

## Centrifugal Pumps

-  Clean Water
-  Residential
-  Commercial



### PERFORMANCE RANGE

- Flow Rate up to **42 GPM** (160 l/min) (9.6 m<sup>3</sup>/h)
- Head up to **183 feet** (56 m)

### APPLICATION LIMITS

- Maximum Suction Lift up to **22 feet** (7 m)
- Liquid temperature between **14°F** (-10 °C) and **194°F** (+90 °C)
- Ambient temperature up to **104°F** (+40 °C)
- Maximum Working Pressure:
  - **87 psi** (6 bar) for CP 600/610/620
  - **145 psi** (10 bar) for CP 650/660/670
- Continuous Duty Rating **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

### FEATURES AND BENEFITS

- Clean water that does not contain abrasive particles
- Liquids that are not chemically aggressive
- Reliable
- Easy to Use

### APPLICATIONS AND MARKETS

- Residential
- Commercial
- Water Distribution
- Small/ Medium Pressure Tanks
- Water Well Service
- Pressure Boosting Systems
- OEM Equipment

### PATENTS - TRADE MARKS - MODELS

- Registered Trade Mark No. 0001516350 CPm158
- Registered EU Design No. 002098434

### OPTIONS AVAILABLE ON REQUEST

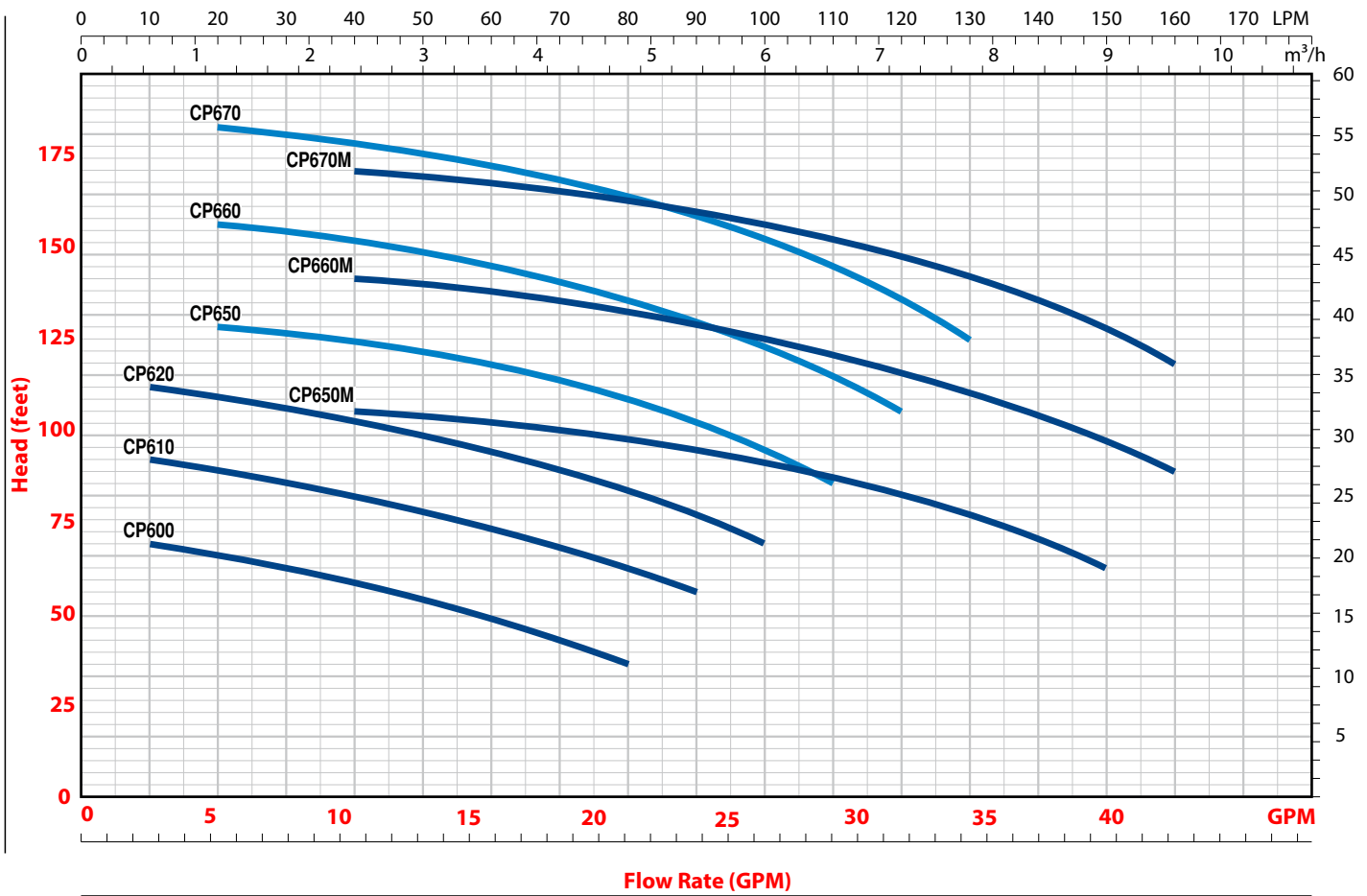
- Special Mechanical Seals
- Other Voltages Available
- IP X5 Class Protection for CP 650-660-670

