

# 2-4CP

## Multi-stage centrifugal pumps

 Clean water

 Domestic use



### PERFORMANCE RANGE

- Flow rate up to **130 l/min** (7.8 m<sup>3</sup>/h)
- Head up to **52 m**

### APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+40 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure **6 bar**
- 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  
ISO 14001: ENVIRONMENT AND SAFETY



### 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. As a result of their quietness, these pumps are widely used in domestic applications such as the distribution of water in combination with small and medium sized pressure tanks, and for the irrigation of gardens and orchards, etc.

The pump should be installed in an enclosed environment or sheltered from inclement weather.

### PATENTS - TRADE MARKS - MODELS

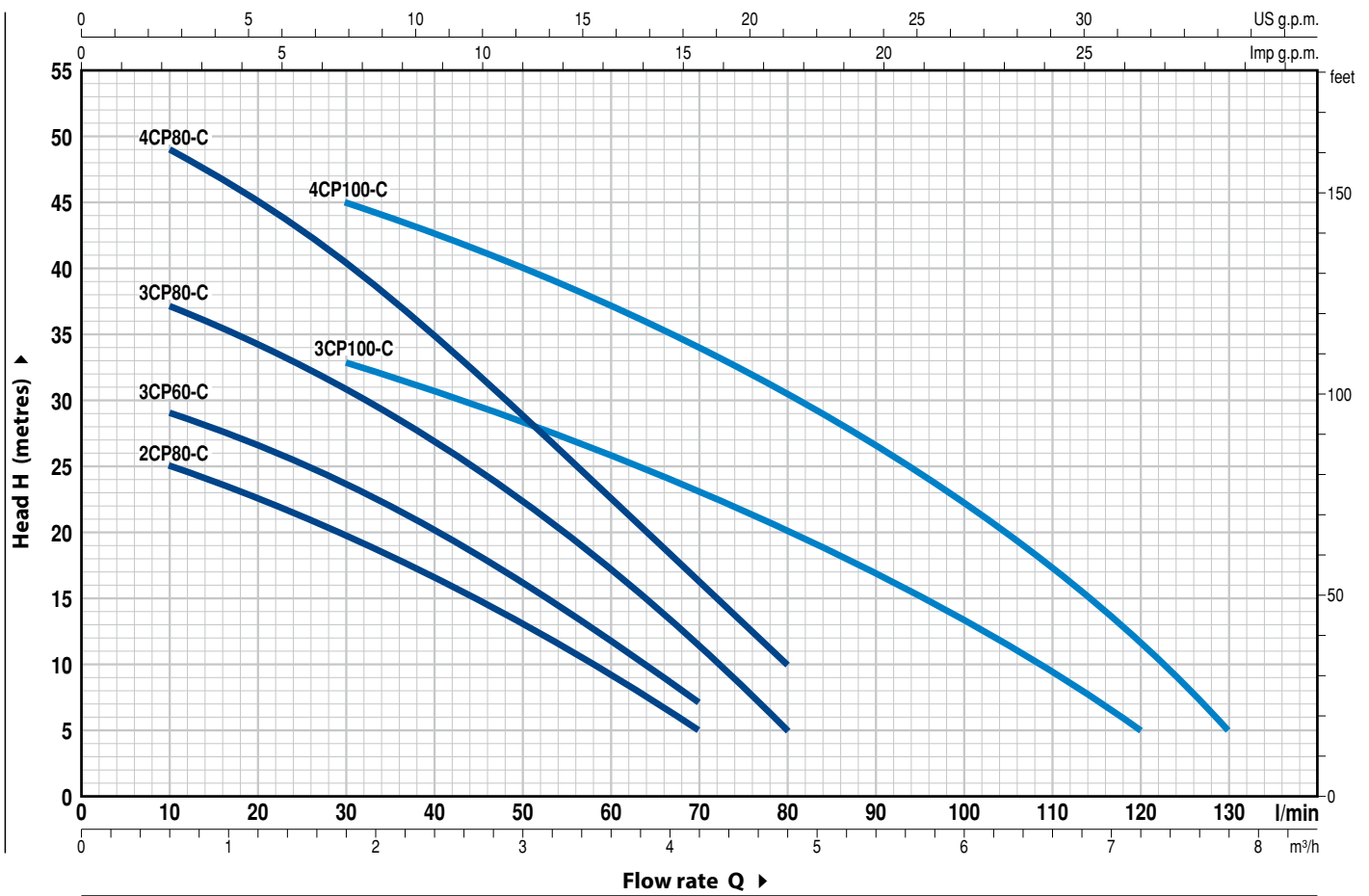
- Registered EU Design n. 002073635-0001

