

CP-ST

Stainless steel centrifugal pumps

CP-ST4

Pump body: **stainless steel AISI 304**
Impeller: **stainless steel AISI 304**
Shaft: **stainless steel AISI 431**

CP-ST6

Pump body: **stainless steel AISI 316L**
Impeller: **stainless steel AISI 316L**
Shaft: **stainless steel AISI 316L**

 Clean water

 Domestic use

 Agricultural use

 Industrial use



PERFORMANCE RANGE

- Maximum flow rate **270 l/min** (16.2 m³/h)
- Maximum head **45 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 100-130-132-150-158 ST4
CP 100-130-132-150-158 ST6
 - **8 bar** for CP 170-170M ST4
CP 170-170M ST6
CP 180-190-200 ST4
CP 180-190-200 ST6
- Continuous service **S1**

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 of its design features these centrifugal pumps are recommended for use in domestic, agricultural and industrial applications. All the components in contact with the pumped liquid are in stainless steel AISI 304 or AISI 316L thus guaranteeing complete hygiene and maximum resistance against corrosion. Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency
- IP X5 class protection for CP 170-170M-180-190-200 ST

CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3



EU REGULATION N. 547/2012

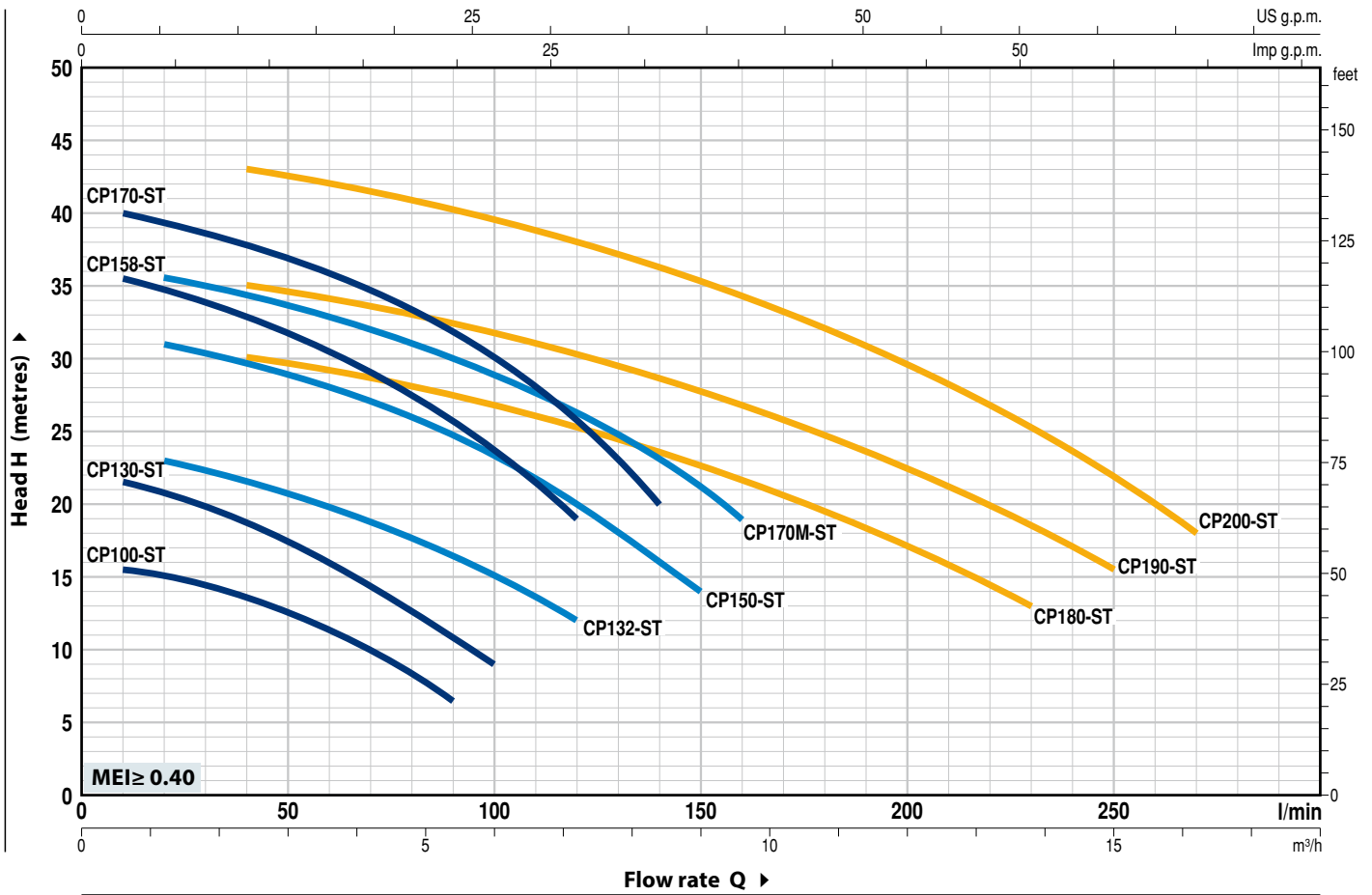
CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY



