



**GENERAL CATALOGUE**

 **PEDROLLO**<sup>®</sup>  
*... the spring of life*



# 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
- 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
- PMCm versions complete with float switch

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, ground-water 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 or 60 Hz frequency

### GUARANTEE

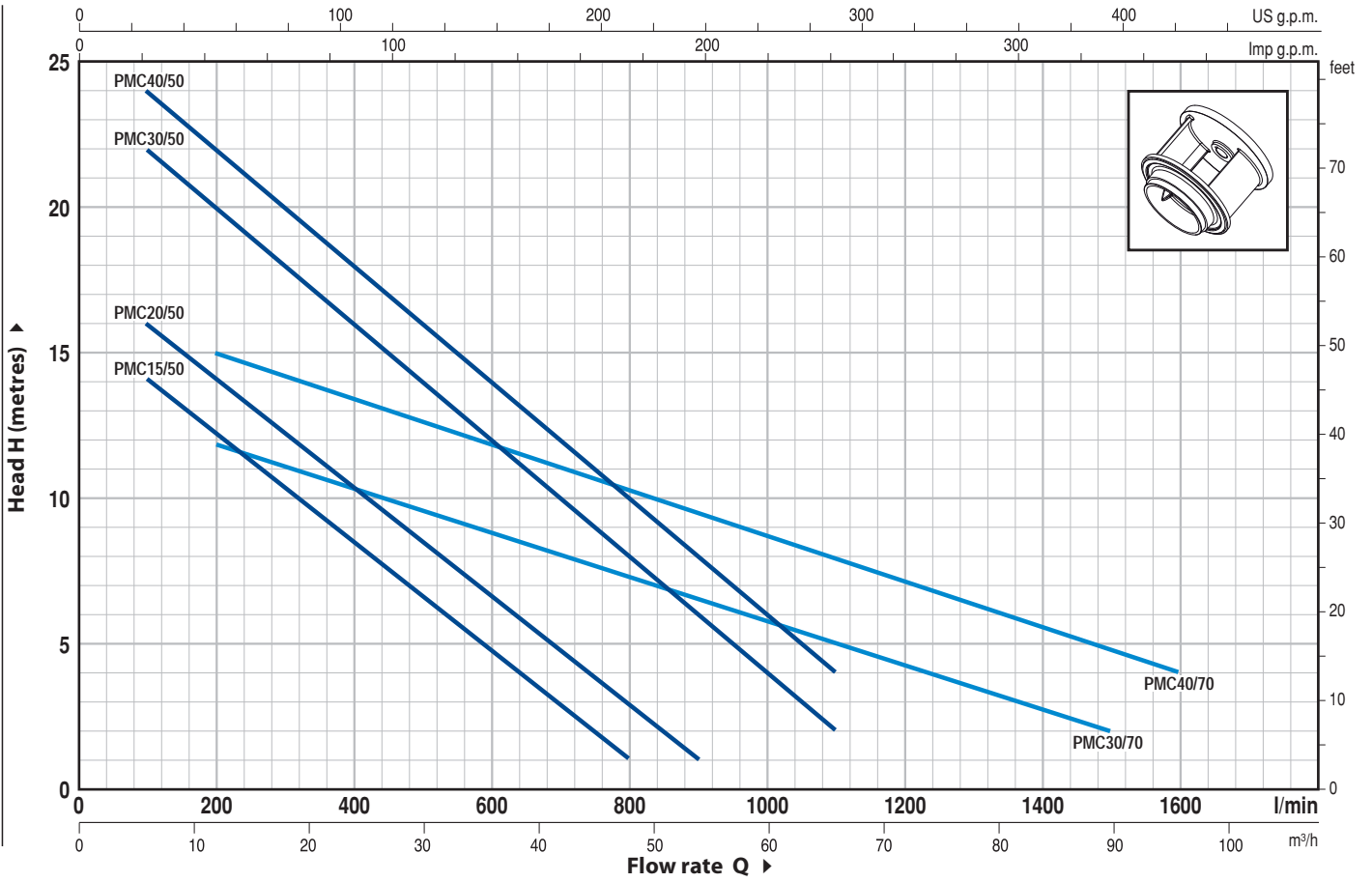
2 years subject to terms and conditions

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		m³/h	0	6	12	18	24	30	36	42	48	54	60	66	72	84	96
				l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600	
PMCm 15/50	PMC 15/50	1.1	1.5	H metres	16	14	12.5	10.5	8.5	6.5	4.5	3	1							
PMCm 20/50	PMC 20/50	1.5	2		18	16	14	12.5	10.5	8.5	6.5	5	3	1						
PMCm 30/50	PMC 30/50	2.2	3		24	22	20	18	16	14	12	10	8	6	4	2				
-	PMC 40/50	3	4		25	24	22	20	18	16	14	12	10	8	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.

## 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	SHAFT WITH DOUBLE SEAL AND OIL CHAMBER	
	<i>Seal</i>	<i>Shaft</i>
