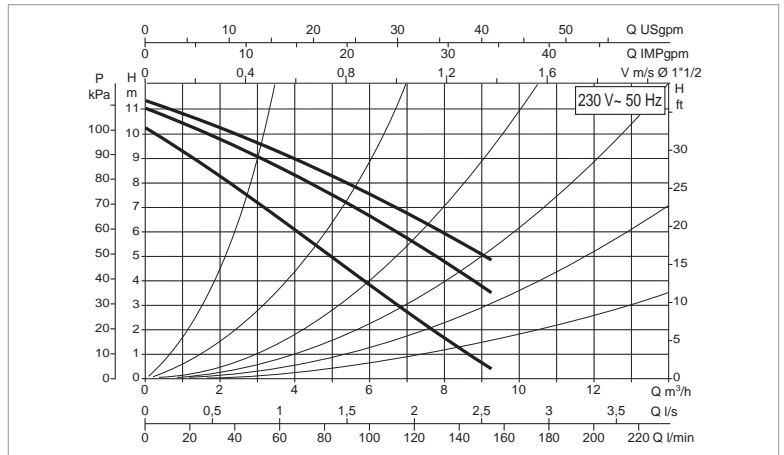
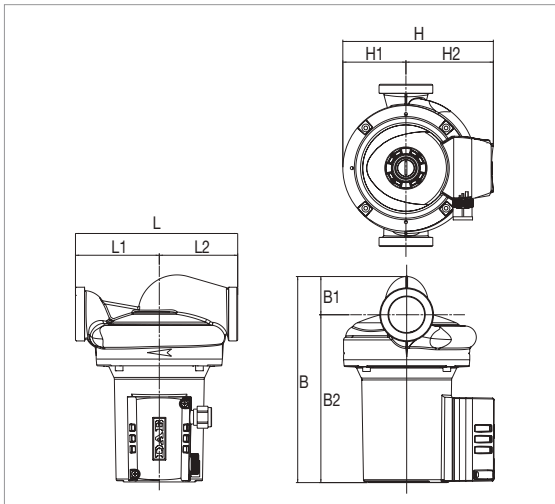
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| A 80/180 XT | 180                | 3x400 V ~         | 1"                | 2               | 2727       | 272      | 0,57 | -         | - | m.c.a.                   | 2,5 |
|             |                    |                   |                   | 1               | 2227       | 186      | 0,30 |           |   |                          |     |

| MODEL       | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|-------------|-----|----|----|-----|----|-----|-----|----|----|------|--------------------|-----|-----|-----------------------|-----------|
|             |     |    |    |     |    |     |     |    |    |      | L                  | B   | H   |                       |           |
| A 80/180 XT | 180 | 90 | 90 | 173 | 34 | 139 | 143 | 52 | 92 | 2° G | 206                | 170 | 180 | 0,066                 | 5,3       |

## A 110/180 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



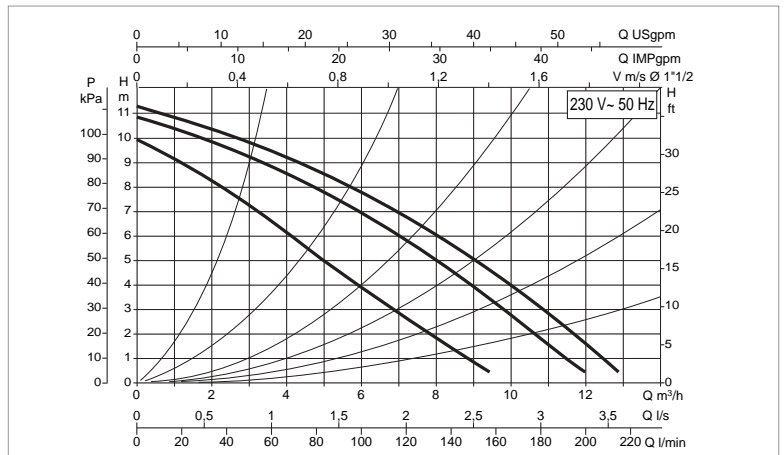
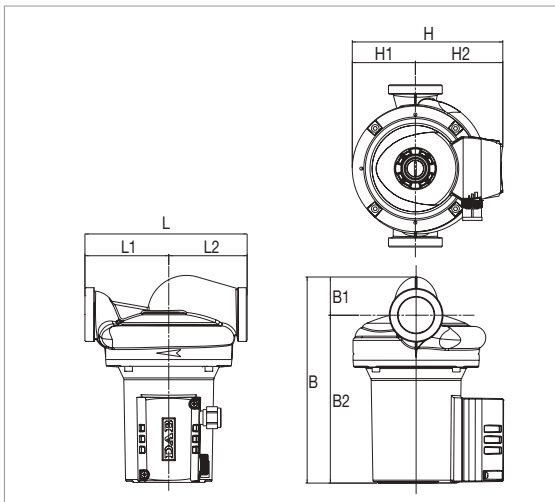
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| A 110/180 M | 180                | 1x230 V ~         | 2" G              | 3               | 2746       | 410      | 1,6  | 12        | 450 | m.c.a.                   | 2,5 |
|             |                    |                   |                   | 2               | 2552       | 393      | 1,8  |           |     |                          |     |
|             |                    |                   |                   | 1               | 2052       | 361      | 1,7  |           |     |                          |     |

| MODEL       | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F        | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|-------------|-----|----|----|-----|----|-----|-----|----|----|----------|--------------------|-----|-----|-----------------------|-----------|
|             |     |    |    |     |    |     |     |    |    |          | L                  | B   | H   |                       |           |
| A 110/180 M | 180 | 93 | 87 | 229 | 42 | 186 | 167 | 70 | 97 | 1" 1/2 G | 237                | 200 | 272 | 0,066                 | 5,3       |

## A 110/180 XM - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



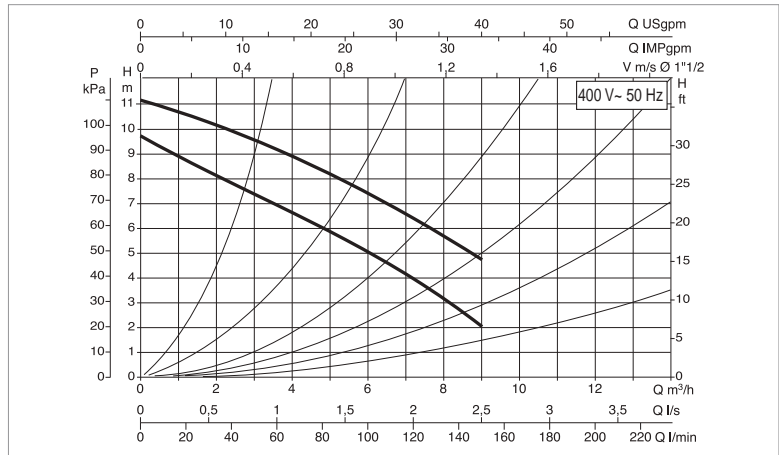
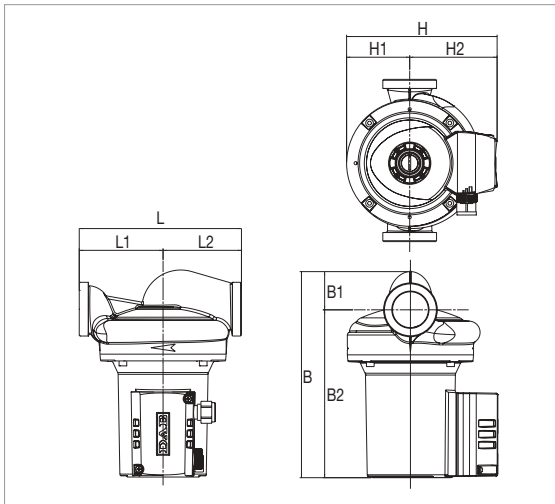
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL        | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|--------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|              |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| A 110/180 XM | 180                | 1x230 V ~         | 1" 1/4            | 3               | 2746       | 195      | 410  | 12        | 450 | m.c.a.                   | 2,5 |
|              |                    |                   |                   | 2               | 2552       | 194      | 393  |           |     |                          |     |
|              |                    |                   |                   | 1               | 2052       | 180      | 361  |           |     |                          |     |