PERFORMANCE RANGE

50 Hz n= 2900 min⁻¹ HS= 0 m



MODEL		POWER (P ₂)			Q	H metres																
Single-phase	Three-phase	kW	HP	▲		m ³ /h	0	0.6	1.2	2.4	3.6	5.4	6.0	7.2	8.4	9.0	9.6	12	13.8	15	16.2	
					l/min	0	10	20	40	60	90	100	120	140	150	160	200	230	250	270		
CPm 100-ST4	CP 100-ST4	0.25	0.33	IE2	H metres	16	15.5	15	13.5	11.2	6.5											
CPm 100-ST6	CP 100-ST6																					
CPm 130-ST4	CP 130-ST4	0.37	0.50	IE3		22.5	21.5	20.8	18.8	16	10.8	9										
CPm 130-ST6	CP 130-ST6																					
CPm 132-ST4	CP 132-ST4	0.55	0.75	IE3		24	-	23	21.5	19.8	16.5	15	12									
CPm 132-ST6	CP 132-ST6																					
CPm 150-ST4	CP 150-ST4	0.75	1	IE3		32	-	31	29.8	28	24.8	23.2	20	16	14							
CPm 150-ST6	CP 150-ST6																					
CPm 158-ST4	CP 158-ST4	0.75	1	IE3		36.5	35.5	34.5	33	31	26.2	24	19									
CPm 158-ST6	CP 158-ST6																					
CPm 170-ST4	CP 170-ST4	1.1	1.5	IE3		41	40	39.2	37.8	36	32	30	25.8	20								
CPm 170-ST6	CP 170-ST6																					
CPm 170M-ST4	CP 170M-ST4	1.1	1.5	IE3		36.5	-	35.5	34.3	33	30	29	26.4	23	21	19						
CPm 170M-ST6	CP 170M-ST6																					
CPm 180-ST4	CP 180-ST4	1.1	1.5	IE3		31.5	-	-	30	29.2	27.5	26.8	25.2	23.5	22.5	21.5	17	13				
CPm 180-ST6	CP 180-ST6																					
CPm 190-ST4	CP 190-ST4	1.5	2	IE3		37	-	-	35	34	32.2	31.5	30.2	28.7	27.8	27	22.7	18.5	15.5			
CPm 190-ST6	CP 190-ST6																					
CPm 200-ST4	CP 200-ST4	2.2	3	IE3	45	-	-	43	42	40.2	39.5	38	36.5	35.5	34.5	29.8	25.5	22	18			
CPm 200-ST6	CP 200-ST6																					

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

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

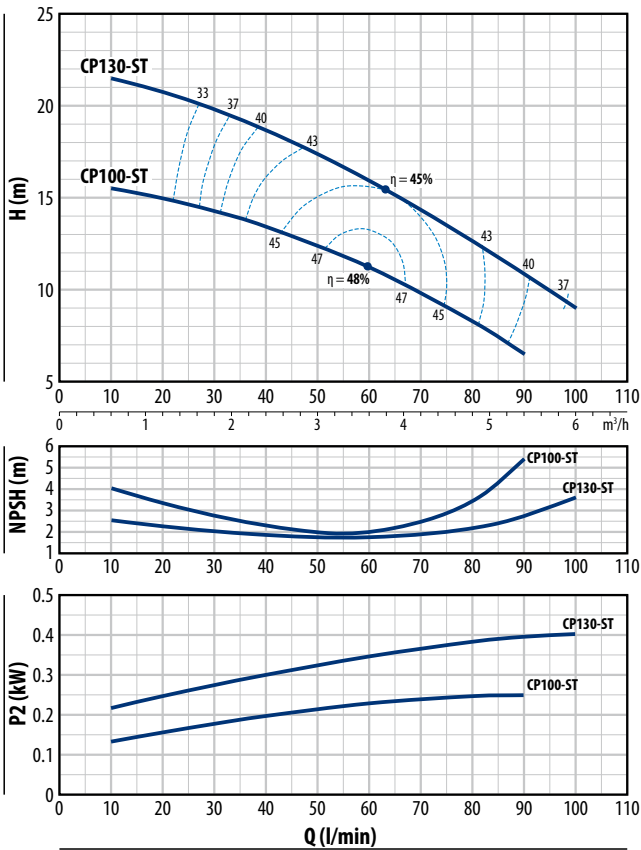
▲ Three-phase motor efficiency class (IEC 60034-30-1)