### WARRANTY

**2 YEARS** subject to terms and conditions

### PERFORMANCE CURVES AND DATA

60 Hz RPM = 3450



MODEL NUMBER		MOTOR SIZE			LPM GPM	HEAD (feet)															
Single-phase	Three-phase	kW	HP	EFF		0	10	20	40	60	80	90	100	110	120	130	150	160			
CPm 600	CP 600	0.37	0.50	IE2	72	68	65	59	49	36	-	-	-	-	-	-	-	-			
CPm 610	CP 610	0.60	0.85		93	91	88	82	72	62	55	-	-	-	-	-	-	-			
CPm 620	CP 620	0.75	1.00	IE3	114	111	108	101	93	83	77	68	-	-	-	-	-	-			
CPm 650	CP 650	1.10	1.50		131	-	127	124	118	108	102	94	85	-	-	-	-	-			
CPm 660	CP 660	1.50	2.00		157	-	155	150	144	134	129	123	114	104	-	-	-	-			
CPm 670	CP 670	2.20	3.00		183	-	182	178	172	164	159	152	144	136	124	-	-	-			
CPm 650M	CP 650M	1.10	1.50		108	-	-	104	101	98	95	91	86	82	75	62	-	-			
CPm 660M	CP 660M	1.50	2.00		144	-	-	141	137	131	127	124	121	116	111	96	88	-			
CPm 670M	CP 670M	2.20	3.00		173	-	-	170	167	162	159	155	152	147	142	127	118	-			

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

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

**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 0.4 in	Ceramic	Graphite	NBR
	CP 620	AR-14	Ø 0.5 in	Ceramic	Graphite	NBR
	CP 650-660-670	FN-18	Ø 0.7 in	Graphite	Ceramic	NBR
	CP 650M-660M-670M					

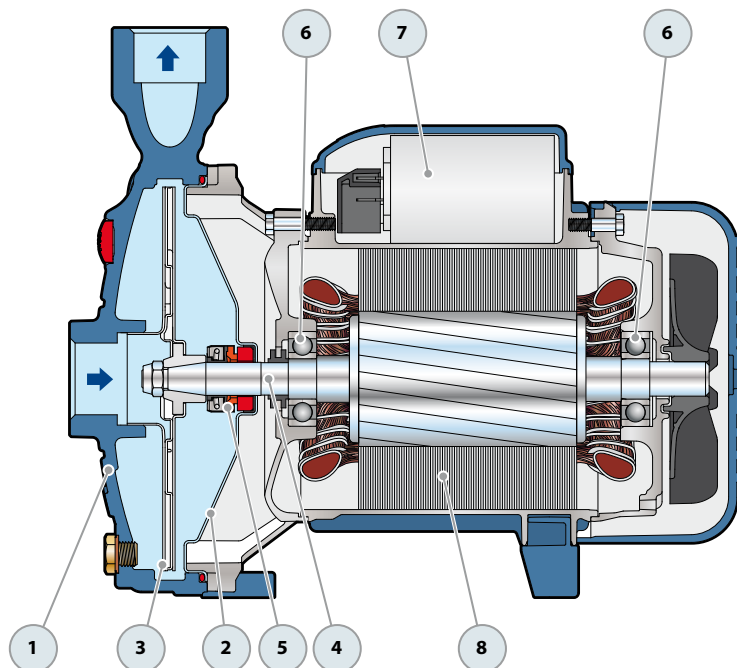
6 BEARINGS	Pump	Model
	CP 600-610	6201 ZZ / 6201 ZZ
	CP 620	6203 ZZ / 6203 ZZ
	CP 650-660-670	6204 ZZ / 6204 ZZ
	CP 650M-660M-670M	

