

# PMC "DOUBLE-CHANNEL"

## Fixed installation pumps

➡ for sewage water



### PERFORMANCE RANGE

- Flow rate up to **1600 l/min** (96 m<sup>3</sup>/h)
- Head up to **25 m**

### APPLICATION LIMITS

- **10 m** maximum immersion depth (with power cable of sufficient length)
- Maximum liquid temperature **+40 °C**
- Solids passage:
  - up to **Ø 50 mm** for PMC 15-20-30-40/50
  - up to **Ø 70 mm** for PMC 30-40/70
- Minimum immersion depth for continuous service:
  - **390 mm** for PMC 15-20-30-40/50
  - **440 mm** for PMC 30-40/70

### CONSTRUCTION AND SAFETY STANDARDS

- Standard features: base pedestal, threaded delivery counterflange, guide tube supports
- **10 m** long power cable
- Float switch for single-phase versions

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



### CERTIFICATIONS



### INSTALLATION AND USE

PMC pumps, made from heavy gauge cast iron offering exceptional sturdiness and abrasion resistance, come equipped with a DOUBLE-CHANNEL stainless steel impeller and are capable of pumping liquids containing short fibred suspended solids. They are ideal for pumping **sewage, waste water, water mixed with mud, groundwater and surface water** in locations such as apartment blocks, public buildings, factories, tower garages, underground car parks and cleaning areas, etc.

### PATENTS - TRADE MARKS - MODELS

- Registered Community Design n° 342159-0017

### OPTIONALS AVAILABLE ON REQUEST

- QES control box for three-phase pumps
- Three-phase dual voltage pumps:
  - 230/400 V or
  - 400/690 V
- Single-phase pumps without float switch
- Other voltages

### GUARANTEE

2 years subject to terms and conditions

➡ For the following versions the built-in thermal overload protector must be connected to the control box in order for the guarantee to be considered valid:

single-phase

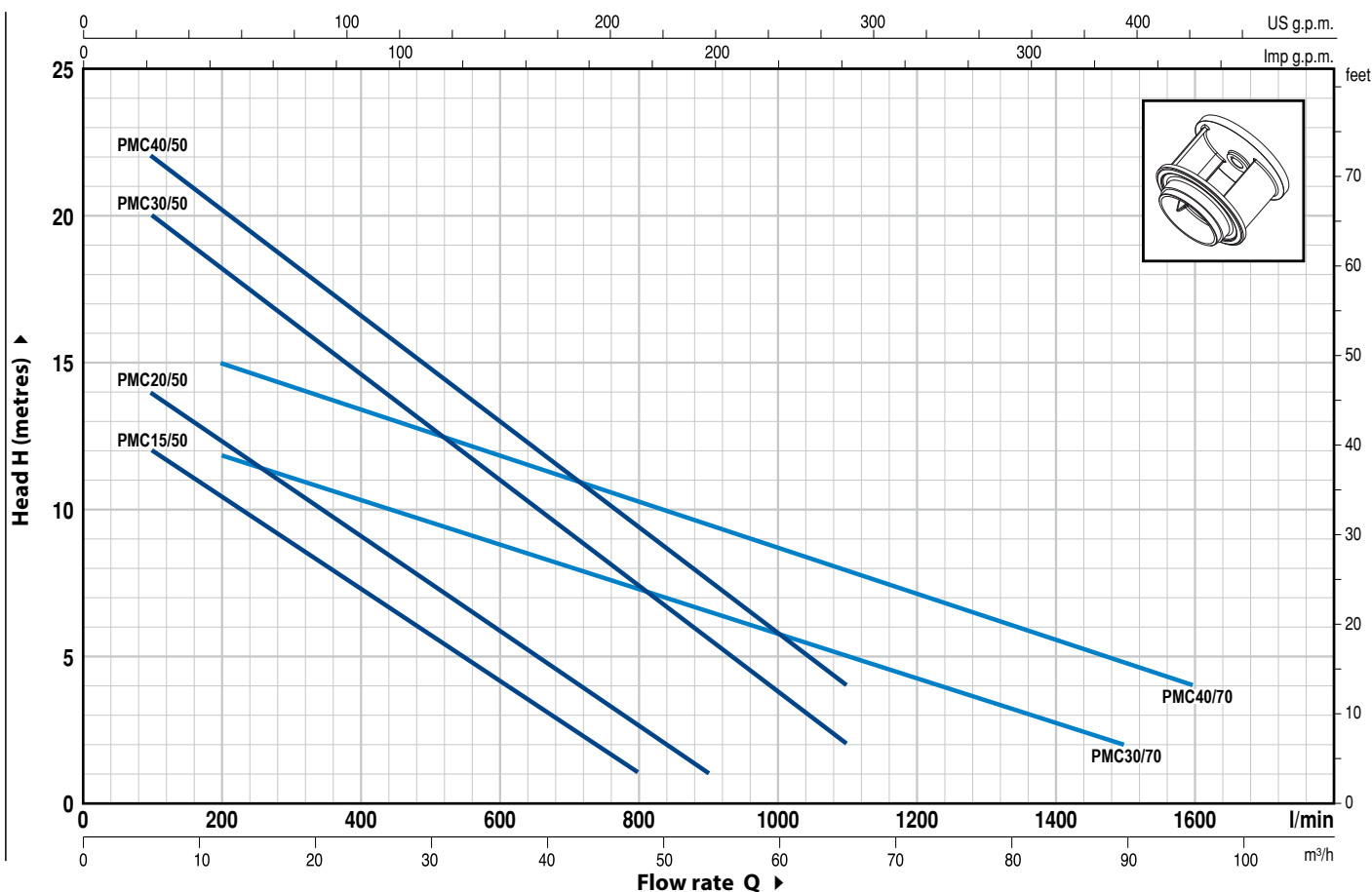
- PMCm 30/50 - HP 3
- PMCm 30/70 - HP 3

three-phase

- PMC 15-20-30-40/50 - HP 1.5-2-3-4
- PMC 30-40/70 - HP 3-4

## CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 1/min



MODEL		POWER		Q	Flow rate (l/min)														
Single-phase	Three-phase	kW	HP		0	6	12	18	24	30	36	42	48	54	60	66	72	84	96
PMCM 15/50	PMC 15/50	1.1	1.5	H metres	14	12	10.5	9	7.5	5.5	4	2.5	1						
PMCM 20/50	PMC 20/50	1.5	2		16	14	12.5	10.5	9	7.5	6	4.5	2.5	1					
PMCM 30/50	PMC 30/50	2.2	3		22	20	18	16.5	14.5	13	11	9.5	7.5	5.5	4	2			
-	PMC 40/50	3	4		24	22	20	18.5	16.5	15	13	11	9.5	7.5	6	4			
PMCM 30/70	PMC 30/70	2.2	3		13	-	12	11	10.5	9.5	8.5	8	7.5	6.5	6	5	4.5	3	2
-	PMC 40/70	3	4		17	-	15	14	13.5	12.5	12	11	10.5	9.5	8.5	8	7	5.5	4

Q = Flow rate H = Total manometric head

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

# PMC "DOUBLE-CHANNEL"

## POS. CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Cast iron, complete with flanged ports
2	SUCTION PLATE	Cast iron
3	BASE PEDESTAL	Cast iron
4	CONTERFLANGE	Steel, complete with threaded ports in compliance with ISO 228/1
5	GUIDE TUBE SUPPORTS	Cast iron
6	IMPELLER	Stainless steel AISI 304 DOUBLE-CHANNEL type
7	MOTOR CASING	Cast iron
8	MOTOR CASING PLATE	Cast iron
9	MOTOR SHAFT	Stainless steel AISI 431

## 10 TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER

Seal	Shaft	Materials		
Model	Diameter	Stationary ring	Rotational ring	Elastomer
STA-20	Ø 20 mm	Ceramic	Graphite	NBR
STA-19	Ø 19 mm	Silicon carbide	Silicon carbide	NBR