CP-ST

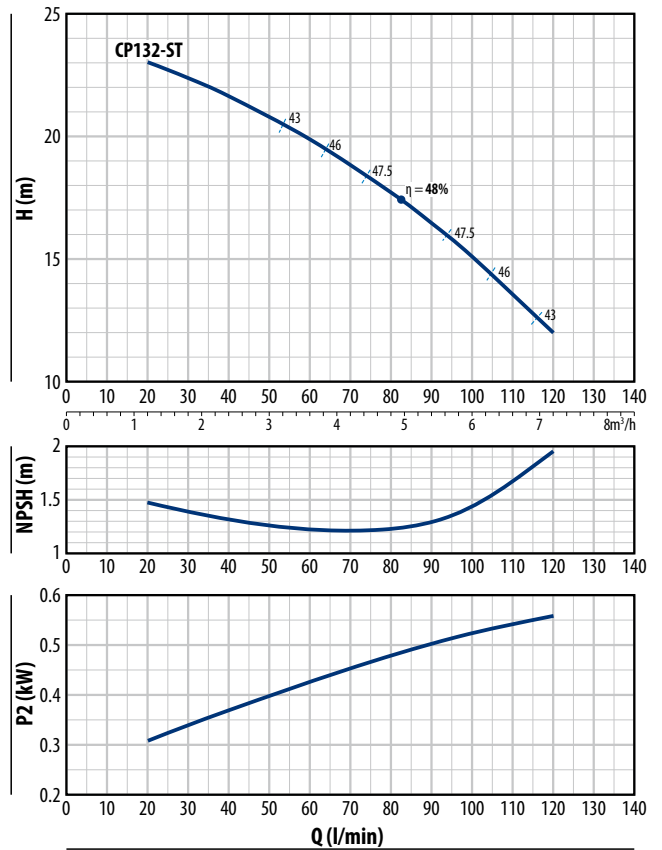
CHARACTERISTIC CURVES

50 Hz n = 2900 min⁻¹ HS = 0 m

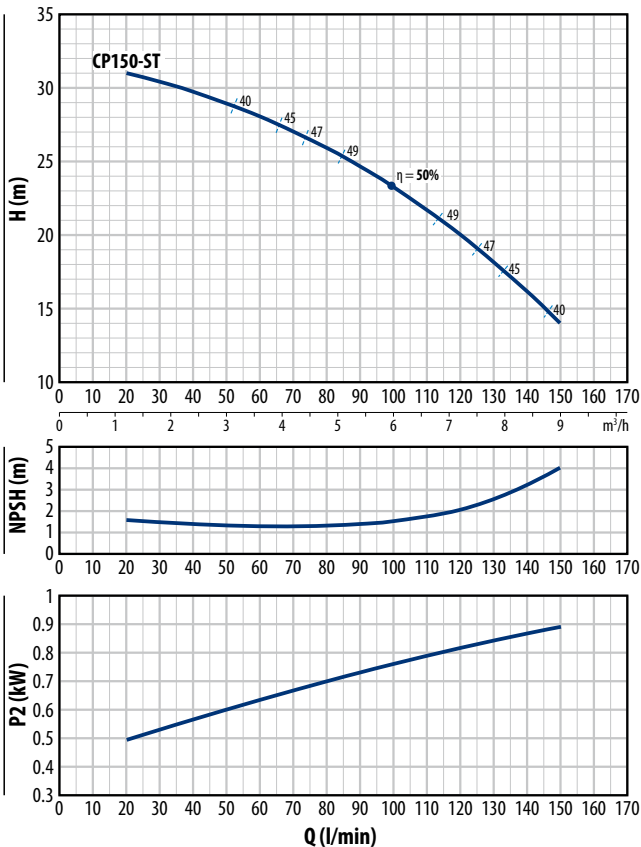
CP 100-ST CP130-ST



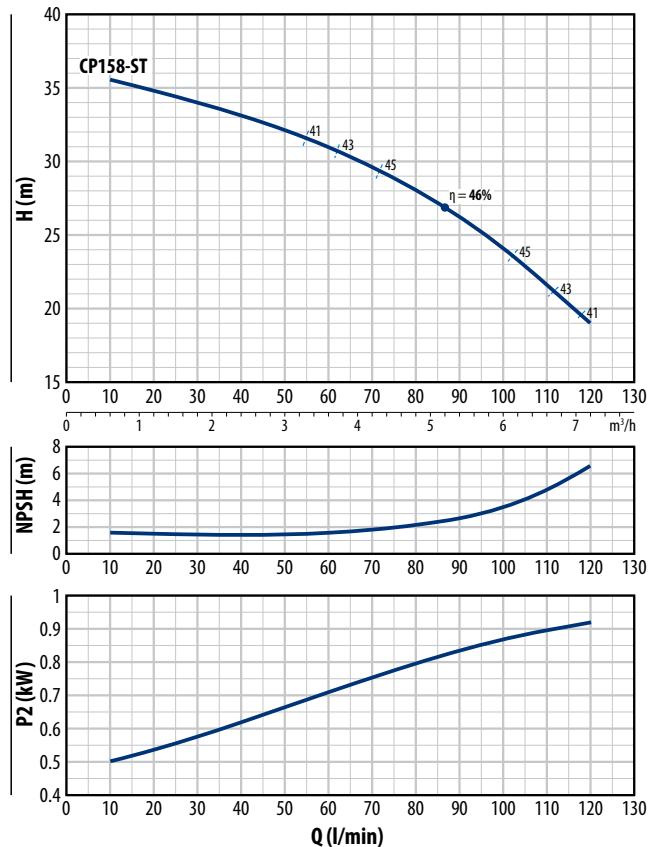
CP 132-ST



CP 150-ST



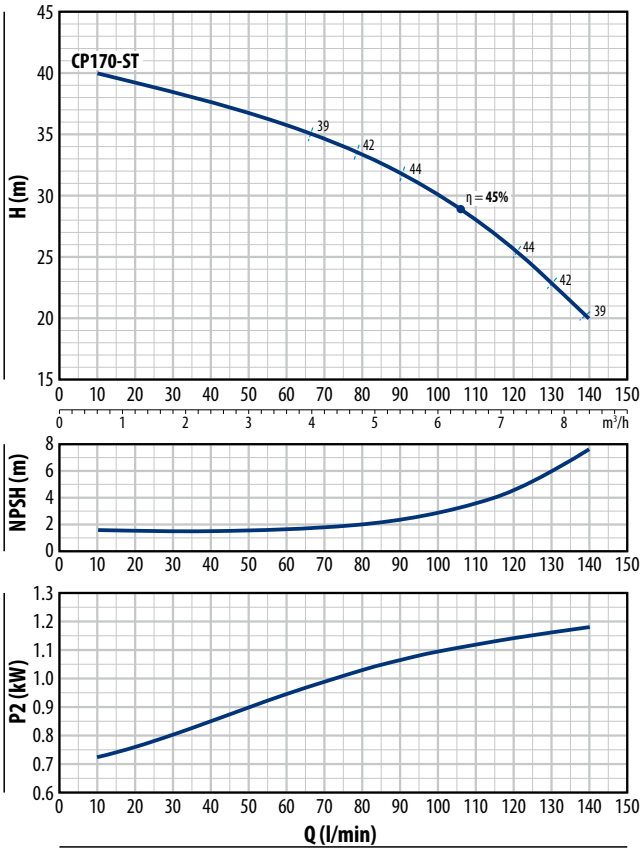
CP 158-ST



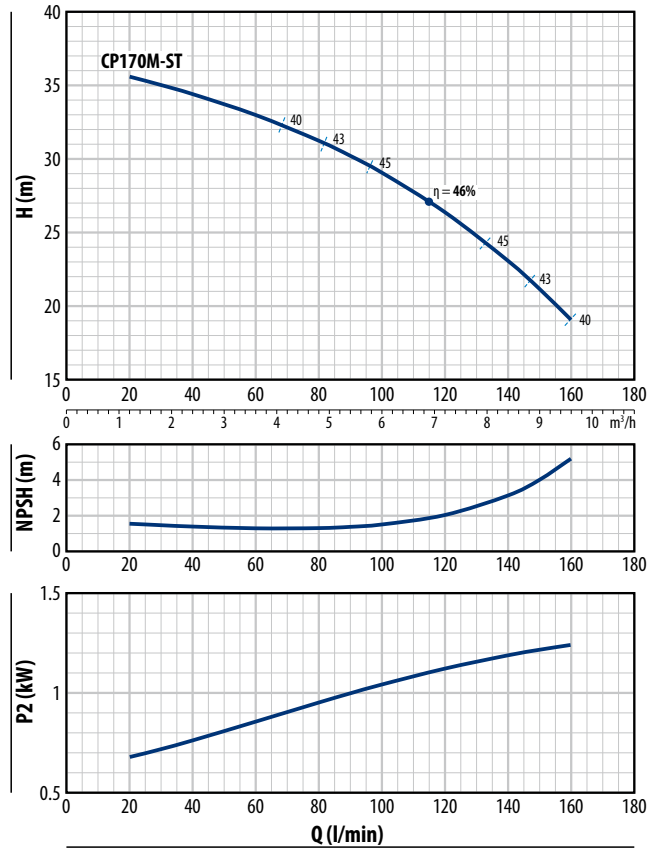
CHARACTERISTIC CURVES

50 Hz n = 2900 min⁻¹ HS = 0 m

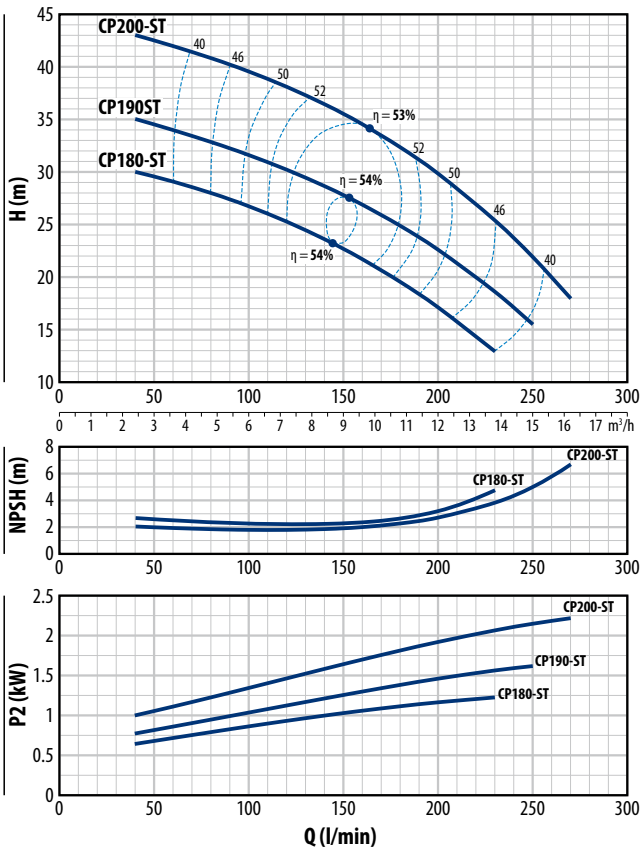
CP 170-ST



CP 170M-ST



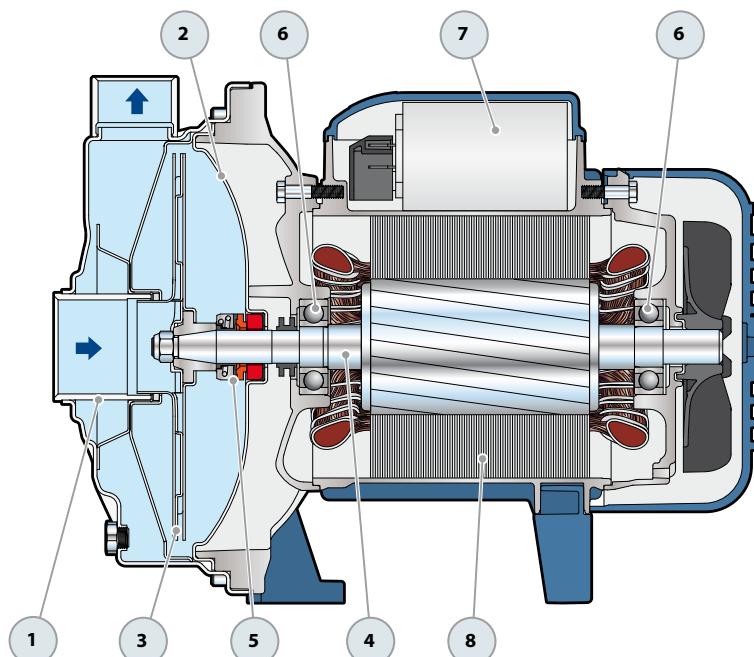
CP 180-190-200-ST



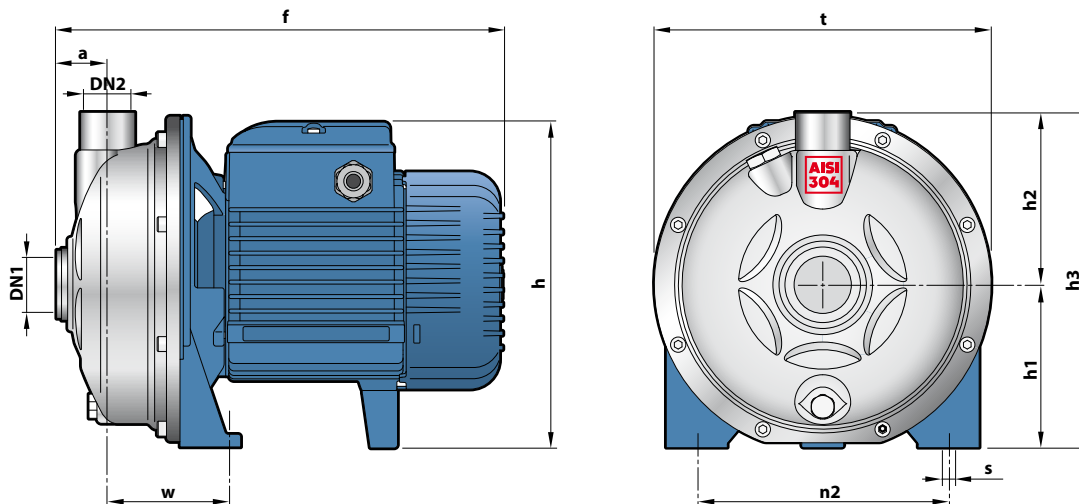
CP-ST4

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Stainless steel AISI 304						
2	BODY BACKPLATE	Stainless steel AISI 304						
3	IMPELLER	Stainless steel AISI 304						
4	MOTOR SHAFT	Stainless steel AISI 431						
5	MECHANICAL SEAL	<i>Pump</i>	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>			
		<i>Model</i>	<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>	<i>Spring</i>
