



### PERFORMANCE RANGE

- Flow rate up to **45 l/min** (2.7 m<sup>3</sup>/h)
- Head up to **100 m**

### APPLICATION LIMITS

- Manometric suction lift up to **8 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+50 °C**
- Max. working pressure **10 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

### INSTALLATION AND USE

Suitable for use with clean water that does not contain abrasive particles and with liquids that are not chemically aggressive towards the materials from which the pump is made. The design features of these particularly compact brass pumps provide a guarantee against rust and oxidation; they are therefore recommended for industrial applications such as cooling and air conditioning. The pump should be installed in an enclosed environment or sheltered from inclement weather.

### PATENTS - TRADE MARKS - MODELS

- Shaft: patent n. 0000275945 (PV55)

### OPTIONS AVAILABLE ON REQUEST

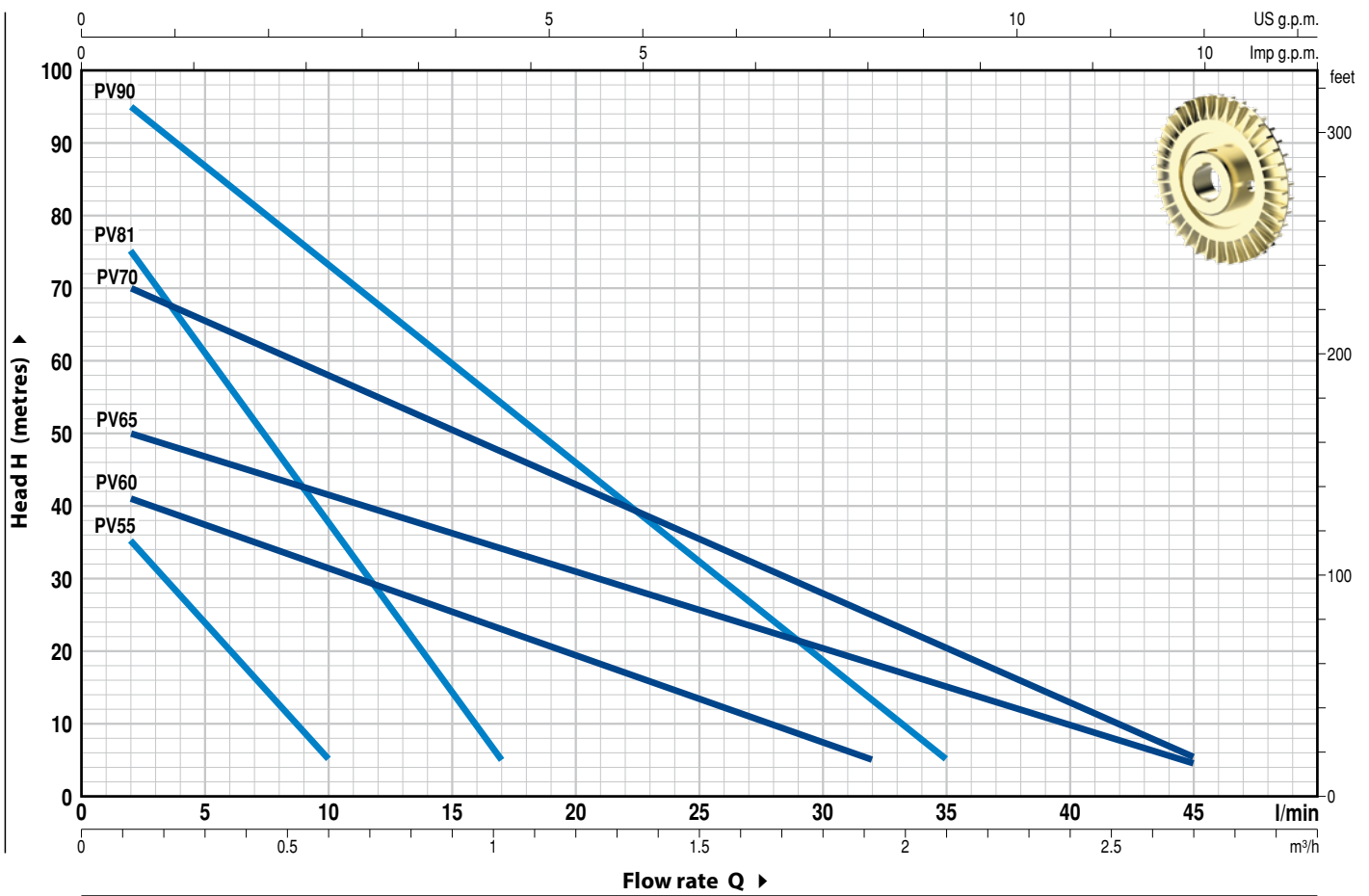
- Special mechanical seal
- Other voltages
- IP X5 class protection for PV70-90

