## MC "DOUBLE-CHANNEL"

## Submersible pumps

for sewage water









## **PERFORMANCE RANGE**

- Flow rate up to 800 l/min (48 m<sup>3</sup>/h)
- Head up to 15 m

#### **APPLICATION LIMITS**

- 5 m maximum immersion depth
- Maximum liquid temperature +40 °C
- Passage of suspended solids up to Ø 50 mm
- 320 mm minimum immersion depth for continuous service

#### **CONSTRUCTION AND SAFETY STANDARDS**

- Complete with **5 m** long power cable
- Float switch for single-phase versions

FN 60335-1 IEC 60335-1 **CEI 61-150** 

FN 60034-1 IEC 60034-1 **CEI 2-3** 



## **CERTIFICATIONS**









## **INSTALLATION AND USE**

MC submersible pumps are suitable for draining dirty water and sewage in domestic and civil applications. They come equipped with a DOUBLE-CHANNEL stainless steel impeller and are capable of pumping liquids containing short fibred suspended solids up to

They are ideal for pumping sewage water, waste water, surface water and water mixed with mud in locations such as holiday homes and detached homes.

These pumps distinguish themselves for their reliability, which can be best appreciated under automatic operating conditions in fixed installations.

## **PATENTS - TRADE MARKS - MODELS**

Patent pending n° BO2008A000494, BO2008A000496

## **OPTIONALS AVAILABLE ON REQUEST**

- Pumps with a **10 m** long power cable
  - N.B. Standard EN 60335-2-41 states that the power cable must be 10 m long for outdoor applications
- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency

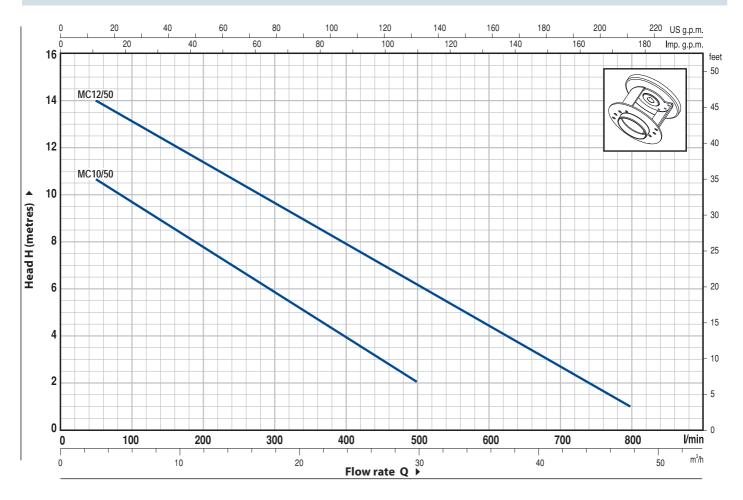
### **GUARANTEE**

2 years subject to terms and conditions



## **CHARACTERISTIC CURVES AND PERFORMANCE DATA**

## 50 Hz n= 2900 1/min



| MODEL        |             | POV  | VER | m³/h     | 0  | 3    | 6   | 9    | 12   | 15   | 18  | 21  | 24  | 27  | 30  | 36  | 42  | 48  |
|--------------|-------------|------|-----|----------|----|------|-----|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Single-phase | Three-phase | kW   | HP  | I/min    | 0  | 50   | 100 | 150  | 200  | 250  | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 |
| MCm 10/50    | MC 10/50    | 0.75 | 1   | H metres | 12 | 10.7 | 9.7 | 8.7  | 7.8  | 6.8  | 5.9 | 5   | 4   | 3   | 2   |     |     |     |
| MCm 12/50    | MC 12/50    | 1.1  | 1.5 |          | 15 | 14   | 13  | 12.3 | 11.5 | 10.5 | 9.7 | 8.8 | 8   | 7   | 6.2 | 4.5 | 2.7 | 1   |

 $\mathbf{Q} = \mathsf{Flow} \; \mathsf{rate} \; \; \mathbf{H} = \mathsf{Total} \; \mathsf{manometric} \; \mathsf{head}$ 

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

# MC "DOUBLE-CHANNEL"

| POS. | COMPONENT          | CONSTRUCTION CHARACTERISTICS                               |
|------|--------------------|--|
| 1    | PUMP BODY          | Cast iron, with threaded port in compliance with ISO 228/1 |
| 2    | BASE               | Stainless steel AISI 304                                   |
| 3    | IMPELLER           | Stainless steel AISI 304 DOUBLE-CHANNEL type               |
| 4    | MOTOR CASING       | Stainless steel AISI 304                                   |
| 5    | MOTOR CASING PLATE | Stainless steel AISI 304                                   |
| 6    | MOTOR SHAFT        | Stainless steel EN 10088-3 - 1.4104                        |

#### 7 SHAFT WITH DOUBLE SEAL AND OIL CHAMBER

| Seal       | Shaft          |  | Materials       |           |
|------------|----------------|--|-----------------|-----------|
| Model      | Diameter       | Stationary ring  | Rotational ring | Elastomer |
| MG1-14 SIC | <b>Ø 14</b> mm | Ceramic  | Silicon carbide | NBR       |
| LIP SEAL   | •-             | 15 x <b>Ø 24</b> x <b>H 5</b> mm<br>16 x <b>Ø 24</b> x <b>H 5</b> mn |                 |           |