| MODEL        | L   | L1 | L2 | B   | B1 | B2  | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|--------------|-----|----|----|-----|----|-----|-----|----|----|------|--------------------|-----|-----|-----------------------|-----------|
|              |     |    |    |     |    |     |     |    |    |      | L                  | B   | H   |                       |           |
| A 110/180 XM | 180 | 93 | 87 | 229 | 42 | 186 | 167 | 70 | 97 | 2" G | 237                | 200 | 272 | 0,066                 | 5,3       |

## A 110/180 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



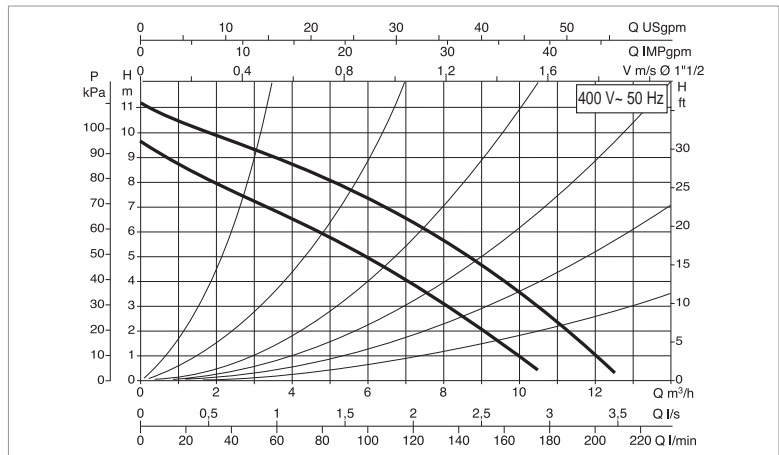
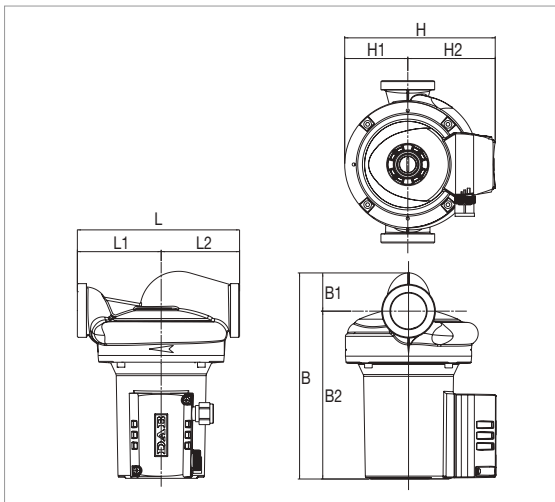
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL       | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |      |
|-------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|------|
|             |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90 ° |
| A 110/180 T | 180                | 3x400 V ~         | 2° G              | 2               | 2753       | 402      | 0,87 | -         | - | m.c.a.                   | 2,5  |
|             |                    |                   |                   | 1               | 2338       | 286      | 0,48 |           |   |                          |      |

| MODEL       | L   | L1 | L2 | B   | B1  | B2 | H   | H1 | H2 | F        | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|-------------|-----|----|----|-----|-----|----|-----|----|----|----------|--------------------|-----|-----|-----------|-----------|
|             |     |    |    |     |     |    |     |    |    |          | L                  | B   | H   |           |           |
| A 110/180 T | 180 | 93 | 87 | 229 | 186 | 42 | 163 | 70 | 93 | 1 1/2° G | 237                | 200 | 272 | 0,066     | 5,2       |

## A 110/180 XT - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



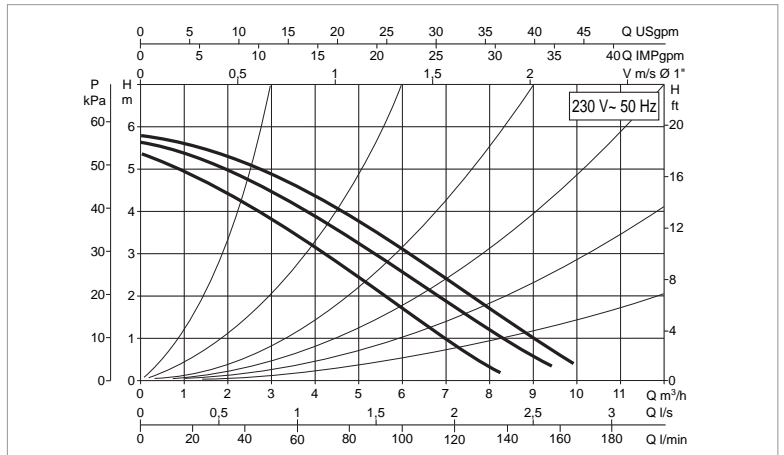
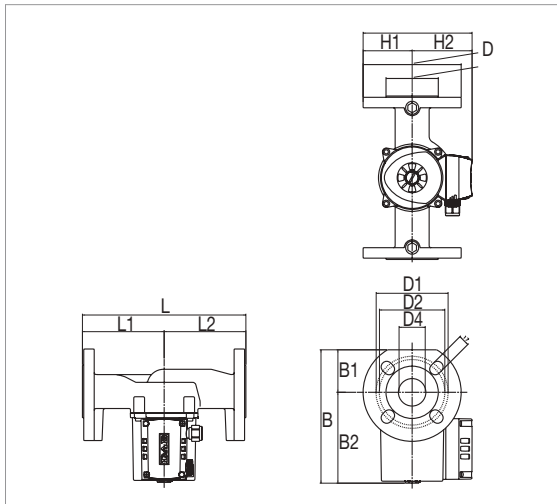
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL        | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |      |
|--------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|------|
|              |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90 ° |
| A 110/180 XT | 180                | 3x400 V ~         | 2° G              | 2               | 2759       | 403      | 0,90 | -         | - | m.c.a.                   | 2,5  |
|              |                    |                   |                   | 1               | 2341       | 289      | 0,48 |           |   |                          |      |

| MODEL        | L   | L1 | L2 | B   | B1  | B2 | H   | H1 | H2 | F    | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|--------------|-----|----|----|-----|-----|----|-----|----|----|------|--------------------|-----|-----|-----------|-----------|
|              |     |    |    |     |     |    |     |    |    |      | L                  | B   | H   |           |           |
| A 110/180 XT | 180 | 93 | 87 | 229 | 186 | 42 | 163 | 70 | 93 | 2° G | 237                | 200 | 272 | 0,066     | 5,2       |