		CP 100-ST4, CP 130-ST4 CP 132-ST4	AR-12	Ø 12 mm	Ceramic	Graphite	NBR	AISI 304
		CP 150-ST4, CP 158-ST4	AR-14	Ø 14 mm	Ceramic	Graphite	NBR	AISI 304
		CP 170-ST4, CP 170M-ST4 CP 180-ST4, CP 190-ST4 CP 200-ST4	FN-18	Ø 18 mm	Graphite	Ceramic	NBR	AISI 316
6	BEARINGS	<i>Pump</i>	<i>Model</i>					
		CP 100-ST4, CP 130-ST4 CP 132-ST4	6201 ZZ / 6201 ZZ					
		CP 150-ST4, CP 158-ST4	6203 ZZ / 6203 ZZ					
		CP 170-ST4, CP 170M-ST4 CP 180-ST4, CP 190-ST4 CP 200-ST4	6204 ZZ / 6204 ZZ					
		7	CAPACITOR	<i>Pump</i>	<i>Capacitance</i>			
<i>Single-phase</i>	<i>(230 V or 240 V)</i>			<i>(110 V)</i>				
CPm 100-ST4	10 µF - 450 VL			25 µF - 250 VL				
CPm 130-ST4	10 µF - 450 VL			25 µF - 250 VL				
CPm 132-ST4	14 µF - 450 VL			25 µF - 250 VL				
CPm 150-ST4, CPm 158-ST4	20 µF - 450 VL			60 µF - 300 VL				
CPm 170-ST4, CPm 170M-ST4	25 µF - 450 VL			60 µF - 250 VL				
CPm 180-ST4	31.5 µF - 450 VL			60 µF - 250 VL				
CPm 190-ST4	45 µF - 450 VL			80 µF - 250 VL				
CPm 200-ST4	50 µF - 450 VL			-				