	<i>Model</i>	<i>Diameter</i>
	<i>Stationary ring</i>	<i>Rotational ring</i>
	<i>Materials</i>	<i>Elastomer</i>
	FN-20 DV	Ø 20 mm
		Widia
		Silicon carbide
		NBR
11	LIP SEAL	Ø 20 x Ø 30 x H 7 mm
12	BEARINGS	6304 ZZ - C3 / 6304 ZZ - C3

## POS. CONSTRUCTION CHARACTERISTICS

### 13 CAPACITOR

Pump	Capacitance
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Single-phase	(230 V or 240 V)
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PM Cm 15/50	31.5 µF 450 VL
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PM Cm 20/50	50 µF 450 VL
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PM Cm 30/50-70	60 µF 450 VL
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### 14 ELECTRIC MOTOR

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

⇒ **PM Cm 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 68

### 15 POWER CABLE

10 m long "H07 RN-F" cable

### 16 CONTROL BOX for PM Cm 15-20

(only for single-phase versions)

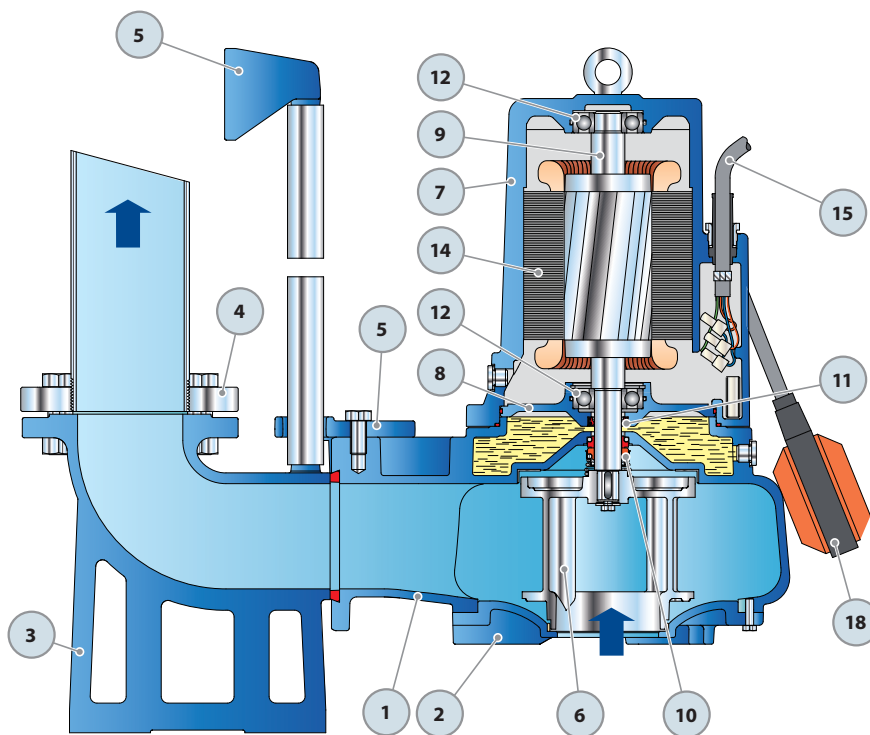
Complete with capacitor and manual reset motor protector