## B 50/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



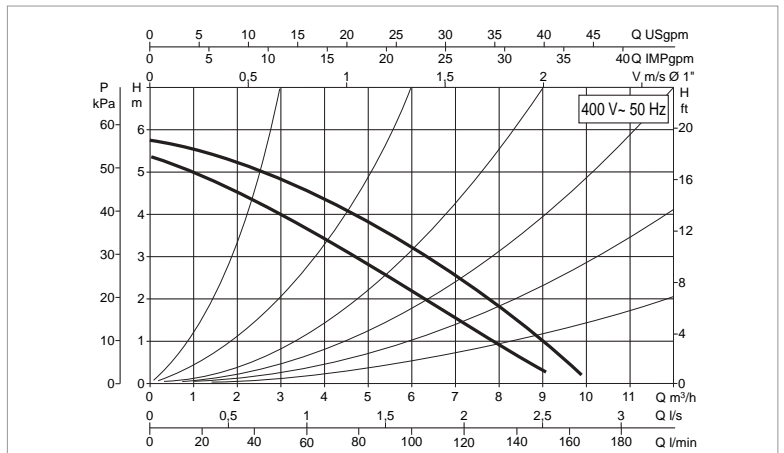
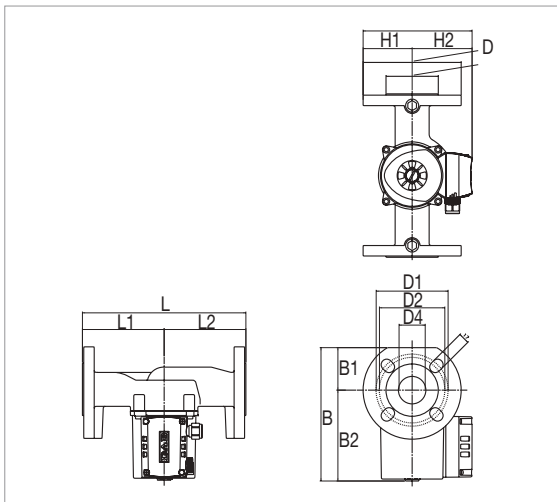
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |      |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|------|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90 ° |
| B 50/250.40 M | 250                | 1x230 V ~         | DN 40             | 3               | 2766       | 195      | 0,95 | 4         | 400 | m.c.a.                   | 1,5  |
|               |                    |                   |                   | 2               | 2616       | 194      | 0,95 |           |     |                          |      |
|               |                    |                   |                   | 1               | 2215       | 180      | 0,85 |           |     |                          |      |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |                       |           |
| B 50/250.40 M | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 167 | 75 | 92 | DN40/PN10 | 302                | 202 | 283 | 0,013                 | 9,1       |

## B 50/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



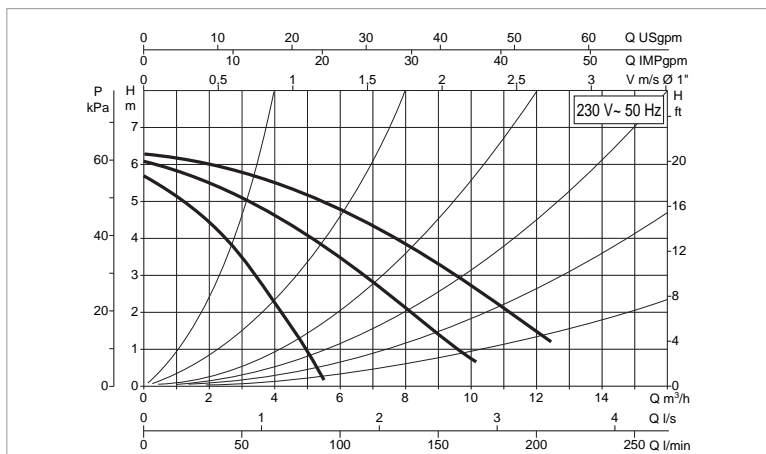
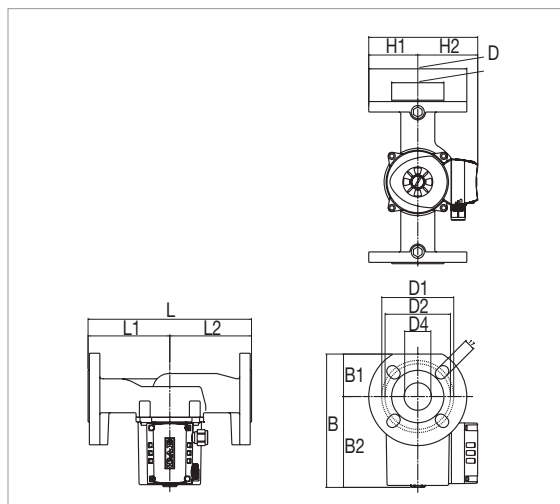
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |      |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|------|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90 ° |
| B 50/250.40 T | 250                | 3x400 V ~         | DN 40             | 2               | 2838       | 201      | 0,5  | -         | - | m.c.a.                   | 1,5  |
|               |                    |                   |                   | 1               | 2520       | 129      | 0,23 |           |   |                          |      |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |                       |           |
| B 50/250.40 T | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 167 | 75 | 92 | DN40/PN10 | 302                | 202 | 283 | 0,013                 | 9,3       |

## B 56/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



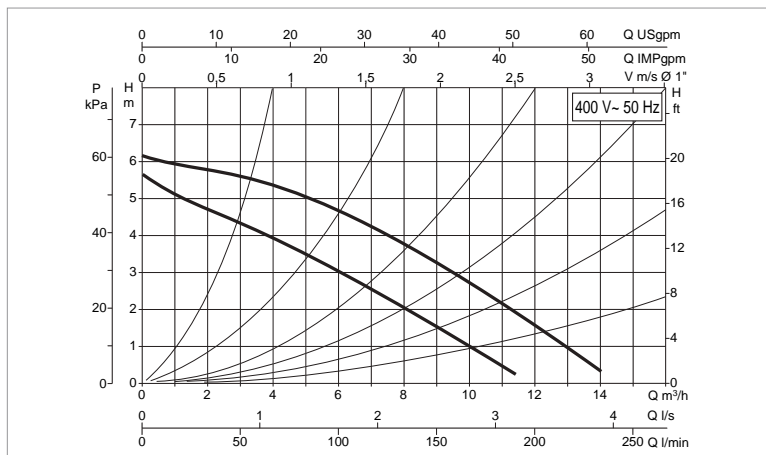
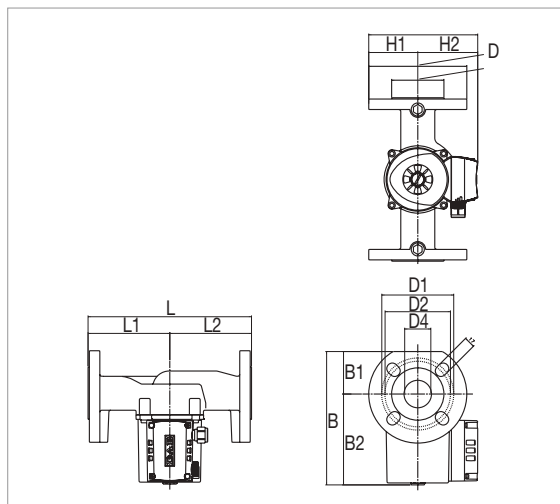
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |                      |                   |                   |           |        | MINIMUM SUCTION PRESSURE |      |
|---------------|--------------------|-------------------|-------------------|-----------------|----------------------|-------------------|-------------------|-----------|--------|--------------------------|------|
|               |                    |                   |                   | SPEED           | REV. 1/min           | P1 MAX W          | In A              | CAPACITOR |        | t°                       | 90 ° |
|               |                    |                   |                   |                 |                      |                   |                   | µF        | Vc     |                          |      |
| B 56/250.40 M | 250                | 1x230V ~          | DN 40             | 3<br>2<br>1     | 2658<br>2117<br>1394 | 271<br>294<br>224 | 1,18<br>1,32<br>1 | 7<br>400  | m.c.a. | 1,5                      |      |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |           |           |
| B 56/250.40 M | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 167 | 75 | 92 | DN40/PN10 | 302                | 202 | 283 | 0,013     | 9,3       |