### 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	Flow rate										
Single-phase	Three-phase	kW	HP	▲		m <sup>3</sup> /h	0	0.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54	0.60
						l/min	0	2	3	4	5	6	7	8	9	10
PVM 55	PV 55	0.18	0.25	IE3	metres	<b>60 Hz</b>	55	46	41.5	37	32.5	28	23.5	19	14.5	10
						50 Hz	42	35	31	27.5	24	20	16	12.5	9	5

⇒ The PVM55 and PV55 pumps are designed to work also at 50 Hz

MODEL		POWER (P <sub>2</sub> )			Q	Flow rate																
Single-phase	Three-phase	kW	HP	▲		m <sup>3</sup> /h	0	0.12	0.30	0.60	0.90	1.02	1.2	1.5	1.8	1.9	2.1	2.4	2.7			
						l/min	0	2	5	10	15	17	20	25	30	32	35	40	45			
PVM 60	PV 60	0.37	0.50	IE3	H metres	43	41	37.5	31.5	25.5	23	19.5	13	7.5	5							
PVM 81	PV 81	0.37	0.50			85	75	61	38	15	5											
PVM 65	PV 65	0.60	0.85			52	50	47	41	36	34	31	26	21	19	15	10	5				
PVM 70	PV 70	0.90	1.20			74	70	65.5	58	50	47	43	35	28	25	20	13	5				
PVM 90	PV 90	0.90	1.20			100	95	87	73	59.5	54	46	32	19	13	5						

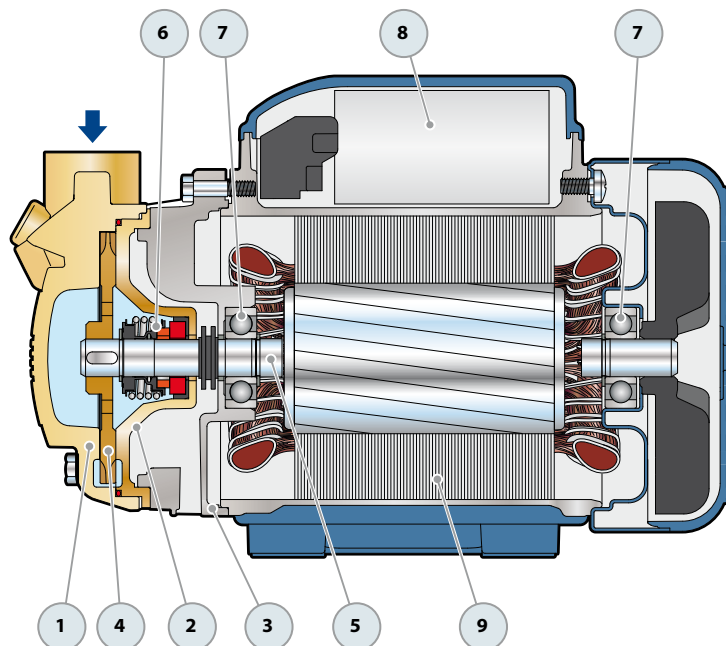
Q = Flow rate H = Total manometric head HS = Suction height

