

Submersible pumps

-  Filthy water
-  Domestic use
-  Civil use



PERFORMANCE RANGE

- Flow rate up to **750 l/min** (45 m³/h)
- Head up to **15 m**

APPLICATION LIMITS

- **10 m** maximum immersion depth (with a sufficiently long power cable)
- Maximum liquid temperature **+40 °C**
- Passage of suspended solids up to **Ø 50 mm**
- Minimum immersion depth for continuous service: **300 mm**

CONSTRUCTION AND SAFETY STANDARDS

- **10 m** long power cable
- Float switch for single-phase versions

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

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



CERTIFICATIONS

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



INSTALLATION AND USE

MC series pumps, made from heavy gauge cast iron offering exceptional sturdiness, abrasion resistance and durability, come equipped with a **DOUBLE-CHANNEL** impeller and are capable of pumping liquids containing short fibred suspended solids up to Ø 50 mm.

Recommended for conveying **drained water and sewage, waste water, water mixed with mud, groundwater and surface water** for applications in blocks of flats, industries, multi-storey and underground car parks, wash areas, etc.

PATENTS - TRADE MARKS - MODELS

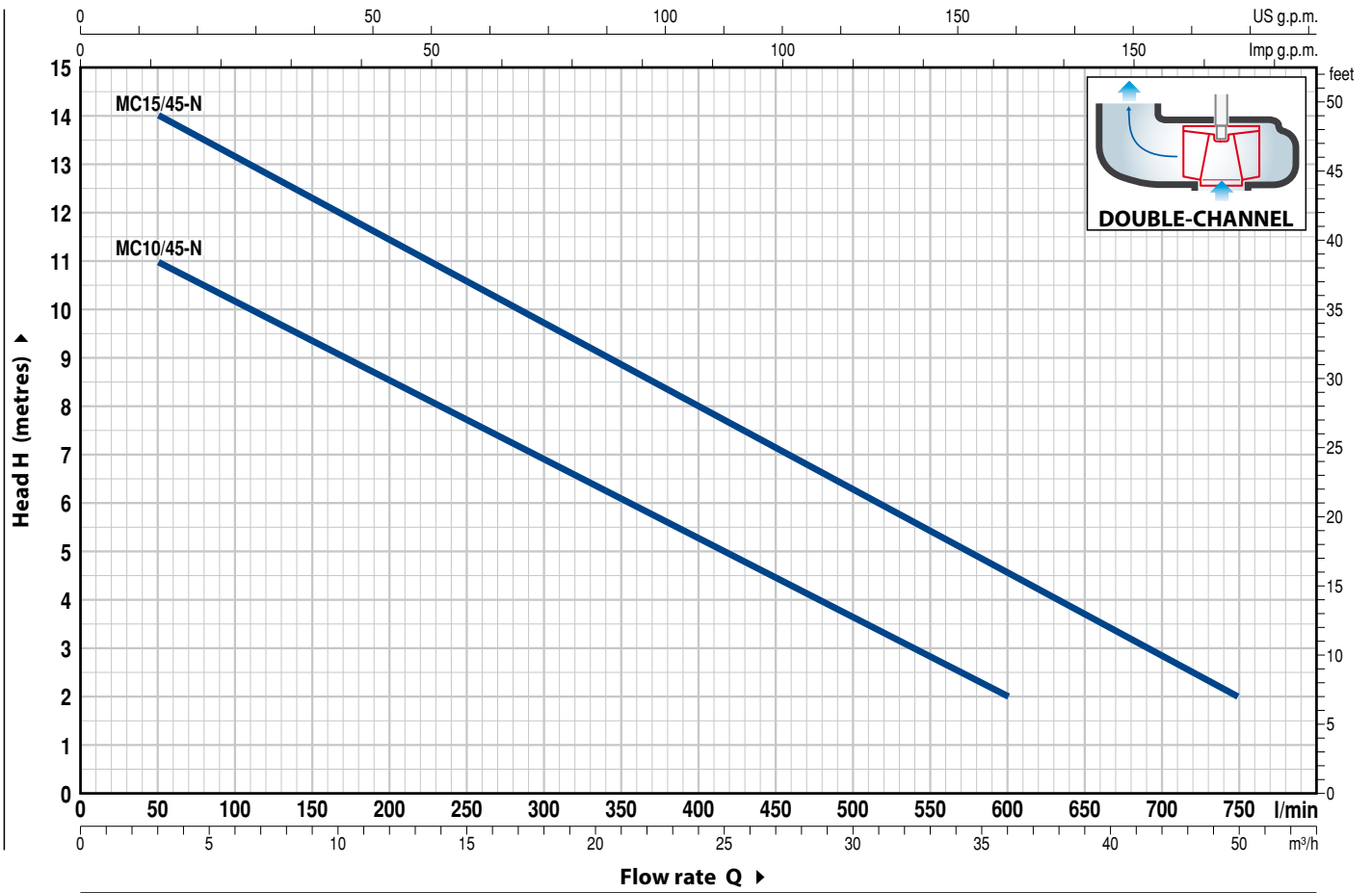
- Patent Pending n. BO2015A000116
- Registered EU Design n. 002501486-0003