## B 56/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



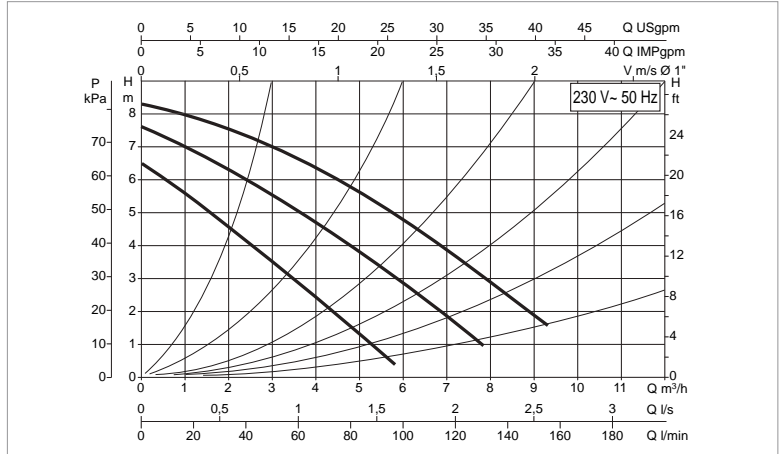
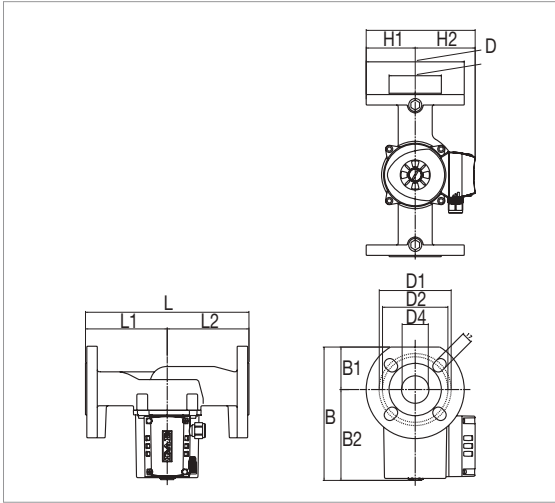
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |              |            |             |           |        | MINIMUM SUCTION PRESSURE |      |
|---------------|--------------------|-------------------|-------------------|-----------------|--------------|------------|-------------|-----------|--------|--------------------------|------|
|               |                    |                   |                   | SPEED           | REV. 1/min   | P1 MAX W   | In A        | CAPACITOR |        | t°                       | 90 ° |
|               |                    |                   |                   |                 |              |            |             | µF        | Vc     |                          |      |
| B 56/250.40 T | 250                | 3x400V ~          | DN 40             | 2<br>1          | 2708<br>2178 | 291<br>200 | 0,6<br>0,32 | -<br>-    | m.c.a. | 1,5                      |      |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |           |           |
| B 56/250.40 T | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 167 | 75 | 92 | DN40/PN10 | 302                | 202 | 283 | 0,013     | 9,2       |

## B 80/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



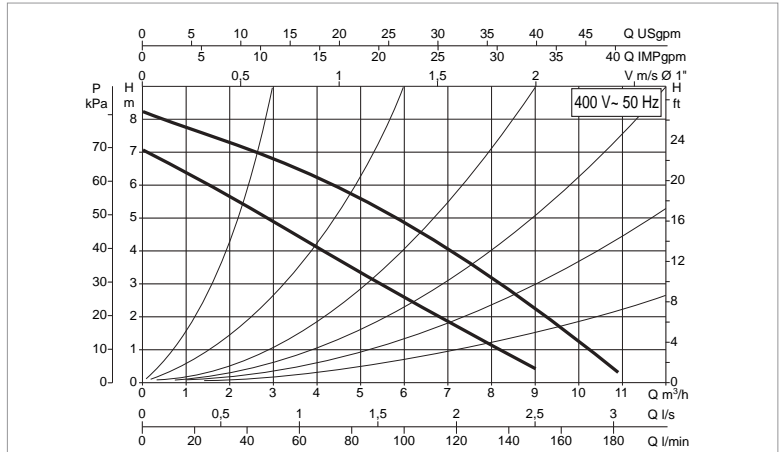
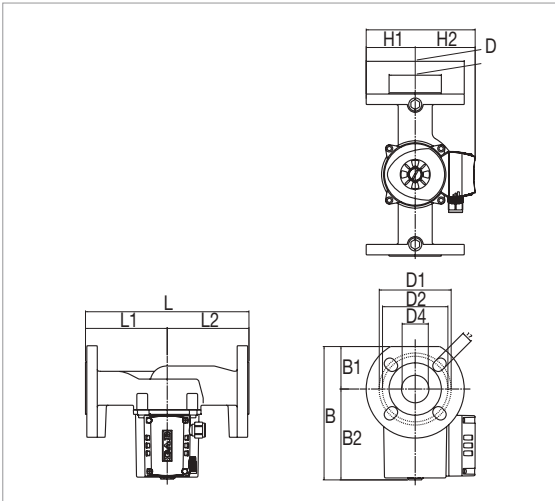
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| B 80/250.40 M | 250                | 1x230 V ~         | DN 40             | 3               | 2683       | 256      | 1,12 | 7         | 400 | m.c.a.                   | 2,5 |
|               |                    |                   |                   | 2               | 2374       | 260      | 1,17 |           |     |                          |     |
|               |                    |                   |                   | 1               | 1688       | 218      | 1,00 |           |     |                          |     |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |                       |           |
| B 80/250.40 M | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 167 | 75 | 92 | DN40/PN10 | 302                | 202 | 283 | 0,013                 | 9,3       |

