

# 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 a sufficiently long power cable)
- 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 counter-flange, guide tube supports (the guide tubes are not included)
- **10 m** long power cable
- Float switch for single-phase versions

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



### CERTIFICATIONS

COMPANY WITH MANAGEMENT SYSTEM  
CERTIFIED BY DNV  
ISO 9001: QUALITY  
ISO 14001: ENVIRONMENT AND SAFETY



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

### GUARANTEE

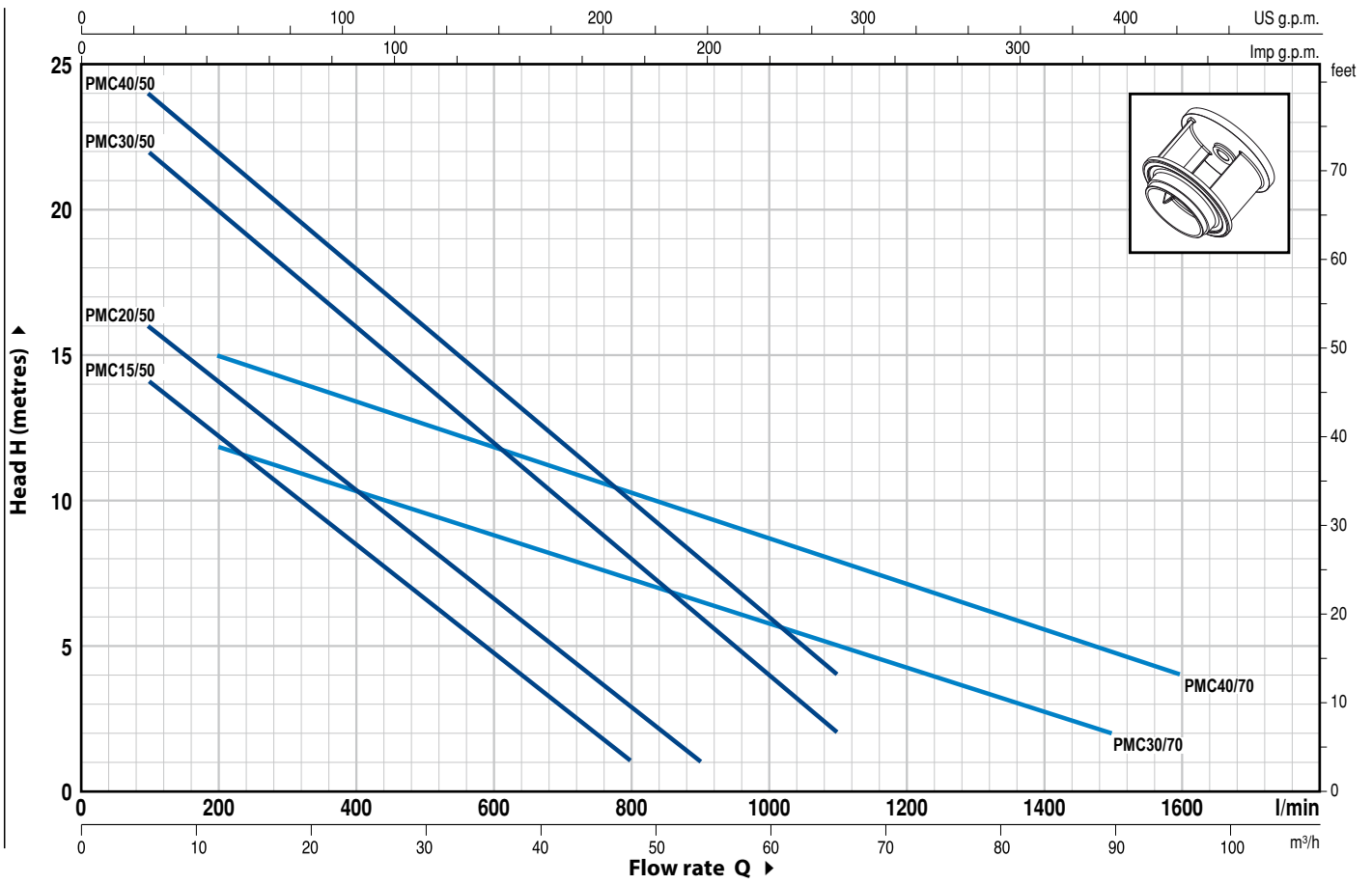
2 years subject to terms and conditions

► 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        | three-phase                         |
| – PMCm 30/50 - HP 3 | – PMC 15-20-30-40/50 - HP 1.5-2-3-4 |
| – PMCm 30/70 - HP 3 | – PMC 30-40/70 - HP 3-4             |

**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

**50 Hz n= 2900 1/min**



MODEL		POWER		Q	Flow rate																
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	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	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600		
PMCm 20/50	PMC 20/50	1.5	2		16	14	12.5	10.5	8.5	6.5	4.5	3	1								
PMCm 30/50	PMC 30/50	2.2	3		18	16	14	12.5	10.5	8.5	6.5	5	3	1							
-	PMC 40/50	3	4		24	22	20	18	16	14	12	10	8	6	4	2					
PMCm 30/70	PMC 30/70	2.2	3		25	24	22	20	18	16	14	12	10	8	6	4					
-	PMC 40/70	3	4		13	-	12	11	10.5	9.5	8.5	8	7.5	6.5	6	5	4.5	3	2		
					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 Grade 3.

