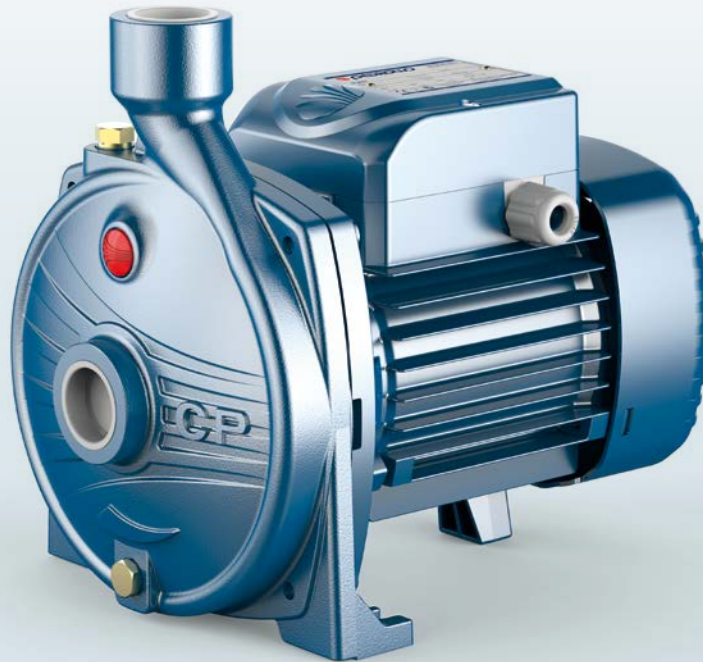


-  Clean water
-  Domestic use
-  Civil use



### PERFORMANCE RANGE

- Flow rate up to **160 l/min** (9.6 m<sup>3</sup>/h)
- Head up to **56 m**

### APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure:
  - **6 bar** for CP 600-610-620
  - **10 bar** for CP 650-660-670
- Continuous service **S1**

### CONSTRUCTION AND SAFETY STANDARDS

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

### INSTALLATION AND USE

Suitable for use with clean water and with liquids that are not chemically aggressive towards the materials from which the pump is made. Because they are reliable and easy to use these pumps are widely used in domestic and civil applications such as the distribution of water in combination with small and medium sized pressure tanks, for transferring liquids and for the irrigation of gardens and orchards. The pump should be installed in an enclosed environment or sheltered from inclement weather.