8	ELECTRIC MOTOR	CPm-ST4: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.						
		CP-ST4: three-phase 230/400 V - 50 Hz.						
		<p>⇒ The three-phase pumps are fitted with high performance motors for P₂=0.25 kW in class IE2 and from P₂=0.37 kW in class IE3 (IEC 60034-30-1)</p> <p>- Insulation: class F - Protection: IP X4</p>						



DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm										kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	n2	t	w	s	1~	3~
CPm 100-ST4	CP 100-ST4	1 1/4"	1"	31.5	266	181	92	93.5	185.5	120	181	68.5	9	5.7	5.7
CPm 130-ST4	CP 130-ST4													6.5	6.5
CPm 132-ST4	CP 132-ST4													7.2	7.2
CPm 150-ST4	CP 150-ST4			34	296	219 *	107	112	219	165	221	80.5	9.5	10.8	10.7
CPm 158-ST4	CP 158-ST4													10.8	10.8
CPm 170-ST4	CP 170-ST4			33.5	368	251	120	117.5	237.5	180	244	86.5	11	14.5	14.6
CPm 170M-ST4	CP 170M-ST4													14.4	14.5
CPm 180-ST4	CP 180-ST4			33.5	368	250	120	117.5	237.5	180	244	86.5	11	15.8	15.8