# PMC "DOUBLE-CHANNEL"

## POS. CONSTRUCTION CHARACTERISTICS

1	<b>PUMP BODY</b>	Cast iron, complete with flanged ports			
2	<b>SUCTION PLATE</b>	Cast iron			
3	<b>BASE PEDESTAL</b>	Cast iron			
4	<b>CONTERFLANGE</b>	Steel, complete with threaded ports in compliance with ISO 228/1			
5	<b>GUIDE TUBE SUPPORTS</b>	Cast iron			
6	<b>IMPELLER</b>	Stainless steel AISI 304 DOUBLE-CHANNEL type			
7	<b>MOTOR CASING</b>	Cast iron			
8	<b>MOTOR CASING PLATE</b>	Cast iron			
9	<b>MOTOR SHAFT</b>	Stainless steel AISI 431			
10	<b>TWO MECHANICAL SEALS SEPARATED BY AN OIL CHAMBER</b>				
	<b>Seal</b>	<b>Shaft</b>			
	<b>Model</b>	<b>Diameter</b>	<b>Stationary ring</b>	<b>Rotational ring</b>	<b>Elastomer</b>
	STA-20	Ø 20 mm	Ceramic	Graphite	NBR
	STA-19	Ø 19 mm	Silicon carbi- de	Silicon carbi- de	NBR
11	<b>BEARINGS</b>	6304 ZZ - C3 / 6304 ZZ - C3			

## POS. CONSTRUCTION CHARACTERISTICS

### 12 CAPACITOR

<i>Pump</i>	<i>Capacitance</i>
<i>Single-phase</i>	<i>(230 V or 240 V)</i>
<b>PMCm 15/50</b>	<b>31.5 µF 450 VL</b>
<b>PMCm 20/50</b>	<b>50 µF 450 VL</b>
<b>PMCm 30/50-70</b>	<b>60 µF 450 VL</b>

### 13 ELECTRIC MOTOR

**PMCm 15-20:** single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding.

⇒ **PMCm 30:** single-phase 230 V - 50 Hz with motor protector built-in to the winding to be connected to the control box

⇒ **PMC:** three-phase 400 V - 50 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 foe PMCm 15-20

(only for single-phase versions)

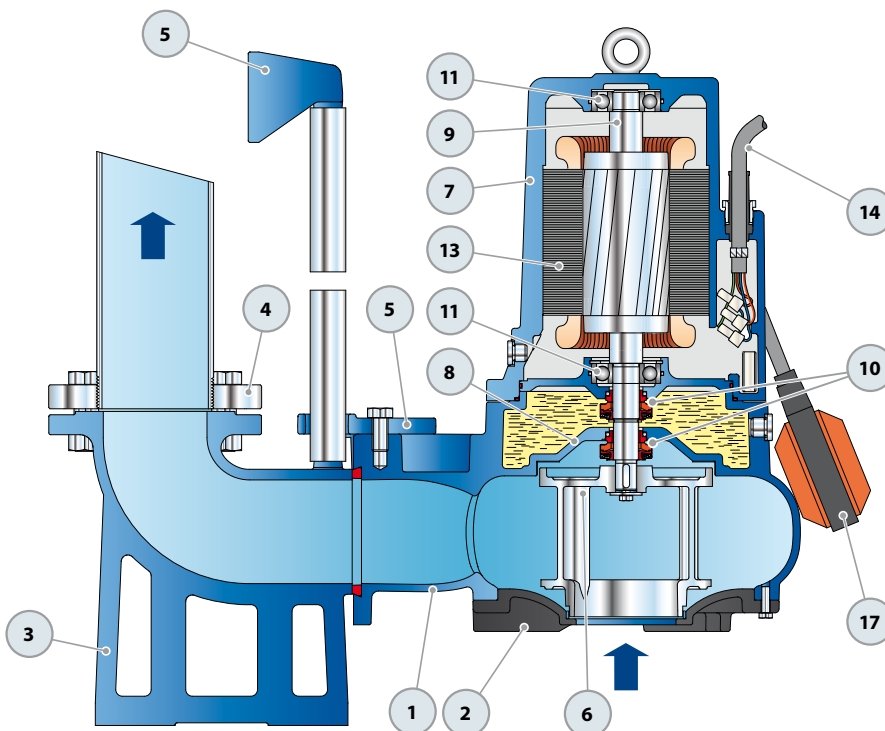
Complete with capacitor and manual reset motor protector