### 17 CONTROL BOX for PM Cm 30

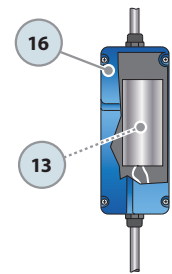
(only for single-phase versions)

QES 300 MONO series

### 18 FLOAT SWITCH

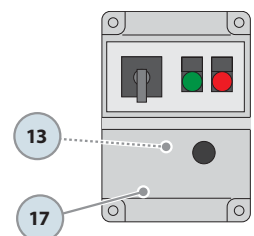


#### Standard features



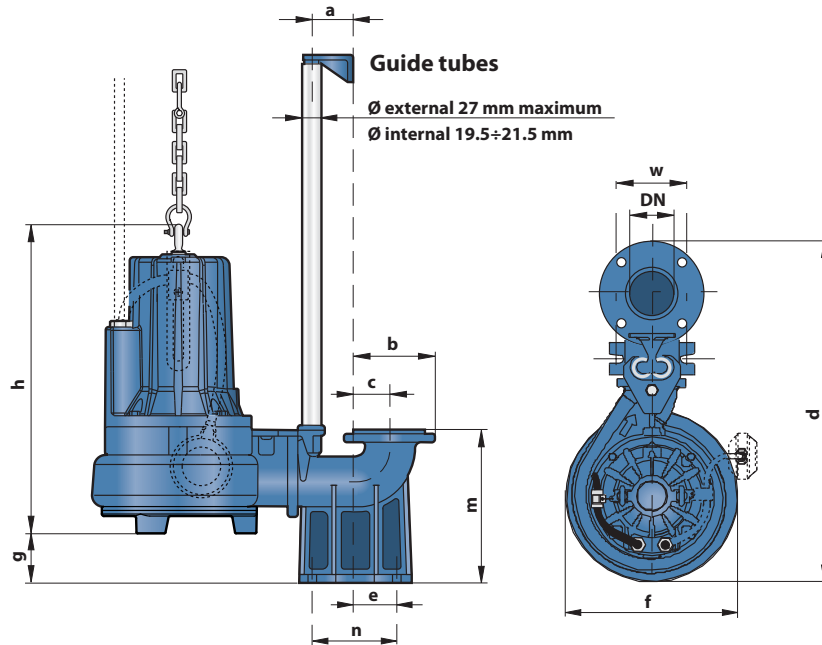
Control box for PM Cm 15-20 (HP 1.5-2.0)  
(only for single-phase versions)

#### Standard features

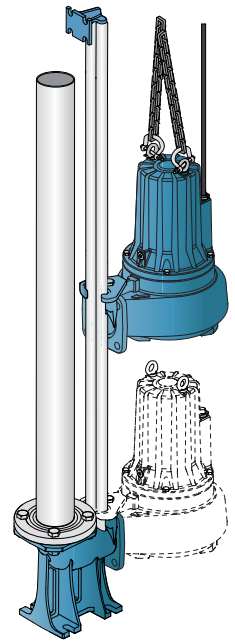


Control box for PM Cm 30 (HP 3.0)  
(only for single-phase versions)

**DIMENSIONS AND WEIGHT**



**Typical installation**



MODEL		PORT DN	solids passage	DIMENSIONS mm										kg*			
Single-phase	Three-phase			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	250	52	330	198	120	72	46.7	45.4	
PMcM 20/50	PMC 20/50										445/430				48.0	46.0	
PMcM 30/50	PMC 30/50										445				52.2	48.7	
-	PMC 40/50																52.0
PMcM 30/70	PMC 30/70	3"	Ø 70 mm		150	70	570	85	270	87	460/446	255	130	112	61.0	57.4	
-	PMC 40/70										460				-	60.8	

(\*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)	1~	3~
PMcM 15/50	PMC 15/50	24	1715	1139	1107
PMcM 20/50	PMC 20/50	24	1715	1169	1121
PMcM 30/50	PMC 30/50	24	1715	1270	1185
-	PMC 40/50	24	1715	-	1265
PMcM 30/70	PMC 30/70	12	1280	749	706
-	PMC 30/70	12	1280	-	747