### PATENTS - TRADE MARKS - MODELS

- Registered EU Design n. 002098434

### OPTIONS AVAILABLE ON REQUEST

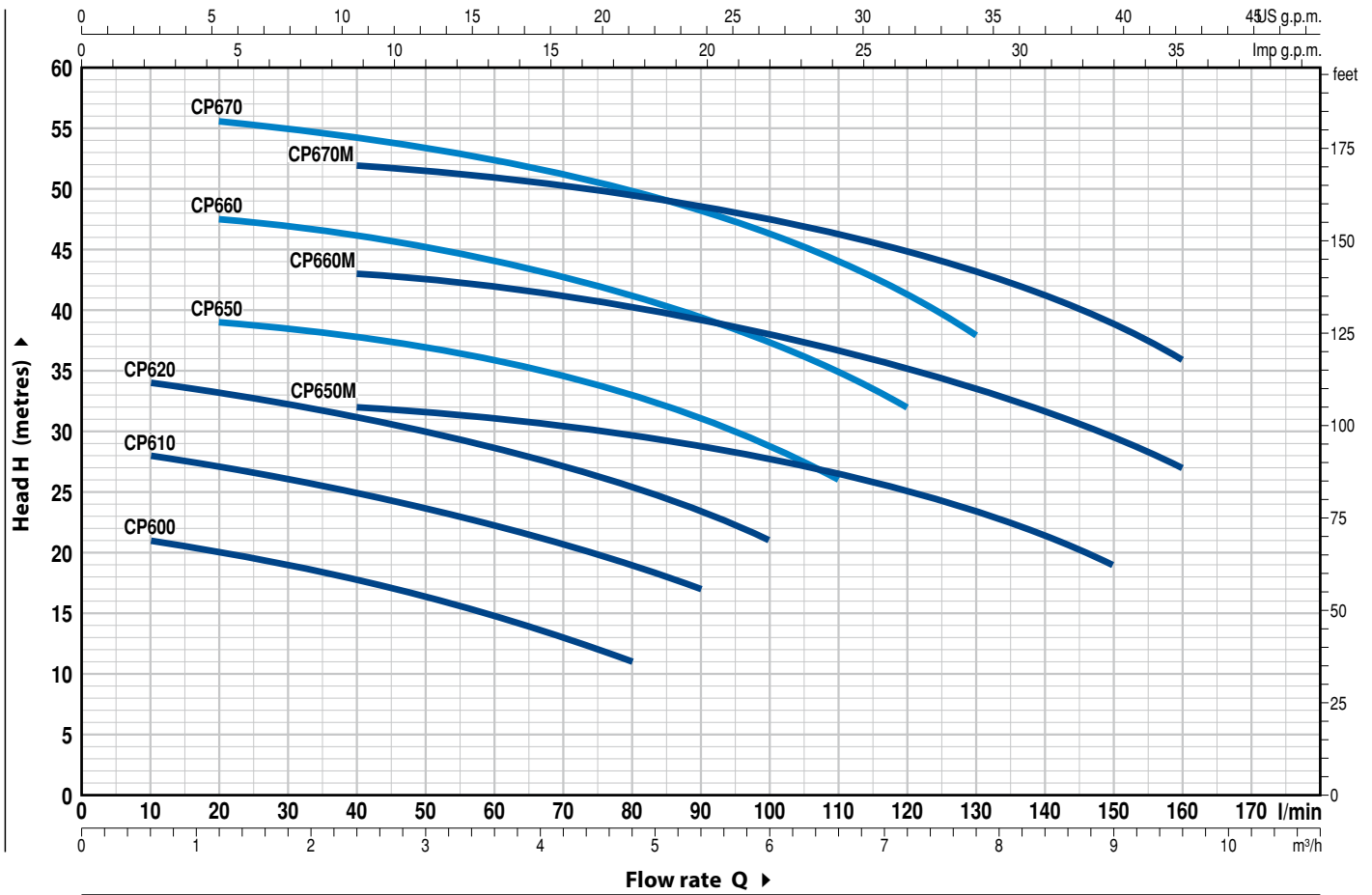
- Special mechanical seal
- Other voltages
- IP X5 class protection for CP 650-660-670

### GUARANTEE

2 years subject to terms and conditions

### CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n = 3450 min<sup>-1</sup> HS = 0 m



MODEL		POWER (P <sub>2</sub> )			Q	H metres															
Single-phase	Three-phase	kW	HP	▲		0	0.6	1.2	2.4	3.6	4.8	5.4	6.0	6.6	7.2	7.8	9.0	9.6			
					l/min	0	10	20	40	60	80	90	100	110	120	130	150	160			
CPm 600	CP 600	0.37	0.50	IE2	H metres	22	21	20	18	15	11										
CPm 610	CP 610	0.60	0.85			28.5	28	27	25	22	19	17									
CPm 620	CP 620	0.75	1	35		34	33	31	28.5	25.5	23.5	21									
CPm 650	CP 650	1.1	1.5	40		-	39	38	36	33.1	31.2	28.8	26								
CPm 660	CP 660	1.5	2	48		-	47.5	46	44	41	39.5	37.5	35	32							
CPm 670	CP 670	2.2	3	IE3		56	-	55.5	54.5	52.5	50	48.5	46.5	44	41.5	38					
CPm 650M	CP 650M	1.1	1.5			33	-	-	32	31	30	29	28	26.5	25	23	19				
CPm 660M	CP 660M	1.5	2			44	-	-	43	42	40	39	38	37	35.5	34	29.5	27			
CPm 670M	CP 670M	2.2	3			53	-	-	52	51	49.5	48.5	47.5	46.5	45	43.5	39	36			