### OPTIONS AVAILABLE ON REQUEST

- Other voltages or 60 Hz frequency

### CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



MODEL		POWER (P <sub>2</sub> )		Q	H metres																		
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.8	
				l/min	0	5	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130		
2CPm 80-C	2CP 80-C	0.37	0.50	H metres	27	26	25	24	22.5	21	20	16.5	13	9	5								
3CPm 60-C	3CP 60-C	0.37	0.50		30	30	29	28	26.5	25	23.5	20	16	11.5	7								
3CPm 80-C	3CP 80-C	0.45	0.60		40	38	37	36	34.5	33	31	27	22.5	17	11	5							
4CPm 80-C	4CP 80-C	0.55	0.75		52	50	49	47	44.5	42	40	34	28.5	22.5	16	10							
3CPm 100-C	3CP 100-C	0.55	0.75		38	37	36	35	34.5	33.5	33	31	28	26	23	20	17	13.5	10	5			
4CPm 100-C	4CP 100-C	0.75	1		50	50	49	48	47	46	45	42	39.5	37	34	30.5	26.5	22	17	11	5		

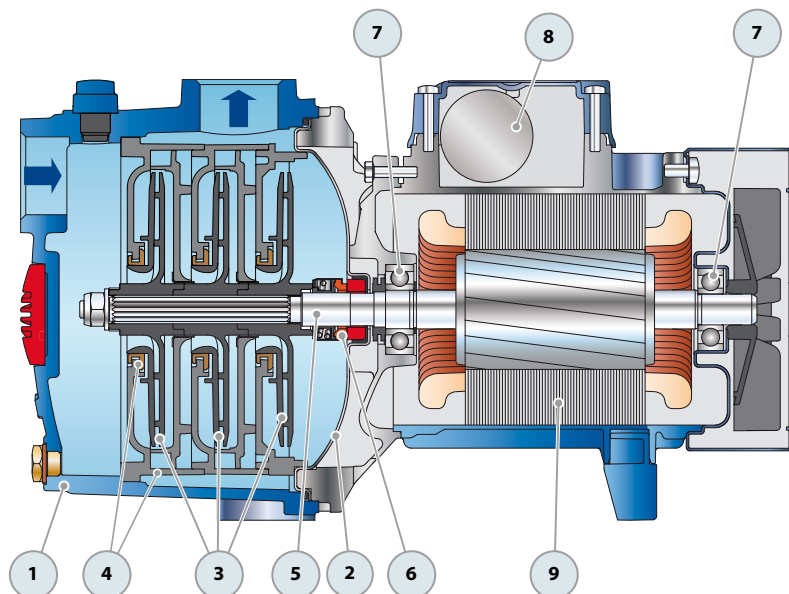
Q = Flow rate H = Total manometric head HS = Suction height

