

Centrifugal pumps

-  Clean water
-  Domestic use
-  Civil use



PERFORMANCE RANGE

- Flow rate up to **160 l/min** (9.6 m³/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.

Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

PATENTS - TRADE MARKS - MODELS

- Registered EU Design n. 002098434

OPTIONS AVAILABLE ON REQUEST

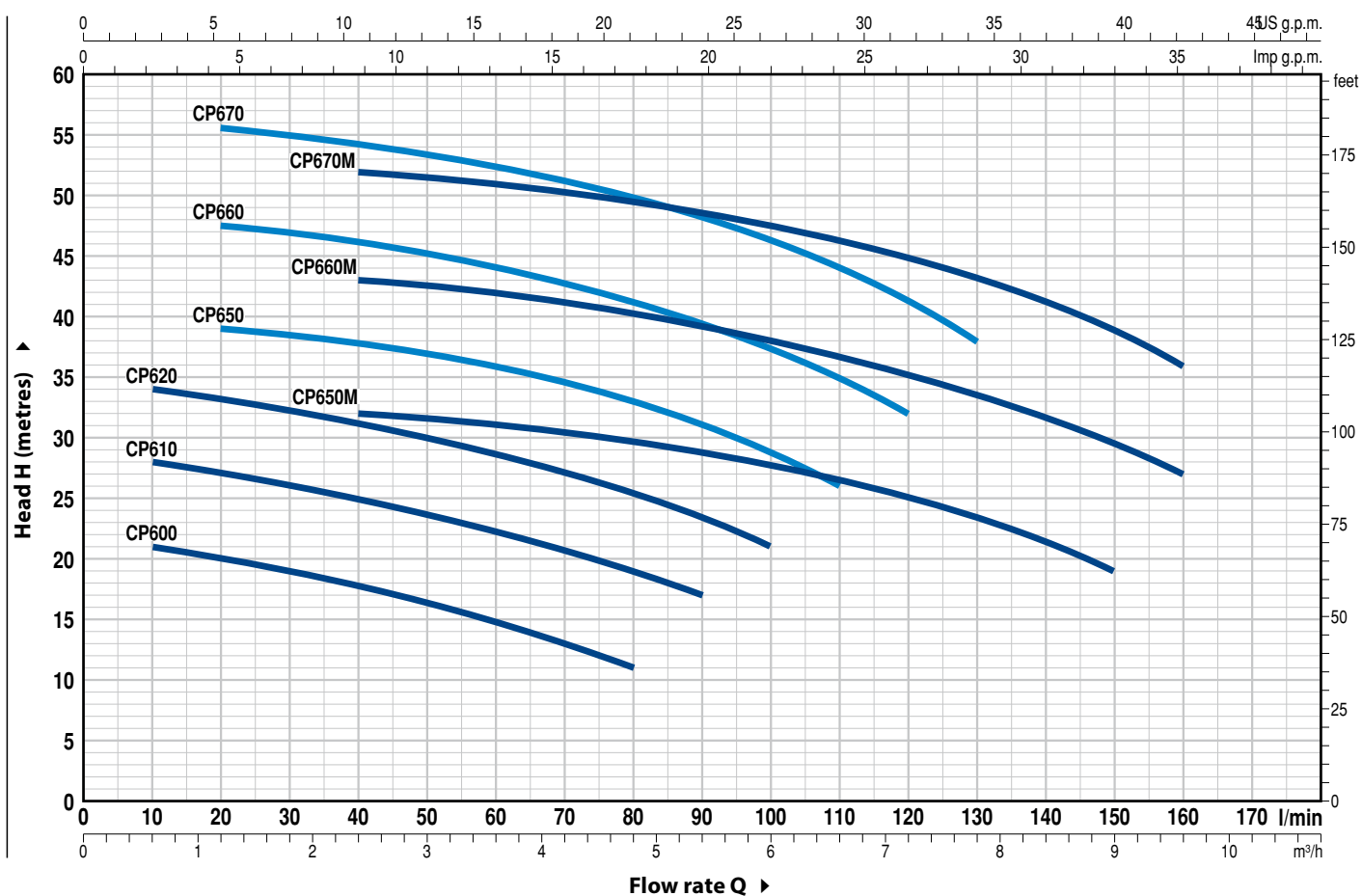
- Special mechanical seal
- Other voltages
- IP X5 class protection for CP 650-660-670