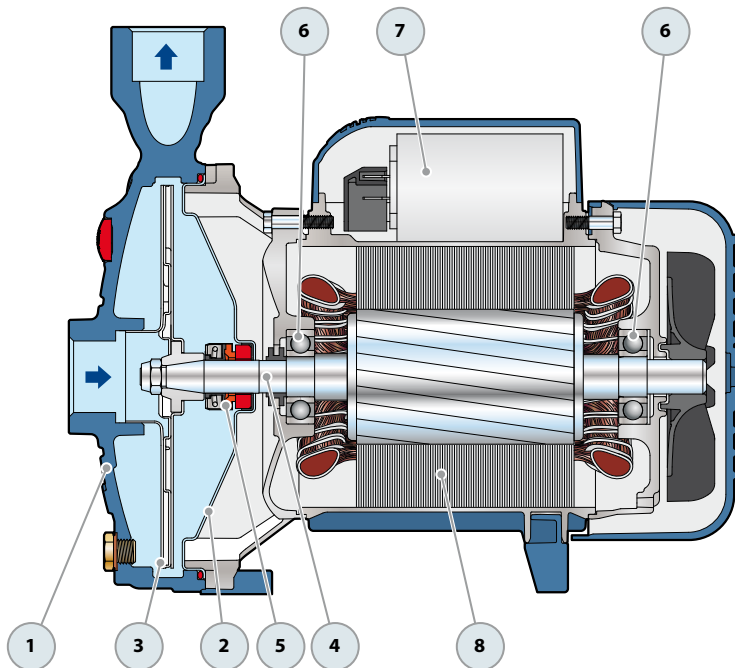
Q = Flow rate H = Total manometric head HS = Suction height

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

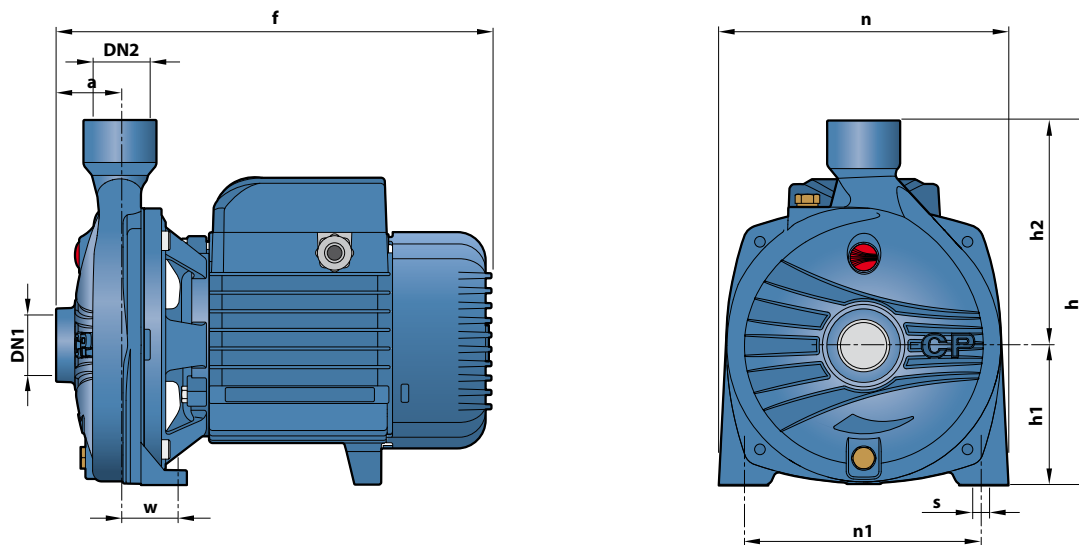
▲ Performance class of the three-phase motor (IEC 60034-30-1)