9 BEARINGS 6203 ZZ / 6203 ZZ

#### 10 CAPACITOR

8

| Pump         | Capacitance         |                     |
|--------------|---------------------|---------------------|
| Single-phase | (230 V or 240 V)    | (110 V)             |
| MCm 10/50    | <b>20</b> μF 450 VL | <b>30</b> μF 250 VL |
| MCm 12/50    | <b>25</b> μF 450 VL | -                   |

#### 11 ELECTRIC MOTOR

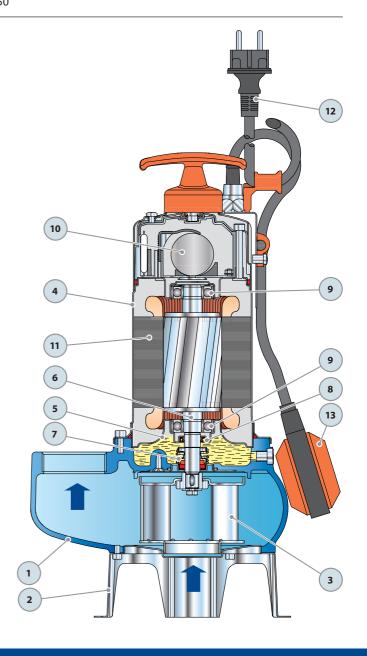
- Single-phase 230 V 50 Hz with thermal overload protector built-in to the winding
- Three-phase 400 V 50 HzInsulation: F class
- Protection: IP 68

## 12 POWER CABLE

**5 metre** long "H07 RN-F" cable (with Schuko plug on single-phase versions only)

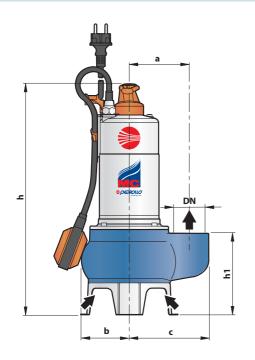
## 13 FLOAT SWITCH

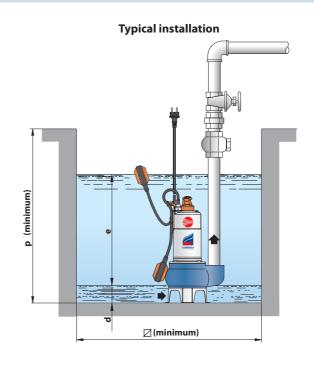
(only for single-phase versions)





## **DIMENSIONS AND WEIGHT**





| MODEL        |             | PORT       | solids  | DIMENSIONS mm |     |      |     |     |     |          |     |     | kg   |      |     |      |      |
|--------------|-------------|------------|---------|---------------|-----|------|-----|-----|-----|----------|-----|-----|------|------|-----|------|------|
| Single-phase | Three-phase | DN         | passage | a             | b   | С    | h   | h1  | d   | e        | р   |     | 1~   | 3~   |     |      |      |
| MCm 10/50    | MC 10/50    | 2"         | 2//     | 2"            | 2// | Ø 50 | 110 | 92  | 150 | 437      | 153 |     |      | 500  | 500 | 14.1 | 12.9 |
| MCm 12/50    | MC 12/50    | <b>Z</b> " | Ø 50 mm | 115           | 97  | 157  | 458 | 159 | 60  | variable | 500 | 500 | 17.0 | 15.8 |     |      |      |

## **ABSORPTION**

| MODEL        | <b>VOLTAGE</b> (single-phase) |              |               |  |  |  |  |
|--------------|-------------------------------|--------------|---------------|--|--|--|--|
| Single-phase | 230 V                         | 240 V        | 110 V         |  |  |  |  |
| MCm 10/50    | <b>5.2</b> A                  | <b>5.2</b> A | <b>11.7</b> A |  |  |  |  |
| MCm 12/50    | <b>8.5</b> A                  | <b>8.5</b> A | _             |  |  |  |  |

| MODEL       | <b>VOLTAGE</b> (three-phase) |              |              |              |  |  |  |  |
|-------------|------------------------------|--------------|--------------|--------------|--|--|--|--|
| Three-phase | 230 V                        | 400 V        | 240 V        | 415 V        |  |  |  |  |
| MC 10/50    | <b>3.6</b> A                 | <b>2.1</b> A | <b>3.6</b> A | <b>2.1</b> A |  |  |  |  |
| MC 12/50    | <b>6.1</b> A                 | <b>3.5</b> A | <b>6.1</b> A | <b>3.5</b> A |  |  |  |  |

## **PALLETIZATION**

| МС           | (           | GROUP | AGE  |     | CONTAINER |       |      |      |      |
|--------------|-------------|-------|------|-----|-----------|-------|------|------|------|
|              | n°          | Н     | kg   |     | n°        | Н     | kg   |      |      |
| Single-phase | Three-phase | pumps | (mm) | 1~  | 3~        | pumps | (mm) | 1~   | 3~   |
| MCm 10/50    | MC 10/50    | 60    | 1520 | 865 | 791       | 80    | 1980 | 1148 | 1049 |
| MCm 12/50    | MC 12/50    | 45    | 1574 | 784 | 730       | 60    | 2052 | 1039 | 968  |