OPTIONS AVAILABLE ON REQUEST

- Single-phase pumps without float switch
- Other voltages or 60 Hz frequency

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm



| MODEL | | POWER (P ₂) | | Q | Flow rate | | | | | | | | | | | | | |
|--------------|-------------|-------------------------|-----|----------|-------------------|----|-----|------|-----|-----|-----|-----|-----|-----|----|--|--|--|
| Single-phase | Three-phase | kW | HP | | m ³ /h | 0 | 3 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 45 | | | |
| | | | | l/min | 0 | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 750 | | | | |
| MCm 10/45-N | MC 10/45-N | 0.75 | 1 | H metres | 12 | 11 | 10 | 8.5 | 7 | 5 | 3.5 | 2 | | | | | | |
| MCm 15/45-N | MC 15/45-N | 1.1 | 1.5 | | 15 | 14 | 13 | 11.5 | 9.7 | 8 | 6.3 | 4.5 | 3 | 2 | | | | |

Q = Flow rate H = Total manometric head

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

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

| | | |
|---|---------------------------|--|
| 1 | PUMP BODY | Cast iron with an Epoxy Electro Coating treatment, with threaded port in compliance with ISO 228/1 |
| 2 | BASE | Stainless steel AISI 304 |
| 3 | IMPELLER | Precision cast stainless steel AISI 304 DOUBLE-CHANNEL type |
| 4 | MOTOR CASING | Cast iron with an Epoxy Electro Coating treatment |
| 5 | MOTOR CASING PLATE | Stainless steel AISI 304 |
| 6 | MOTOR SHAFT | Stainless steel EN 10088-3 - 1.4104 |

7 SHAFT WITH DOUBLE MECHANICAL SEAL SEPARATED BY AN OIL CHAMBER

| Seal Model | Shaft Diameter | Position | Materials | | |
|-------------|----------------|------------|-----------------|-----------------|-----------|
| | | | Stationary ring | Rotational ring | Elastomer |
| MG1-14D SIC | Ø 14 mm | Motor side | Silicon carbide | Graphite | NBR |
| | | Pump side | Silicon carbide | Silicon carbide | NBR |

8 BEARINGS 6203 ZZ / 6203 ZZ

9 CAPACITOR

| Pump | Capacitance | |
|--------------|------------------|----------------|
| Single-phase | (230 V or 240 V) | (110 V) |
| MCm 10/45-N | 20 µF 450 VL | 30 µF - 250 VL |
| MCm 15/45-N | 25 µF 450 VL | - |

10 ELECTRIC MOTOR

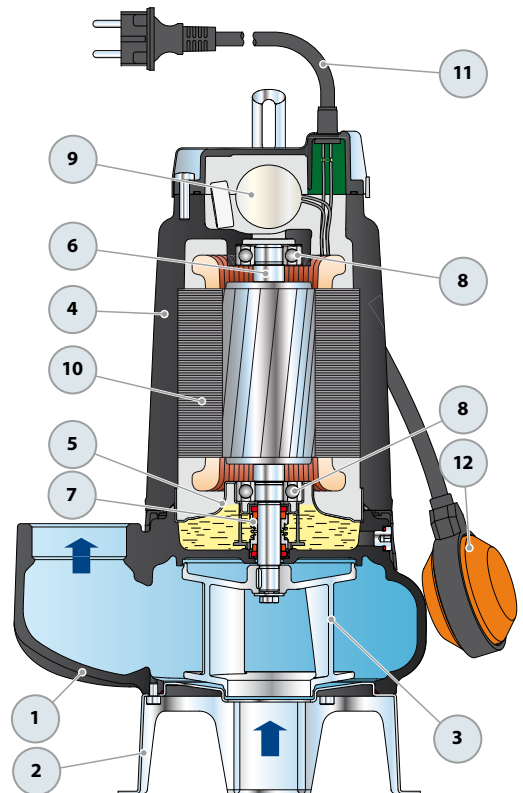
MCm: single-phase 230 V - 50 Hz
with thermal overload protector incorporated into the winding
MC: three-phase 400 V - 50 Hz
– Insulation: class F
– Protection: IP X8