## B 80/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



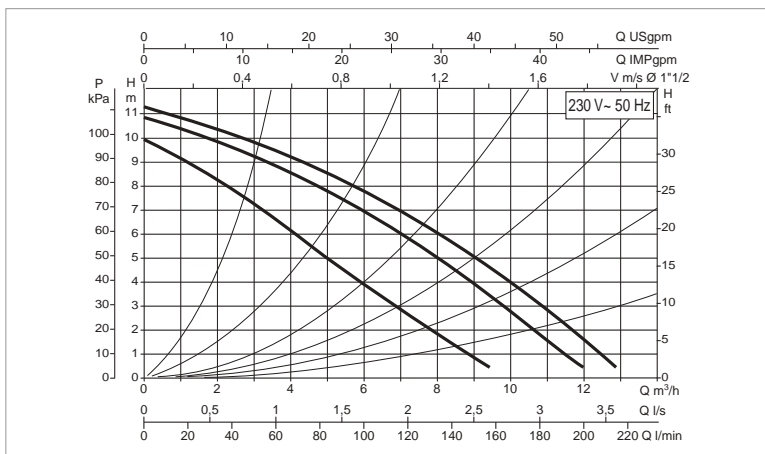
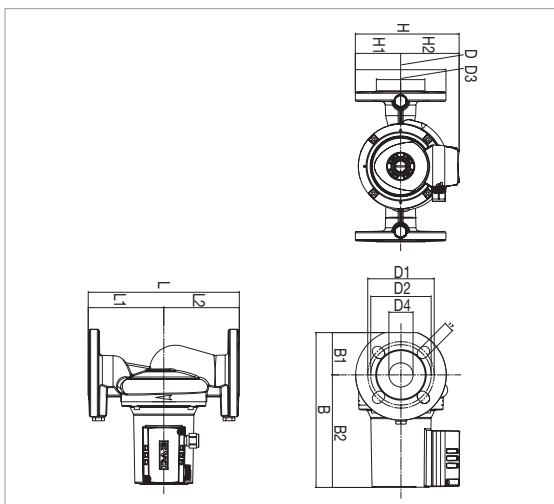
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| B 80/250.40 T | 250                | 3x400 V ~         | DN 40             | 2               | 2724       | 271      | 0,57 | -         | - | m.c.a.                   | 2,5 |
|               |                    |                   |                   | 1               | 2226       | 187      | 0,31 |           |   |                          |     |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |                       |           |
| B 80/250.40 T | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 167 | 75 | 92 | DN40/PN10 | 302                | 202 | 283 | 0,013                 | 9,3       |

## B 110/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



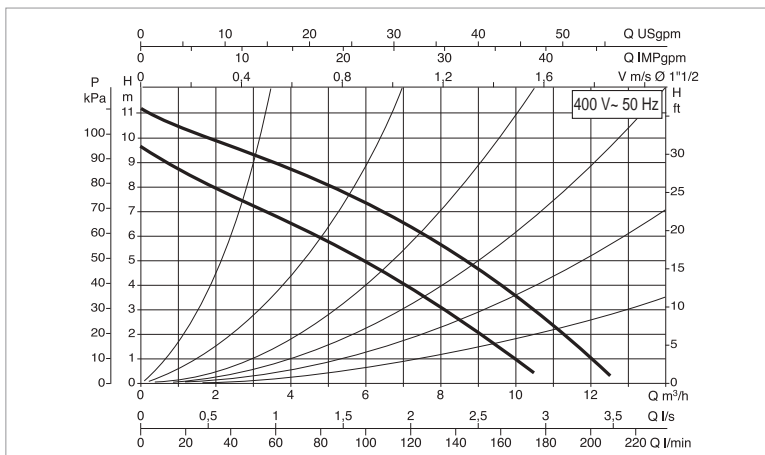
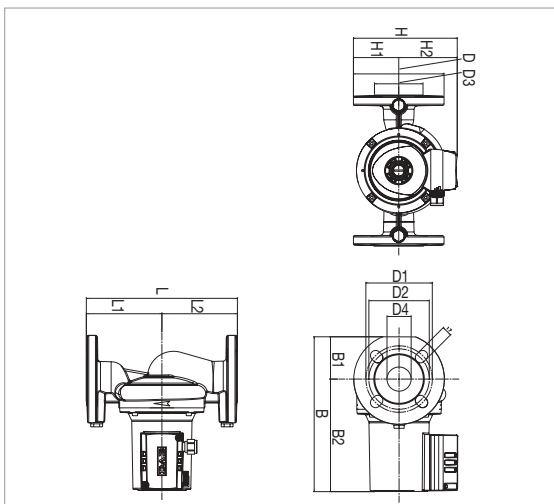
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL          | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|----------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|                |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| B 110/250.40 M | 250                | 1x230 V ~         | DN 40             |                 |            |          |      |           |     |                          |     |
|                |                    |                   |                   | 3               | 2746       | 410      | 1,77 | 12        | 450 | m.c.a.                   | 2,5 |
|                |                    |                   |                   | 2               | 2552       | 393      | 1,78 |           |     |                          |     |
|                |                    |                   |                   | 1               | 2052       | 361      | 1,64 |           |     |                          |     |

| MODEL          | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|----------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------|-----------|
|                |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |           |           |
| B 110/250.40 M | 250 | 125 | 125 | 256 | 70 | 186 | 150 | 110 | 100 | 80 | 40 | 172 | 75 | 97 | DN40/PN10 | 302                | 202 | 283 | 0,013     | 9,2       |

## B 110/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

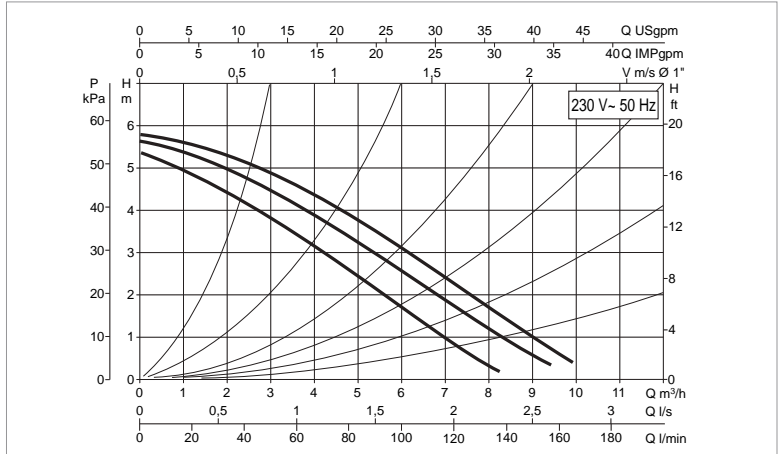
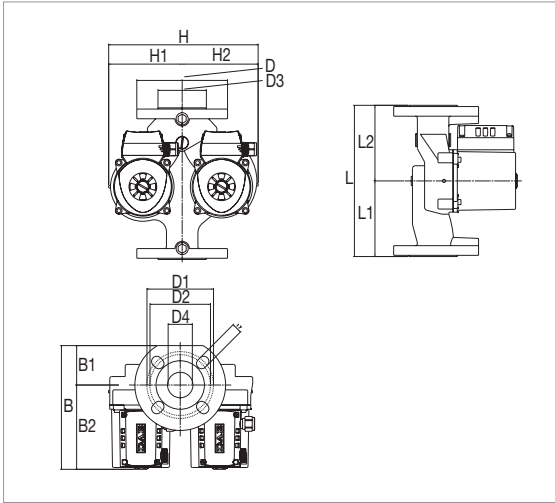
| MODEL          | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|----------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|                |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| B 110/250.40 T | 250                | 3x400 V ~         | DN 40             |                 |            |          |      |           |   |                          |     |
|                |                    |                   |                   | 2               | 2759       | 403      | 0,90 | -         | - | m.c.a.                   | 2,5 |
|                |                    |                   |                   | 1               | 2341       | 289      | 0,48 |           |   |                          |     |

| MODEL          | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1 | H2 | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|----------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|----|----|-----------|--------------------|-----|-----|-----------|-----------|
|                |     |     |     |     |    |     |     |     |     |    |    |     |    |    |           | L                  | B   | H   |           |           |
| B 110/250.40 T | 250 | 125 | 125 | 256 | 70 | 186 | 150 | 110 | 100 | 80 | 40 | 168 | 75 | 93 | DN40/PN10 | 302                | 202 | 283 | 0,013     | 9,3       |