GUARANTEE

2 years subject to terms and conditions

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 min⁻¹ HS= 0 m



MODEL		POWER (P ₂)			Q	m³/h	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
Single-phase	Three-phase	kW	HP	▲		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	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

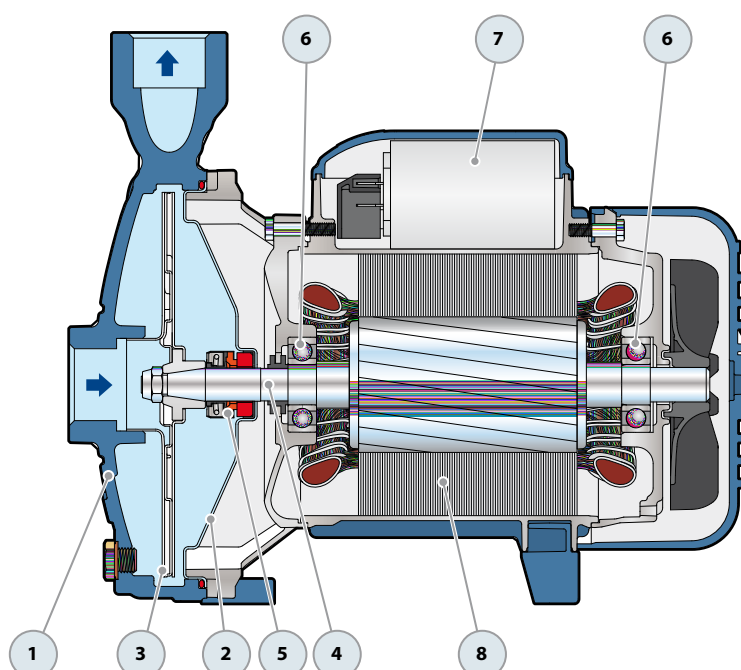
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Three-phase motor efficiency class (IEC 60034-30-1)