CPm 190-ST4	CP 190-ST4													16.2	16.9
CPm 200-ST4	CP 200-ST4													19.4	19.5

(*) h=233 mm for single-phase versions at 110 V

ABSORPTION

MODEL	VOLTAGE	
Single-phase	230 V	110 V
CPm 100-ST4	2.0 A	4.0 A
CPm 130-ST4	3.0 A	6.0 A
CPm 132-ST4	3.7 A	7.4 A
CPm 150-ST4	6.0 A	12.0 A
CPm 158-ST4	6.0 A	12.0 A
CPm 170-ST4	7.8 A	15.6 A
CPm 170M-ST4	7.8 A	15.6 A
CPm 180-ST4	8.5 A	17.0 A
CPm 190-ST4	10.5 A	21.0 A
CPm 200-ST4	12.8 A	-

MODEL	VOLTAGE					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
CP 100-ST4	1.7 A	1.0 A	0.6 A	1.7 A	1.0 A	0.6 A
CP 130-ST4	1.9 A	1.1 A	0.6 A	1.9 A	1.1 A	0.6 A
CP 132-ST4	2.3 A	1.3 A	0.8 A	2.1 A	1.2 A	0.7 A
CP 150-ST4	4.2 A	2.4 A	1.4 A	4.0 A	2.3 A	1.3 A
CP 158-ST4	4.2 A	2.4 A	1.4 A	4.0 A	2.3 A	1.3 A
CP 170-ST4	5.7 A	3.3 A	1.9 A	5.5 A	3.2 A	1.8 A
CP 170M-ST4	5.7 A	3.3 A	1.9 A	5.5 A	3.2 A	1.8 A
CP 180-ST4	5.7 A	3.3 A	1.9 A	5.5 A	3.2 A	1.8 A
CP 190-ST4	6.6 A	3.8 A	2.2 A	6.2 A	3.6 A	2.1 A
CP 200-ST4	8.8 A	5.1 A	2.9 A	8.5 A	4.9 A	2.8 A