### 16 CONTROL BOX for PMCm 30

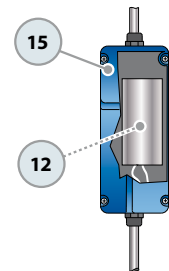
(only for single-phase versions)

**QES 300 MONO** series

### 17 FLOAT SWITCH

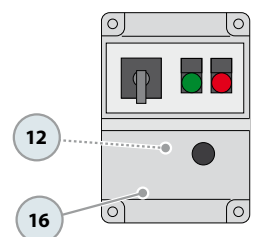


### Standard features



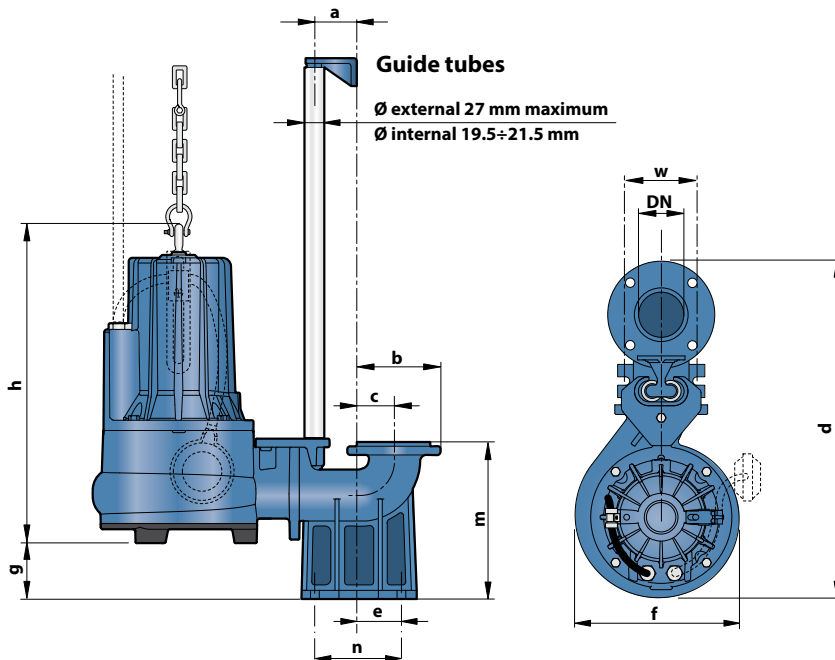
Control box for PMCm 15-20 (HP 1.5-2.0)  
(only for single-phase versions)

### Standard features

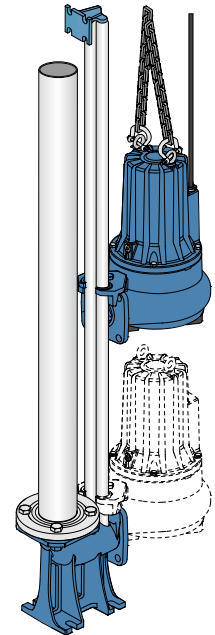


Control box for PMCm 30 (HP 3.0)  
(only for single-phase versions)

## 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										48.2				46.9	
PMcM 30/50	PMC 30/50										457/442				52.2	49.1
-	PMC 40/50										457				-	52.7
PMcM 30/70	PMC 30/70	3"	Ø 70 mm	60	150	70	570	85	268	92	472/458	255	130	112	62.6	59.3
-	PMC 40/70										472				-	62.9

(\*weight includes counterflanges)

## ABSORPTION

MODEL	VOLTAGE (single-phase)	
Single-phase	230 V	240 V
PMcM 15/50	9.0 A	9.0 A
PMcM 20/50	10.5 A	10.5 A
PMcM 30/50	15.2 A	15.2 A
PMcM 30/70	15.2 A	15.2 A

MODEL	VOLTAGE (three-phase)					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
PMC 15/50	6.1 A	3.5 A	2 A	6.1 A	3.5 A	2.0 A
PMC 20/50	7.4 A	4.3 A	2.5 A	7.4 A	4.3 A	2.5 A
PMC 30/50	9.9 A	5.7 A	3.3 A	9.9 A	5.7 A	3.3 A
PMC 40/50	13.5 A	7.8 A	4.5 A	13.5 A	7.8 A	4.5 A
PMC 30/70	10.2 A	5.9 A	3.4 A	10.2 A	5.9 A	3.4 A
PMC 40/70	13.5 A	7.8 A	4.5 A	13.5 A	7.8 A	4.5 A

## PALLETIZATION

MODEL		GROUPAGE / CONTAINER			
Single-phase	Three-phase	n° pumps	H (mm)	kg	
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