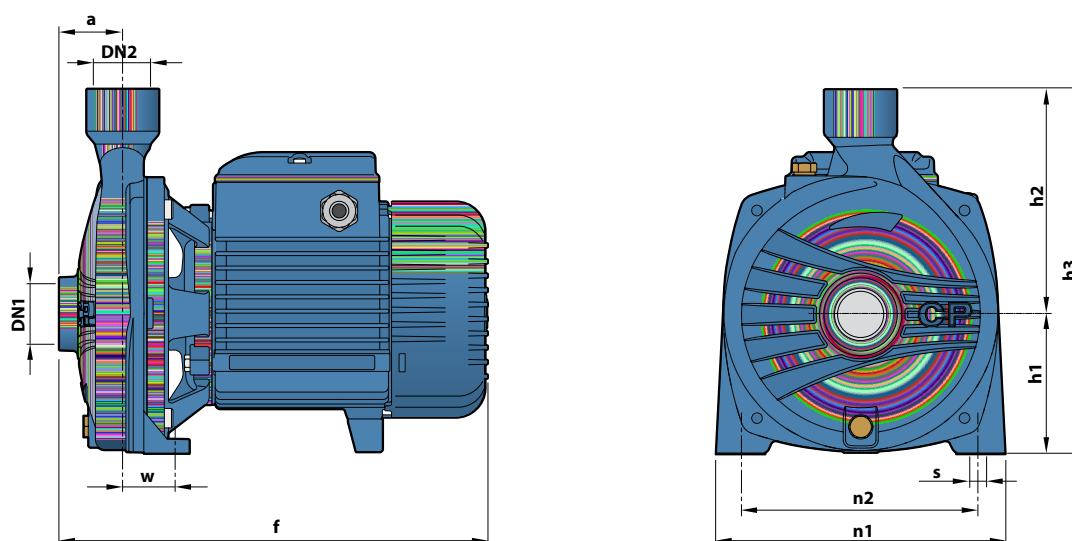
POS. COMPONENT

CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Cast iron with an Epoxy Electro Coating treatment, with threaded ports in compliance with ISO 228/1					
2	BODY BACKPLATE	Stainless steel AISI 304 (cast iron for CP 650-660-670-650M-660M-670M)					
3	IMPELLER	Stainless steel AISI 304					
4	MOTOR SHAFT	Stainless steel AISI 431					
5	MECHANICAL SEAL	Pump	Seal	Shaft	Materials		
		Model	Model	Diameter	Stationary ring	Rotational ring	Elastomer
		CP 600-610	AR-12	Ø 12 mm	Cerámica	Grafito	NBR
		CP 620	AR-14	Ø 14 mm	Cerámica	Grafito	NBR
		CP 650-660-670 CP 650M-660M-670M	FN-18	Ø 18 mm	Grafito	Cerámica	NBR
6	BEARINGS	Pump	Model				
		CP 600-610	6201 ZZ / 6201 ZZ				
		CP 620	6203 ZZ / 6203 ZZ				
		CP 650-660-670 CP 650M-660M-670M	6204 ZZ / 6204 ZZ				
7	CAPACITOR	EN 60252-1/A1					
8	ELECTRIC MOTOR	CPm: single-phase 220 V - 60 Hz with thermal overload protector incorporated into the winding. CP: three-phase 220/380 V - 60 Hz or 220/440 V - 60 Hz. ➡ 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) – Insulation: class F – Protection: IP X4					



DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h3	h1	h2	n1	n2	w	s		1~	3~
CPm 600	CP 600	1"	1"	42	257	205	82	123	165	135	38	11		7.0	7.7
CPm 610	CP 610				286	240	92	148	190	160	37			8.5	7.8
CPm 620	CP 620													11.0	10.9
CPm 650 - 650M	CP 650 - 650M	1 1/4"	1"	51	367	260	110	150	206	165	44.5	11		17.8	17.6
CPm 660 - 660M	CP 660 - 660M				367/387									18.9	17.9
CPm 670 - 670M	CP 670 - 670M													20.9	22.5

ABSORPTION

MODEL	VOLTAGE		
Single-phase	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	10.4 A
CPm 650	8.8 A	17.6 A	16.0 A
CPm 650M	8.8 A	17.6 A	16.7 A
CPm 660	9.7 A	20.0 A	16.8 A
CPm 660M	9.7 A	19.0 A	18.4 A
CPm 670	13.2 A	25.0 A	22.9 A
CPm 670M	12.0 A	24.0 A	19.0 A

MODEL	VOLTAGE			
Three-phase	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	7.5 A	4.3 A	5.8 A	3.2 A
CP 650M	7.5 A	4.3 A	5.8 A	3.2 A
CP 660	7.6 A	4.4 A	5.9 A	3.2 A
CP 660M	7.6 A	4.4 A	6.4 A	4.1 A
CP 670	7.5 A	4.3 A	5.8 A	3.2 A
CP 670M	8.6 A	5.0 A	7.8 A	4.5 A

CAPACITORS

MODEL	CAPACITANCE	
Single-phase	220 V	110 V or 127 V
CPm 600	10 µF - 450 VL	25 µF - 250 VL
CPm 610	14 µF - 450 VL	25 µF - 250 VL
CPm 620	20 µF - 450 VL	60 µF - 300 VL
CPm 650-650M	25 µF - 450 VL	60 µF - 250 VL
CPm 660-660M	31.5 µF - 450 VL	60 µF - 250 VL
CPm 670-670M	50 µF - 450 VL	80 µF - 250 VL

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