7 CAPACITOR	Pump	Capacitance	
	Single-phase	(230 V)	(115 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

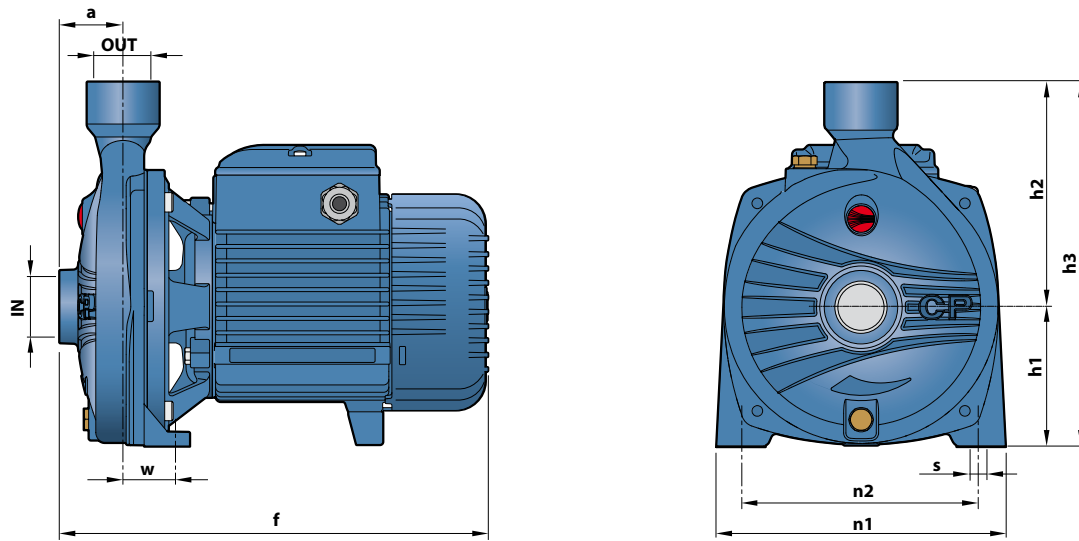
**8 ELECTRIC MOTOR** CPm: single-phase 230 V - 60 Hz with thermal overload protector incorporated into the winding.  
 CP: three-phase 220/380 V - 60 Hz or 230/460 V - 60 Hz.

➔ **The three-phase pumps are fitted with high performance motors up to P<sub>2</sub>=0.60 kW in class IE2 and from P<sub>2</sub>=0.75 kW in class IE3 (IEC 60034-30-1)**

- Insulation: class F
- Protection: IP X4



## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS (inches)									Lbs	
Single-phase	Three-phase	IN	OUT	a	f	h3	h1	h2	n1	n2	w	s	1-PH	3-PH
CPm 600	CP 600	1"	1"	0.15	10	8	3	4.8	6.5	5.3	1.5	0.4	15.4	16.9
CPm 610	CP 610				11	9	3.6	5.8	7.5	6.3	1.4		18.7	17.2
CPm 620	CP 620				11	9	3.6	5.8	7.5	6.3	1.4		24.3	24
CPm 650 - 650M	CP 650 - 650M	1¼"	1"	2	14	10.2	4.3	5.9	8.1	6.5	1.7	0.4	39.2	38.8
CPm 660 - 660M	CP 660 - 660M				14/15								41.7	39.5
CPm 670 - 670M	CP 670 - 670M				14/15								46	49.6

## ABSORPTION

MODEL	VOLTAGE		
	230 V	115 V	127 V
Single-phase	230 V	115 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			
	230 V	380 V	230 V	460 V
Three-phase	230 V	380 V	230 V	460 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