## D 50/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



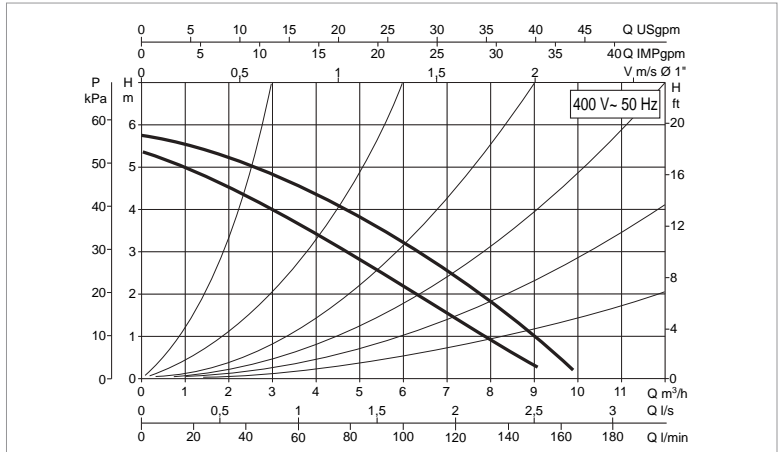
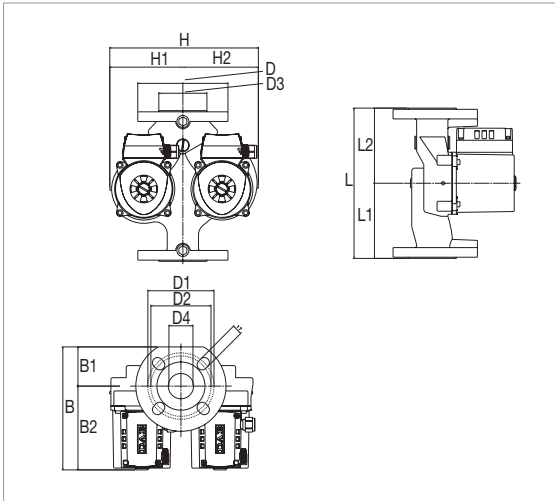
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
|               |                    |                   |                   |                 |            |          |      | µF        | Vc  |                          |     |
| D 50/250.40 M | 250                | 1x230 V ~         | DN 40 - PN 10     | 3               | 2766       | 195      | 0,95 | 4         | 400 | m.c.a.                   | 1,5 |
|               |                    |                   |                   | 2               | 2616       | 194      | 0,95 |           |     |                          |     |
|               |                    |                   |                   | 1               | 2215       | 180      | 0,85 |           |     |                          |     |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |                       |           |
| D 50/250.40 M | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 247 | 122 | 126 | DN40/PN10 | 335                | 298 | 283 | 0,018                 | 15,3      |

## D 50/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



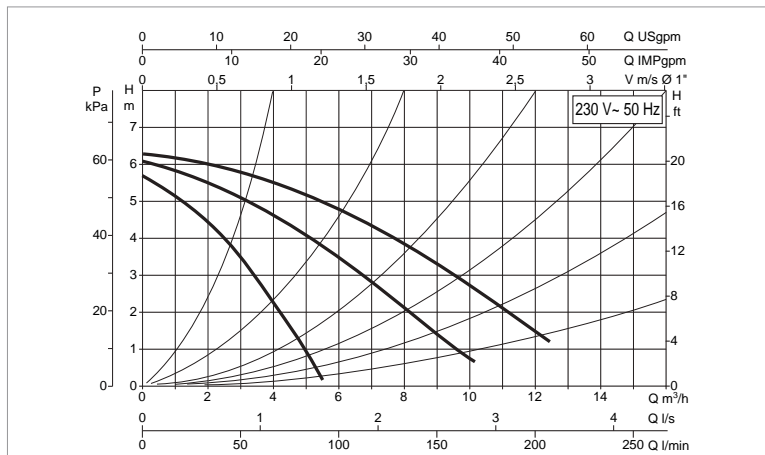
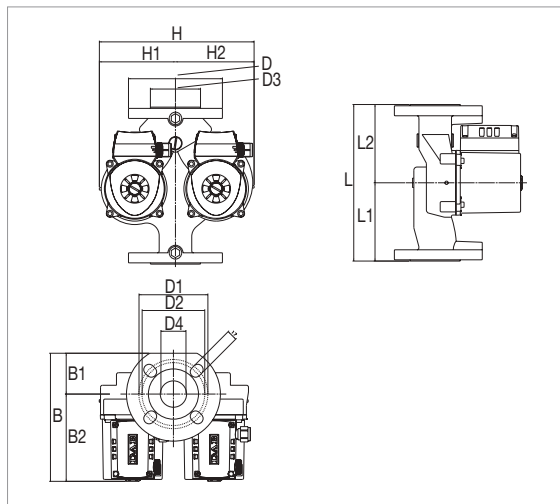
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |    | MINIMUM SUCTION PRESSURE |     |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|----|--------------------------|-----|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |    | t°                       | 90° |
|               |                    |                   |                   |                 |            |          |      | µF        | Vc |                          |     |
| D 50/250.40 T | 250                | 3x400 V ~         | DN 40 - PN 10     | 2               | 2838       | 201      | 0,50 | -         | -  | m.c.a.                   | 1,5 |
|               |                    |                   |                   | 1               | 2520       | 129      | 0,23 |           |    |                          |     |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |                       |           |
| D 50/250.40 T | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 247 | 122 | 126 | DN40/PN10 | 335                | 298 | 283 | 0,018                 | 15,8      |