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

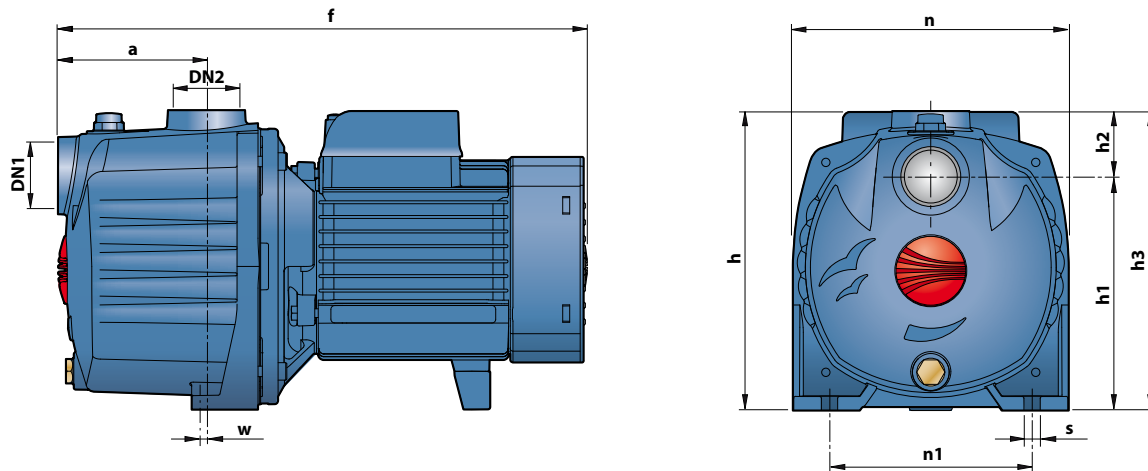
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## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	<b>PUMP BODY</b>	Cast iron with an Epoxy Electro Coating treatment, with threaded ports in compliance with ISO 228/1					
2	<b>BODY BACKPLATE</b>	Stainless steel AISI 304					
3	<b>IMPELLERS</b>	Noryl FE1520PW					
4	<b>DIFFUSERS</b>	Noryl complete with anti-wear ring					
5	<b>MOTOR SHAFT</b>	Stainless steel EN 10088-3 - 1.4104					
6	<b>MECHANICAL SEAL</b>	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>			
		<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>	
		AR-13	Ø 13 mm	Ceramic	Graphite	NBR	
7	<b>BEARINGS</b>	<i>Pump</i>	<i>Model</i>				
		2CP 80-C	6202 ZZ - C3 / 6201 ZZ				
		3CP 60-C					
		3CP 80-C					
		4CP 80-C					
3CP 100-C							
7	<b>BEARINGS</b>	4CP 100-C	6203 ZZ / 6203 ZZ				
		<i>Pump</i>	<i>Capacitance</i>				
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>			
		2CPm 80-C	10 µF - 450 VL	25 µF - 250 VL			
3CPm 60-C	12.5 µF - 450 VL	25 µF - 250 VL					
3CPm 80-C	14 µF - 450 VL	25 µF - 250 VL					
4CPm 80-C	20 µF - 450 VL	60 µF - 300 VL					
3CPm 100-C							
4CPm 100-C							
9	<b>ELECTRIC MOTOR</b>	2-4CPm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.					
		2-4CP: three-phase 230/400 V - 50 Hz.					
		<p>➔ <b>The three-phase pumps are fitted with high performance motors in class IE2 (IEC 60034-30)</b></p> <ul style="list-style-type: none"> <li>- Insulation: class F</li> <li>- Protection: IP X4</li> </ul>					



## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	n	n1	w	s	1~	3~
2CPm 80-C	2CP 80-C	1"	1"	85	307	172	134	38	172	158	116	1.5	9	9.0	9.0
3CPm 60-C	3CP 60-C													9.0	9.0
3CPm 80-C	3CP 80-C													9.8	9.3
4CPm 80-C	4CP 80-C			110	332	10.4	10.5								
3CPm 100-C	3CP 100-C			85	307	10.4	9.9								
4CPm 100-C	4CP 100-C			110	356	191	13.4	13.4							

## ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	240 V	110 V
2CPm 80-C	2.4 A	2.3 A	4.8 A
3CPm 60-C	2.4 A	2.3 A	4.8 A
3CPm 80-C	3.4 A	3.3 A	6.8 A
4CPm 80-C	4.1 A	4.0 A	8.2 A
3CPm 100-C	4.1 A	4.0 A	8.2 A
4CPm 100-C	6.0 A	5.8 A	12.0 A

MODEL	VOLTAGE					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
2CP 80-C	1.7 A	1.0 A	0.6 A	1.6 A	0.9 A	0.5 A
3CP 60-C	1.7 A	1.0 A	0.6 A	1.6 A	0.9 A	0.5 A
3CP 80-C	2.5 A	1.5 A	0.9 A	2.4 A	1.4 A	0.8 A
4CP 80-C	3.4 A	2.0 A	1.2 A	3.3 A	1.9 A	1.1 A
3CP 100-C	3.4 A	2.0 A	1.2 A	3.3 A	1.9 A	1.1 A
4CP 100-C	4.5 A	2.6 A	1.5 A	4.3 A	2.5 A	1.4 A

## PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
2CPm 80-C	2CP 80-C	98	140
3CPm 60-C	3CP 60-C	98	140
3CPm 80-C	3CP 80-C	98	140
4CPm 80-C	4CP 80-C	98	140
3CPm 100-C	3CP 100-C	98	140
4CPm 100-C	4CP 100-C	84	108