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

<b>1 PUMP BODY</b>	Cast iron with an Epoxy Electro Coating treatment, with threaded ports in compliance with ISO 228/1					
<b>2 BODY BACKPLATE</b>	Stainless steel AISI 304 (cast iron for CP 650-660-670)					
<b>3 IMPELLER</b>	Stainless steel AISI 304					
<b>4 MOTOR SHAFT</b>	– Stainless steel EN 10088-3 - 1.4104 for CP600-610-620 – Stainless steel AISI 431 for CP650-660-670, CP650M-660M-670M					
<b>5 MECHANICAL SEAL</b>	<b>Pump</b>	<b>Seal</b>	<b>Shaft</b>	<b>Materials</b>		
	<i>Model</i>	<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
	<b>CP 600-610</b>	<b>AR-12</b>	<b>Ø 12 mm</b>	Ceramic	Graphite	NBR
	<b>CP 620</b>	<b>AR-14</b>	<b>Ø 14 mm</b>	Ceramic	Graphite	NBR
	<b>CP 650-660-670</b> <b>CP 650M-660M-670M</b>	<b>FN-18</b>	<b>Ø 18 mm</b>	Graphite	Ceramic	NBR
<b>6 BEARINGS</b>	<b>Pump</b>	<b>Model</b>				
	<b>CP 600-610</b>	<b>6201 ZZ / 6201 ZZ</b>				
	<b>CP 620</b>	<b>6203 ZZ / 6203 ZZ</b>				
	<b>CP 650-660-670</b>	<b>6204 ZZ / 6204 ZZ</b>				
	<b>CP 650M-660M-670M</b>	<b>6204 ZZ / 6204 ZZ</b>				
<b>7 CAPACITOR</b>	<b>Pump</b>	<b>Capacitance</b>				
	<i>Single-phase</i>	<i>(220 V)</i>		<i>(110 V or 127 V)</i>		
	<b>CPm 600</b>	<b>10</b>	<b>µF - 450 VL</b>	<b>25</b>	<b>µF - 250 VL</b>	
	<b>CPm 610</b>	<b>14</b>	<b>µF - 450 VL</b>	<b>25</b>	<b>µF - 250 VL</b>	
	<b>CPm 620</b>	<b>20</b>	<b>µF - 450 VL</b>	<b>60</b>	<b>µF - 300 VL</b>	
	<b>CPm 650-650M</b>	<b>25</b>	<b>µF - 450 VL</b>	<b>60</b>	<b>µF - 250 VL</b>	
	<b>CPm 660-660M</b>	<b>31.5</b>	<b>µF - 450 VL</b>	<b>60</b>	<b>µF - 250 VL</b>	
<b>CPm 670-670M</b>	<b>50</b>	<b>µF - 450 VL</b>	<b>80</b>	<b>µF - 250 VL</b>		
<b>8 ELECTRIC MOTOR</b>	<b>CPm:</b> single-phase 220 V - 60 Hz with thermal overload protector incorporated into the winding. <b>CP:</b> three-phase 220/380 V - 60 Hz or 220/440 V - 60 Hz.					
	➔ <b>The three-phase pumps are fitted with high performance motors up to P2=0.60 kW in class IE2 and from P2= 0.75 kW in class IE3 (IEC 60034-30-1)</b>					
	– Insulation: class F					
	– Protection: IP X4					



## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	n	n1	w	s	1~	3~
CPm 600	CP 600	1"	1"	42	258	205	82	123	165	135	41	10	7.0	7.7
CPm 610	CP 610												8.5	7.8
CPm 620	CP 620												11.0	10.9
CPm 650 - 650M	CP 650 - 650M	1¼"	1"	51	367	260	110	150	206	165	44.5	11	17.8	17.6
CPm 660 - 660M	CP 660 - 660M												18.9	17.9
CPm 670 - 670M	CP 670 - 670M												20.9	22.5

## ABSORPTION

MODEL	VOLTAGE		
<b>Single-phase</b>	220 V	110 V	127 V
CPm 600	2.7 A	5.5 A	5.2 A
CPm 610	4.0 A	8.0 A	8.0 A
CPm 620	6.0 A	12.0 A	10.0 A
CPm 650	8.8 A	17.6 A	16.7 A
CPm 650M	8.8 A	17.6 A	16.7 A
CPm 660	9.7 A	20.0 A	19.0 A
CPm 660M	9.7 A	19.0 A	18.4 A
CPm 670	13.2 A	25.0 A	22.8 A
CPm 670M	12.0 A	25.0 A	22.8 A

MODEL	VOLTAGE			
<b>Three-phase</b>	220 V	380 V	220 V	440 V
CP 600	1.8 A	1.0 A	2.0 A	1.2 A
CP 610	2.8 A	1.6 A	2.6 A	1.5 A
CP 620	4.2 A	2.4 A	4.2 A	2.4 A
CP 650	6.9 A	4.0 A	5.8 A	3.2 A
CP 650M	6.9 A	4.0 A	5.8 A	3.2 A
CP 660	7.6 A	4.4 A	6.4 A	4.1 A
CP 660M	7.6 A	4.4 A	6.4 A	4.1 A
CP 670	10.0 A	5.8 A	8.6 A	5.0 A
CP 670M	9.0 A	5.2 A	7.0 A	4.0 A

## PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
CPm 600	CP 600	96	144
CPm 610	CP 610	96	144
CPm 620	CP 620	70	112
CPm 650 - 650M	CP 650 - 650M	50	70
CPm 660 - 660M	CP 660 - 660M	50	70
CPm 670 - 670 M	-	50	70
-	CP 670 - 670 M	35	49