## D 56/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



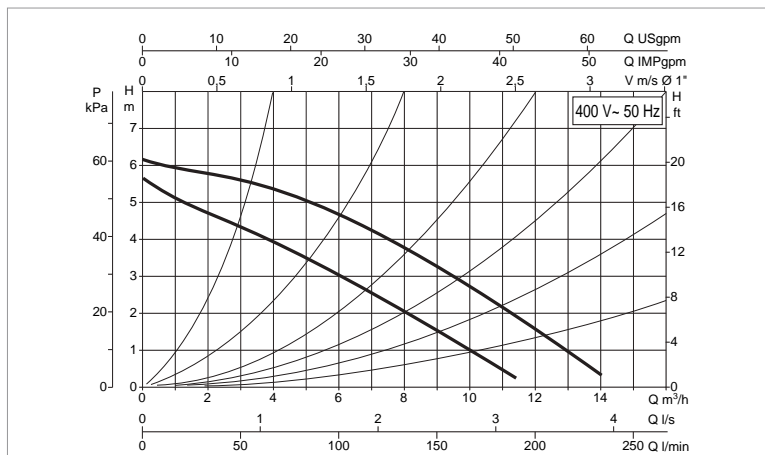
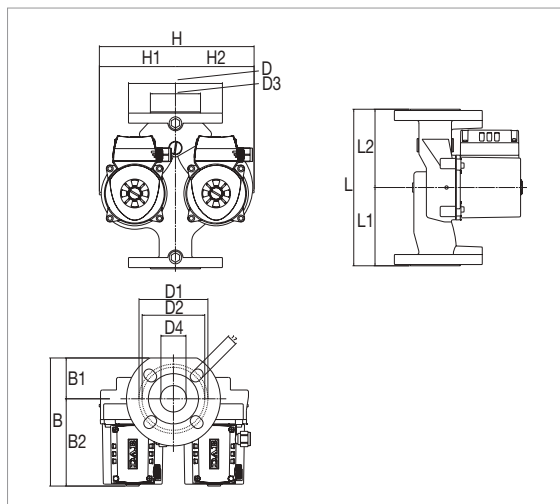
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |     |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|-----|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90° |
| D 56/250.40 M | 250                | 1x230 V ~         | DN 40 - PN 10     | 3               | 2658       | 271      | 1,18 | 7         | 400 | m.c.a.                   | 1,5 |
|               |                    |                   |                   | 2               | 2117       | 294      | 1,32 |           |     |                          |     |
|               |                    |                   |                   | 1               | 1394       | 224      | 1,00 |           |     |                          |     |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |           |           |
| D 56/250.40 M | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 247 | 122 | 126 | DN40/PN10 | 355                | 298 | 283 | 0,018     | 15,8      |

## D 56/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



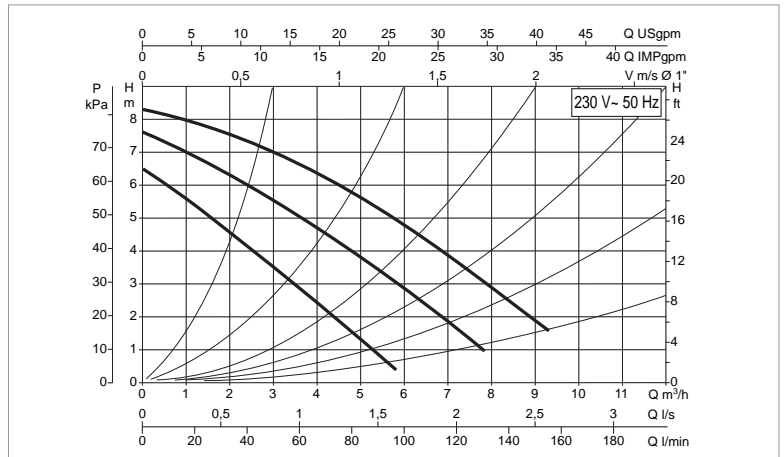
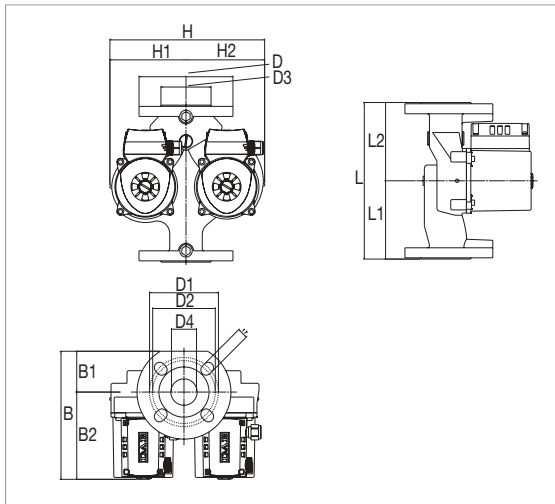
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |     |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|-----|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90° |
| D 56/250.40 T | 250                | 3x400 V ~         | DN 40 - PN 10     | 2               | 2708       | 291      | 0,60 | -         | - | m.c.a.                   | 1,5 |
|               |                    |                   |                   | 1               | 2178       | 200      | 0,33 |           |   |                          |     |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |           |           |
| D 56/250.40 T | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 247 | 122 | 126 | DN40/PN10 | 335                | 298 | 283 | 0,018     | 15,4      |

## D 80/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



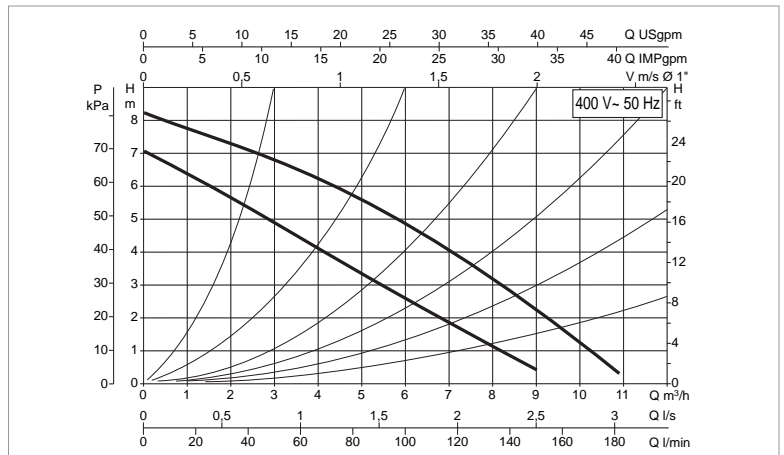
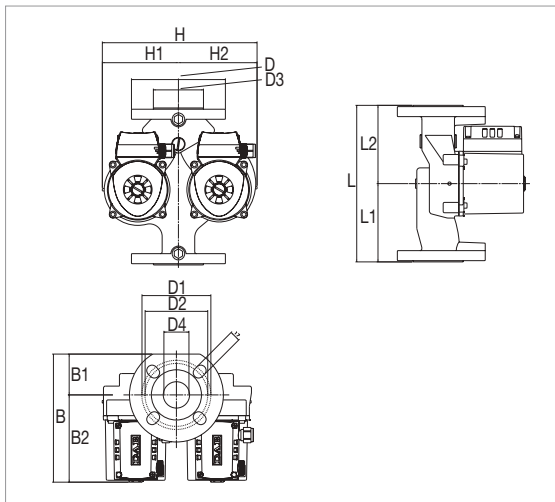
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |      |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|------|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90 ° |
|               |                    |                   |                   |                 |            |          |      | μF        | Vc  |                          |      |
| D 80/250.40 M | 250                | 1x230 V ~         | DN 40 - PN 10     | 3               | 2683       | 256      | 1,12 | 7         | 400 | m.c.a.                   | 2,5  |
|               |                    |                   |                   | 2               | 2374       | 260      | 1,17 |           |     |                          |      |
|               |                    |                   |                   | 1               | 1688       | 218      | 1,00 |           |     |                          |      |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |                       |           |
| D 80/250.40 M | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 247 | 122 | 126 | DN40/PN10 | 355                | 298 | 283 | 0,018                 | 15,8      |