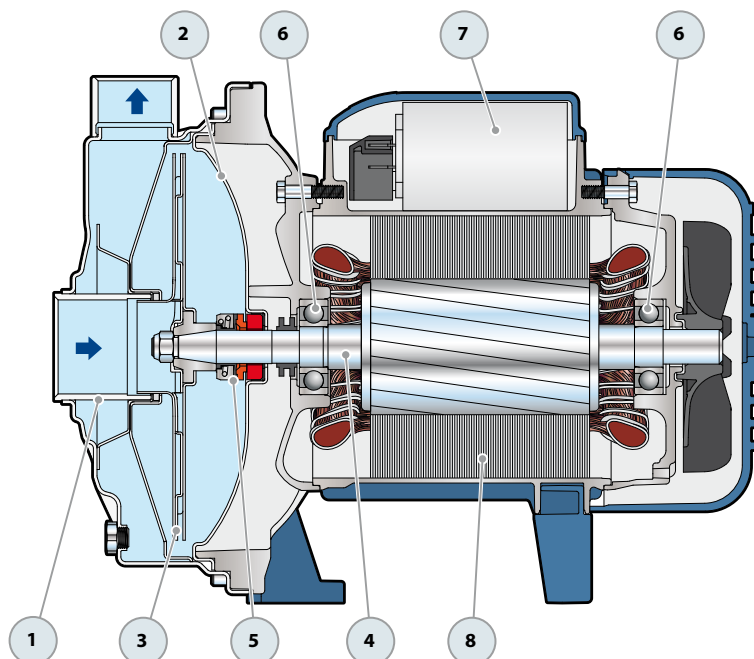
PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
CPm 100-ST4	CP 100-ST4	96	144
CPm 130-ST4	CP 130-ST4		
CPm 132-ST4	CP 132-ST4		
CPm 150-ST4	CP 150-ST4	50	80
CPm 158-ST4	CP 158-ST4	45	63
CPm 170-ST4	CP 170-ST4		
CPm 170M-ST4	CP 170M-ST4	45	63
CPm 180-ST4	CP 180-ST4		
CPm 190-ST4	CP 190-ST4		
CPm 200-ST4	CP 200-ST4		