## 11 BEARINGS 6304 ZZ - C3 / 6304 ZZ - C3

## POS. CONSTRUCTION CHARACTERISTICS

### 12 CAPACITOR

Pump	Capacitance
Single-phase	(220 V)
PMcM 15/50	31.5 µF 450 VL
PMcM 20/50	50 µF 450 VL
PMcM 30/50-70	60 µF 450 VL

### 13 ELECTRIC MOTOR

**PMcM 15-20:** single-phase 220 V - 60 Hz with thermal overload protector built-in to the winding.

⇒ **PMcM 30:** single-phase 220 V - 60 Hz with motor protector built-in to the winding to be connected to the control box

⇒ **PMC:** three-phase 380 V - 60 Hz with motor protector built-in to the winding to be connected to the control box

– Insulation: F class

– Protection: IP X8

### 14 POWER CABLE 10 m long "H07 RN-F" cable

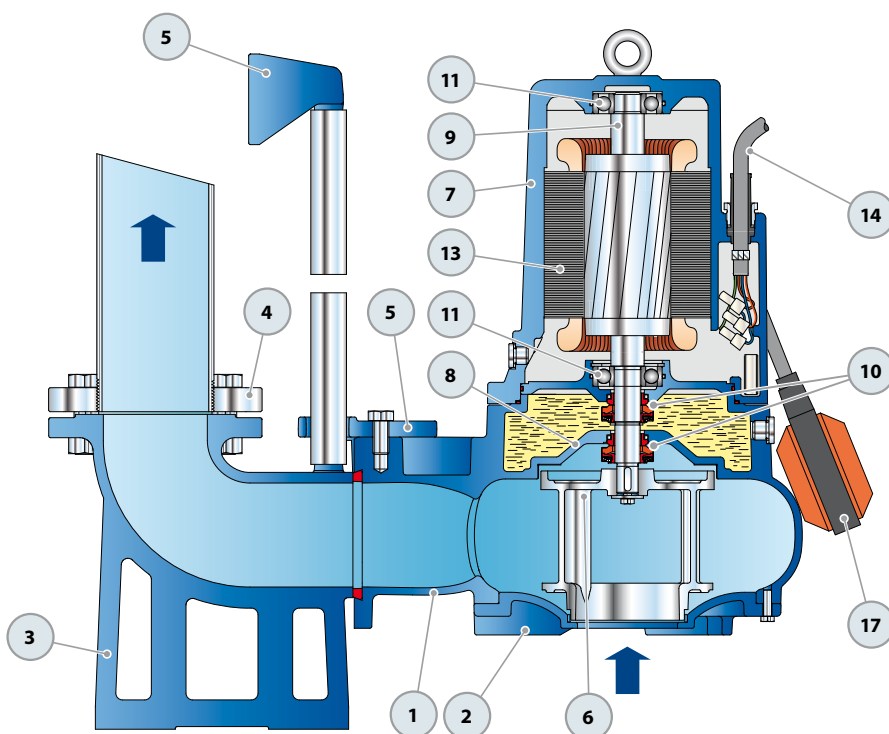
### 15 CONTROL BOX for PMcM 15-20 (only for single-phase versions)

Complete with capacitor and manual reset motor protector

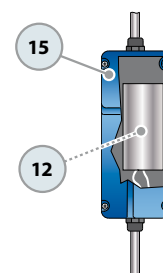
### 16 CONTROL BOX for PMcM 30 (only for single-phase versions)