## D 80/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



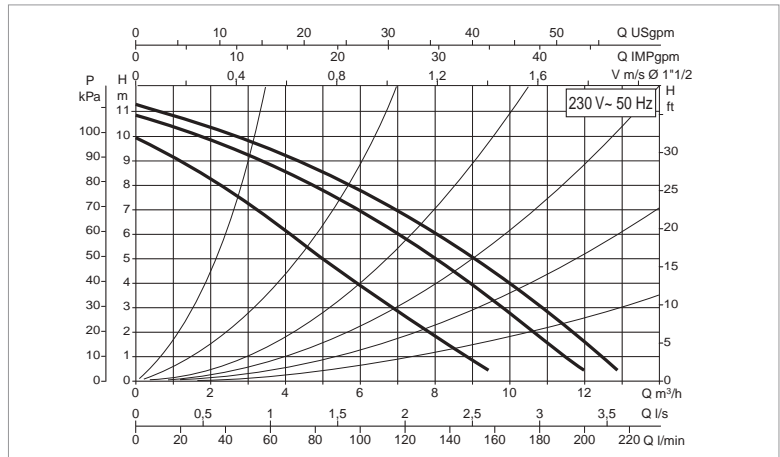
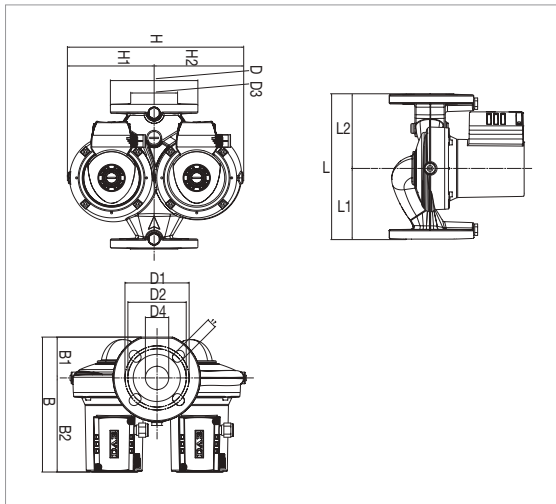
The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

| MODEL         | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |    | MINIMUM SUCTION PRESSURE |      |
|---------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|----|--------------------------|------|
|               |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |    | t°                       | 90 ° |
|               |                    |                   |                   |                 |            |          |      | μF        | Vc |                          |      |
| D 80/250.40 T | 250                | 3x400 V ~         | DN 40 - PN 10     | 2               | 2724       | 271      | 0,57 | -         | -  | m.c.a.                   | 2,5  |
|               |                    |                   |                   | 1               | 2226       | 187      | 0,31 |           |    |                          |      |

| MODEL         | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m <sup>3</sup> | WEIGHT kg |
|---------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------------------|-----------|
|               |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |                       |           |
| D 80/250.40 T | 250 | 125 | 125 | 204 | 65 | 139 | 150 | 110 | 100 | 80 | 40 | 247 | 122 | 126 | DN40/PN10 | 335                | 298 | 283 | 0,018                 | 15,8      |

## D 110/250.40 M - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



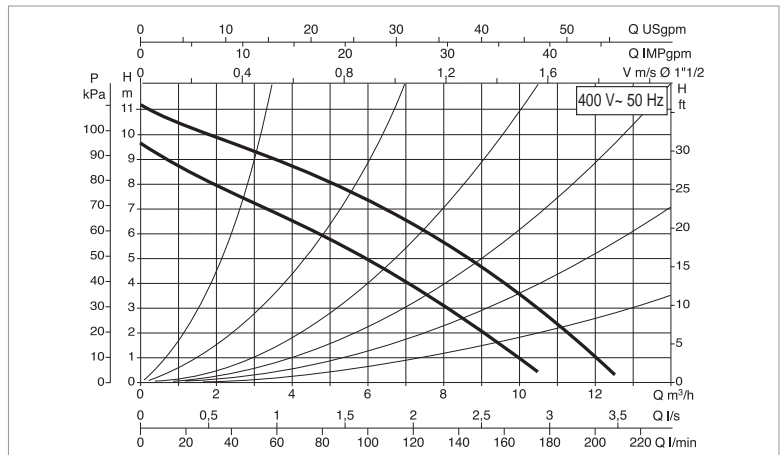
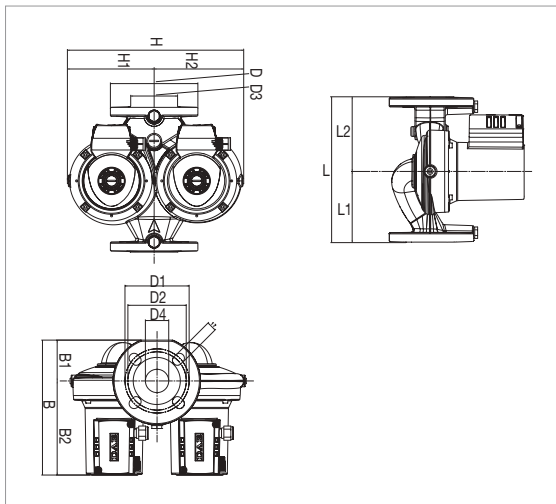
The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL          | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |     | MINIMUM SUCTION PRESSURE |      |
|----------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|-----|--------------------------|------|
|                |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |     | t°                       | 90 ° |
| D 110/250.40 M | 250                | 1x230 V ~         | DN 40 - PN 10     | 3               | 2746       | 410      | 1,77 | 12        | 450 | m.c.a.                   | 2,5  |
|                |                    |                   |                   | 2               | 2552       | 393      | 1,78 |           |     |                          |      |
|                |                    |                   |                   | 1               | 2052       | 361      | 1,64 |           |     |                          |      |

| MODEL          | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|----------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------|-----------|
|                |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |           |           |
| D 110/250.40 M | 250 | 122 | 128 | 231 | 70 | 161 | 150 | 110 | 100 | 80 | 40 | 302 | 149 | 154 | DN40/PN10 | 355                | 298 | 283 | 0,018     | 16        |

## D 110/250.40 T - HEATING, AIR CONDITIONING

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

| MODEL          | CENTRE DISTANCE mm | POWER INPUT 50 Hz | UNIONS ON REQUEST | ELECTRICAL DATA |            |          |      |           |   | MINIMUM SUCTION PRESSURE |      |
|----------------|--------------------|-------------------|-------------------|-----------------|------------|----------|------|-----------|---|--------------------------|------|
|                |                    |                   |                   | SPEED           | REV. 1/min | P1 MAX W | In A | CAPACITOR |   | t°                       | 90 ° |
| D 110/250.40 T | 250                | 3x400 V ~         | DN 40 - PN 10     | 2               | 2759       | 403      | 0,90 | -         | - | m.c.a.                   | 2,5  |
|                |                    |                   |                   | 1               | 2341       | 289      | 0,48 |           |   |                          |      |

| MODEL          | L   | L1  | L2  | B   | B1 | B2  | D   | D1  | D2  | D3 | D4 | H   | H1  | H2  | F         | PACKING DIMENSIONS |     |     | VOLUME m³ | WEIGHT kg |
|----------------|-----|-----|-----|-----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----------|--------------------|-----|-----|-----------|-----------|
|                |     |     |     |     |    |     |     |     |     |    |    |     |     |     |           | L                  | B   | H   |           |           |
| D 110/250.40 T | 250 | 122 | 128 | 231 | 70 | 161 | 150 | 110 | 100 | 80 | 40 | 302 | 149 | 154 | DN40/PN10 | 355                | 298 | 283 | 0,018     | 15,8      |