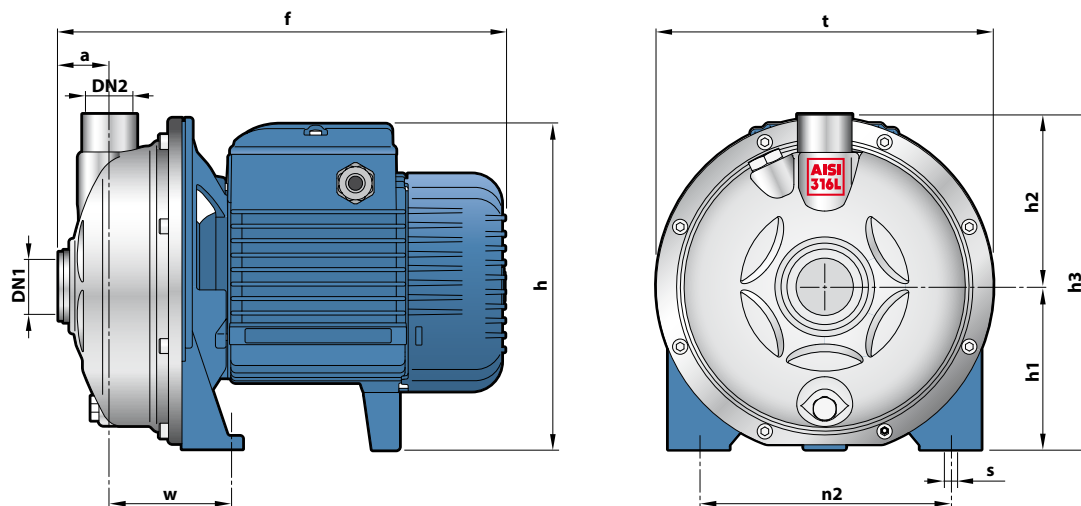
CP-ST6

POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Stainless steel AISI 316L						
2	BODY BACKPLATE	Stainless steel AISI 316L						
3	IMPELLER	Stainless steel AISI 316L						
4	MOTOR SHAFT	Stainless steel AISI 316L						
5	MECHANICAL SEAL	<i>Pump</i>	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>			
		<i>Model</i>	<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>	<i>Spring</i>
		CP 100-ST6, CP 130-ST6 CP 132-ST6	AR-12ST6	Ø 12 mm	Ceramic	Graphite	NBR	AISI 316
		CP 150-ST6, CP 158-ST6 CP 170-ST6, CP 170M-ST6 CP 180-ST6, CP 190-ST6 CP 200-ST6	AR-14ST6	Ø 14 mm	Ceramic	Graphite	NBR	AISI 316
			FN-18ST6	Ø 18 mm	Graphite	Ceramic	NBR	AISI 316
6	BEARINGS	<i>Pump</i>	<i>Model</i>					
		CP 100-ST6, CP 130-ST6 CP 132-ST6	6201 ZZ / 6201 ZZ					
		CP 150-ST6, CP 158-ST6 CP 170-ST6, CP 170M-ST6 CP 180-ST6, CP 190-ST6 CP 200-ST6	6203 ZZ / 6203 ZZ					
			6204 ZZ / 6204 ZZ					
7	CAPACITOR	<i>Pump</i>	<i>Capacitance</i>					
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>		<i>(110 V)</i>			
		CPm 100-ST6	10 µF - 450 VL		25 µF - 250 VL			
		CPm 130-ST6	10 µF - 450 VL		25 µF - 250 VL			
		CPm 132-ST6	14 µF - 450 VL		25 µF - 250 VL			
		CPm 150-ST6, CPm 158-ST6	20 µF - 450 VL		60 µF - 300 VL			
		CPm 170-ST6, CPm 170M-ST6	25 µF - 450 VL		60 µF - 250 VL			
		CPm 180-ST6	31.5 µF - 450 VL		60 µF - 250 VL			
		CPm 190-ST6	45 µF - 450 VL		80 µF - 250 VL			
		CPm 200-ST6	50 µF - 450 VL		-			
8	ELECTRIC MOTOR	CPm-ST6: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.						
		CP-ST6: three-phase 230/400 V - 50 Hz.						
		<p>⇒ The three-phase pumps are fitted with high performance motors for P₂=0.25 kW in class IE2 and from P₂=0.37 kW in class IE3 (IEC 60034-30-1)</p> <ul style="list-style-type: none"> - 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	h3	n2	t	w	s	1~	3~
CPm 100-ST6	CP 100-ST6	1 1/4"	1"	31.5	266	181	92	93.5	185.5	120	181	68.5	9	5.7	5.7
CPm 130-ST6	CP 130-ST6													6.6	6.6
CPm 132-ST6	CP 132-ST6													7.2	6.5
CPm 150-ST6	CP 150-ST6			34	296	219 *	107	112	219	165	221	80.5	9.5	10.8	10.7
CPm 158-ST6	CP 158-ST6													10.8	10.8
CPm 170-ST6	CP 170-ST6			33.5	368	251	120	117.5	237.5	180	244	86.5	11	14.6	14.7
CPm 170M-ST6	CP 170M-ST6													14.5	14.6
CPm 180-ST6	CP 180-ST6			33.5	368	250	120	117.5	237.5	180	244	86.5	11	15.8	15.7
CPm 190-ST6	CP 190-ST6													17.0	17.0
CPm 200-ST6	CP 200-ST6													19.6	19.7

(*) h=233 mm for single-phase versions at 110 V

ABSORPTION

MODEL	VOLTAGE	
Single-phase	230 V	110 V
CPm 100-ST6	2.0 A	4.0 A
CPm 130-ST6	3.0 A	6.0 A
CPm 132-ST6	3.7 A	7.4 A
CPm 150-ST6	6.0 A	12.0 A
CPm 158-ST6	6.0 A	12.0 A
CPm 170-ST6	7.8 A	15.6 A
CPm 170M-ST6	7.8 A	15.6 A
CPm 180-ST6	8.5 A	17.0 A
CPm 190-ST6	10.5 A	21.0 A
CPm 200-ST6	12.8 A	-

MODEL	VOLTAGE					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
CP 100-ST6	1.7 A	1.0 A	0.6 A	1.7 A	1.0 A	0.6 A
CP 130-ST6	1.9 A	1.1 A	0.6 A	1.9 A	1.1 A	0.6 A
CP 132-ST6	2.3 A	1.3 A	0.8 A	2.1 A	1.2 A	0.7 A
CP 150-ST6	4.2 A	2.4 A	1.4 A	4.0 A	2.3 A	1.3 A
CP 158-ST6	4.2 A	2.4 A	1.4 A	4.0 A	2.3 A	1.3 A
CP 170-ST6	5.7 A	3.3 A	1.9 A	5.5 A	3.2 A	1.8 A
CP 170M-ST6	5.7 A	3.3 A	1.9 A	5.5 A	3.2 A	1.8 A
CP 180-ST6	5.7 A	3.3 A	1.9 A	5.5 A	3.2 A	1.8 A
CP 190-ST6	6.6 A	3.8 A	2.2 A	6.2 A	3.6 A	2.1 A
CP 200-ST6	8.8 A	5.1 A	2.9 A	8.5 A	4.9 A	2.8 A

PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
CPm 100-ST6	CP 100-ST6	96	114
CPm 130-ST6	CP 130-ST6		
CPm 132-ST6	CP 132-ST6		
CPm 150-ST6	CP 150-ST6	50	80
CPm 158-ST6	CP 158-ST6		
CPm 170-ST6	CP 170-ST6	45	63
CPm 170M-ST6	CP 170M-ST6		
CPm 180-ST6	CP 180-ST6	45	63
CPm 190-ST6	CP 190-ST6		
CPm 200-ST6	CP 200-ST6		