QES 300 MONO series

### 17 FLOAT SWITCH

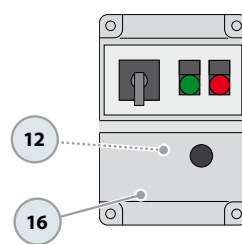


#### Standard features



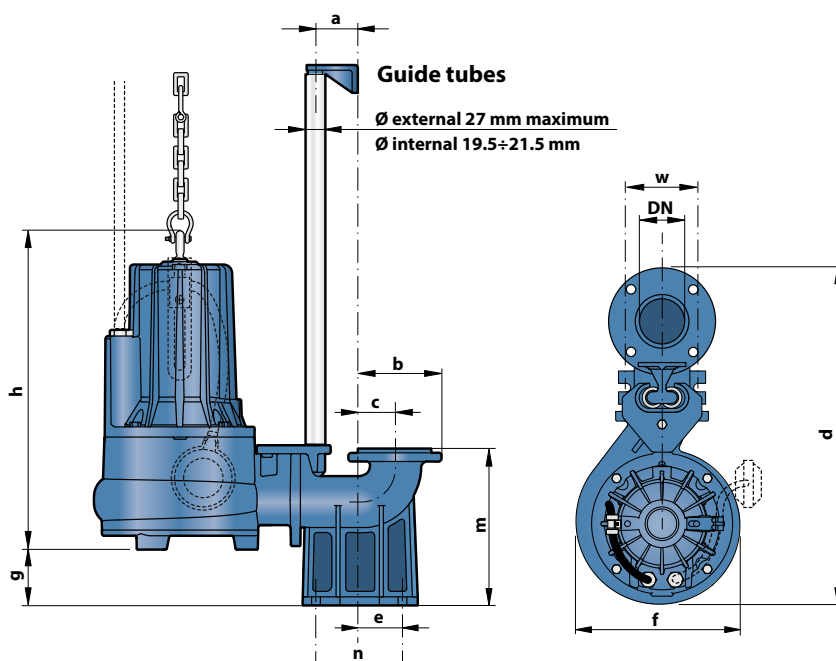
Control box for PMcM 15-20 (HP 1.5-2.0)  
(only for single-phase versions)

#### Standard features

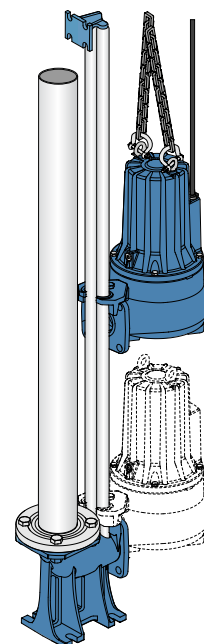


Control box for PMcM 30 (HP 3.0)  
(only for single-phase versions)

## DIMENSIONS AND WEIGHT



### Typical installation



MODEL		PORT	solids passage	DIMENSIONS mm											kg*	
Single-phase	Three-phase	DN		a	b	c	d	e	f	g	h	m	n	w	1~	3~
PMCm 15/50	PMC 15/50	2½"	Ø 50 mm	60	116	51	490	62	248	52	442	198	120	72	47.2	45.9
PMCm 20/50	PMC 20/50										457 / 442				48.2	46.9
PMCm 30/50	PMC 30/50										457				52.2	49.1
–	PMC 40/50										472 / 458				–	52.7
PMCm 30/70	PMC 30/70	3"	Ø 70 mm	60	150	70	570	85	268	92	472	255	130	112	62.6	59.3
–	PMC 40/70										472				–	62.9

(\*weight includes counterflanges)

## ABSORPTION

MODEL	VOLTAGE (single-phase)
Single-phase	220 V
PMCm 15/50	9.5 A
PMCm 20/50	12.5 A
PMCm 30/50	18.0 A
PMCm 30/70	18.0 A

MODEL	VOLTAGE (three-phase)		
Three-phase	220 V	380 V	440 V
PMC 15/50	7.6 A	4.3 A	3.7 A
PMC 20/50	8.9 A	5.2 A	4.5 A
PMC 30/50	12.0 A	7.0 A	5.2 A
PMC 40/50	15.2 A	8.8 A	7.0 A
PMC 30/70	11.3 A	6.5 A	5.1 A
PMC 40/70	15.8 A	9.2 A	7.0 A

## PALLETIZATION

MODEL		GROUPAGE / CONTAINER			
Single-phase	Three-phase	n° pumps	H (mm)	kg	
				1~	3~
PMCm 15/50	PMC 15/50	24	1751	1151	1119
PMCm 20/50	PMC 20/50	24	1751	1175	1143
PMCm 30/50	PMC 30/50	24	1751	1275	1196
–	PMC 40/50	12	1751	–	1283
PMCm 30/70	PMC 30/70	12	1304	769	729
–	PMC 30/70	12	1304	–	772