11 POWER CABLE

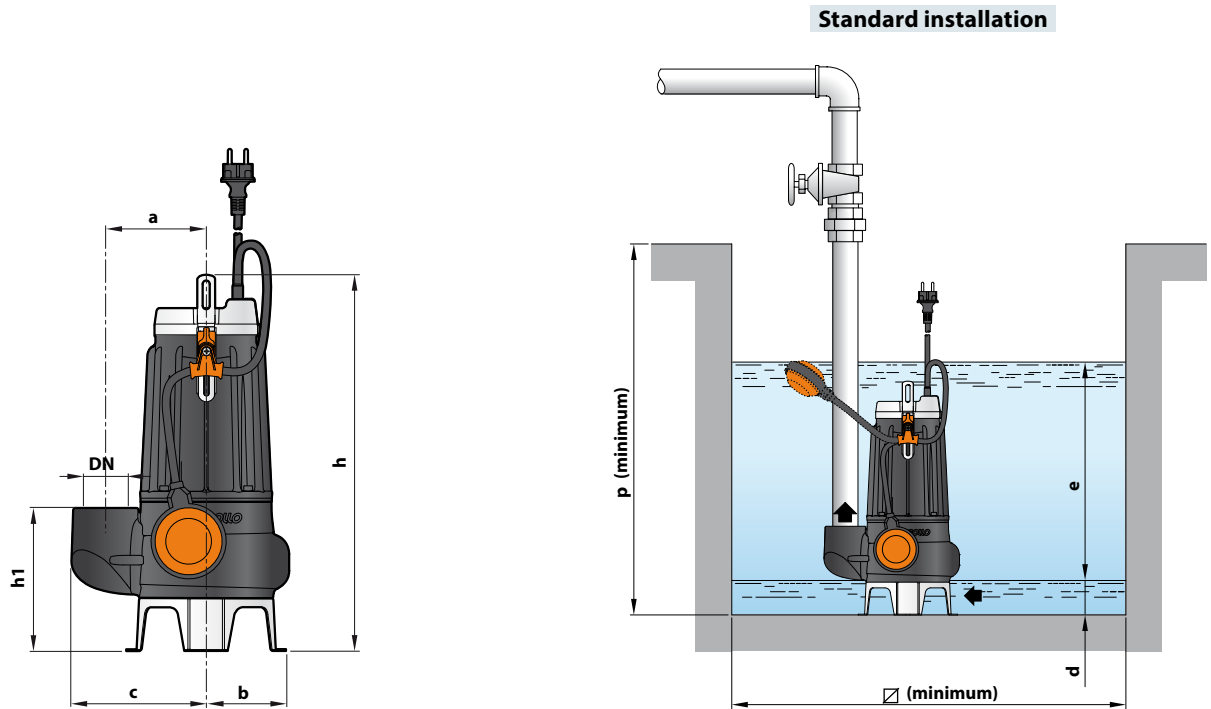
“H07 RN-F” type
(with Schuko plug for single-phase versions only)
Standard length 10 metres

12 FLOAT SWITCH

(only for single-phase versions)



DIMENSIONS AND WEIGHT



| MODEL | | PORT DN | Passage of solids | DIMENSIONS mm | | | | | | | | | | kg | |
|--------------|-------------|------------|----------------------|---------------|----|-----|-----|-----|----|----------|-----|-----|------|------|------|
| Single-phase | Three-phase | | | a | b | c | h | h1 | d | e | p | Ø | 1~ | 3~ | |
| MCm 10/45-N | MC 10/45-N | 2" | Ø 50 mm | 115 | 95 | 155 | 413 | 164 | 60 | variable | 500 | 500 | 19.0 | 17.9 | |
| MCm 15/45-N | MC 15/45-N | | | | | | 428 | | | | | | | | 20.2 |

ABSORPTION

| MODEL | VOLTAGE | | |
|-------------|---------|-------|--------|
| | 230 V | 240 V | 110 V |
| MCm 10/45-N | 5.0 A | 4.8 A | 10.0 A |
| MCm 15/45-N | 8.2 A | 7.9 A | - |

| MODEL | VOLTAGE | | | |
|------------|---------|-------|-------|-------|
| | 230 V | 400 V | 240 V | 415 V |
| MC 10/45-N | 3.7 A | 2.1 A | 3.5 A | 2.0 A |
| MC 15/45-N | 5.6 A | 3.2 A | 5.4 A | 3.1 A |

PALLETIZATION

| MODEL | | GROUPAGE n. pumps | CONTAINER n. pumps |
|--------------|-------------|----------------------|-----------------------|
| Single-phase | Three-phase | | |
| MCm 10/45-N | MC 10/45-N | 54 | 72 |
| MCm 15/45-N | MC 15/45-N | 54 | 72 |