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

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

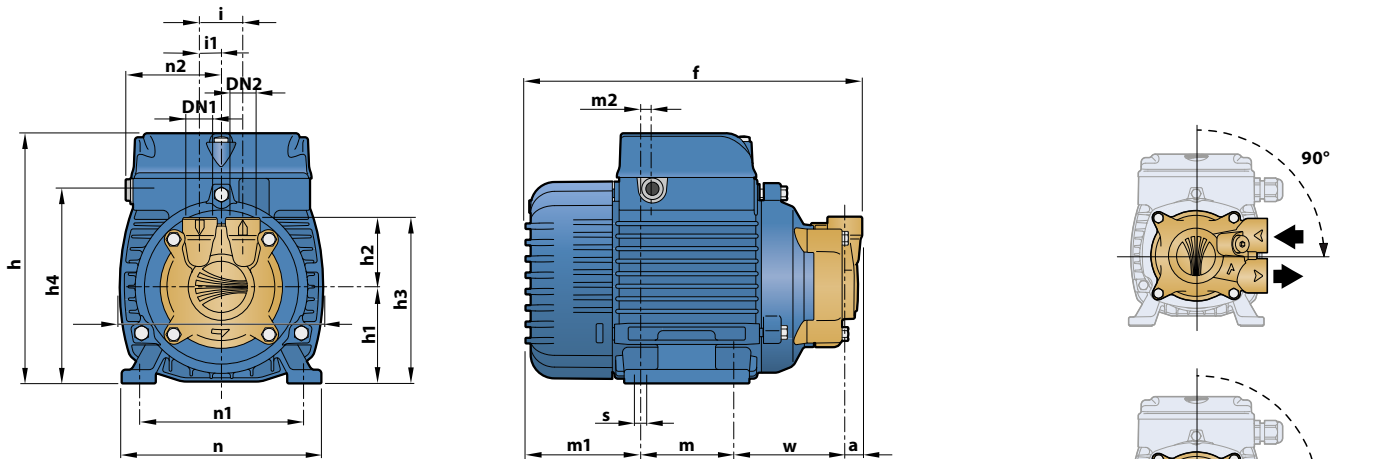
## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	<b>PUMP BODY</b>	Brass complete with threaded ports in compliance with ISO 228/1				
2	<b>PUMP BODY BACK-PLATE</b>	Brass				
3	<b>MOTOR BRACKET</b>	Aluminium				
4	<b>IMPELLER</b>	Brass with peripheral radial vanes				
5	<b>MOTOR SHAFT</b>	Stainless steel AISI 431				
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>
		<b>ST1-12</b>	<b>Ø 12 mm</b>	Silicon carbide	Graphite	NBR
7	<b>BEARINGS</b>	<i>Pump</i>	<i>Model</i>			
		<b>PV 55-60-65-81</b>	<b>6201 ZZ / 6201 ZZ</b>			
		<b>PV 70-90</b>	<b>6203 ZZ / 6203 ZZ</b>			
8	<b>CAPACITOR</b>	<i>Pump</i>	<i>Capacitance</i>			
		<i>Single-phase</i>	<i>(220 V)</i>			
		<b>PVm 55</b>	<b>10 µF - 450 VL</b>			
		<b>PVm 60</b>	<b>10 µF - 450 VL</b>			
		<b>PVm 81</b>	<b>14 µF - 450 VL</b>			
		<b>PVm 65</b>	<b>14 µF - 450 VL</b>			
		<b>PVm 70</b>	<b>25 µF - 450 VL</b>			
		<b>PVm 90</b>	<b>25 µF - 450 VL</b>			
9	<b>ELECTRIC MOTOR</b>	<b>PVm:</b> single-phase 220 V - 60 Hz (50/60 Hz for PVm55) with thermal overload protector incorporated into the winding.				
		<b>PV:</b> three-phase 220/380 V - 60 Hz (50/60 Hz for PV55).				
		<p>⇒ <b>The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30-1)</b></p> <ul style="list-style-type: none"> <li>- Insulation: class F</li> <li>- Protection: IP X4</li> </ul>				

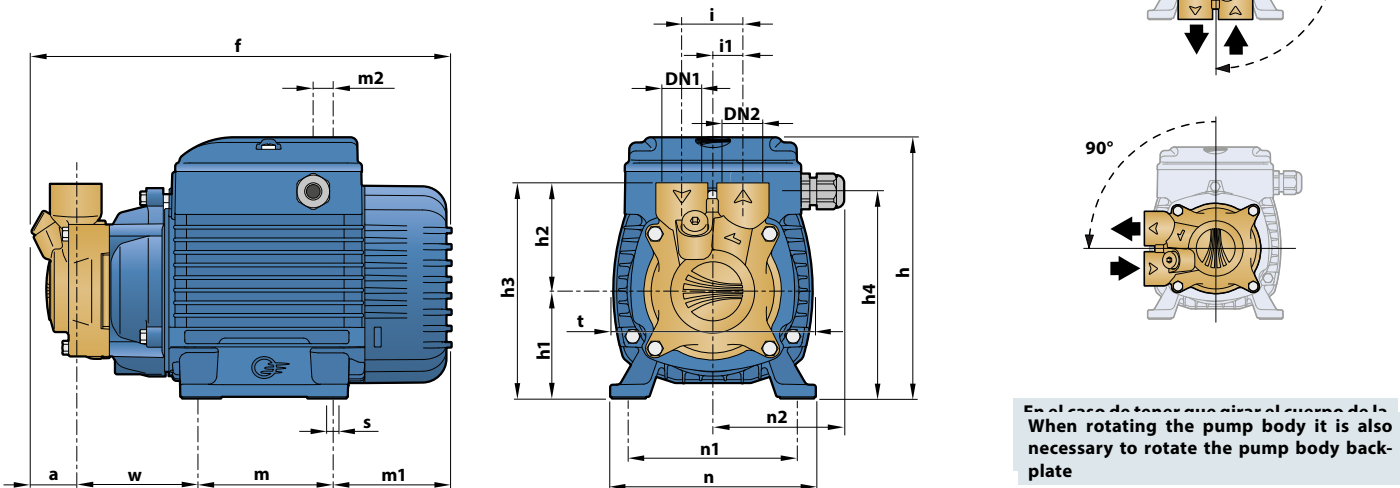


## DIMENSIONS AND WEIGHT

### PV 55



### PV 60-81-65-70-90



En el caso de tener que girar el cuerpo de la bomba es necesario rotar el cuerpo de la placa

MODEL		PORTS		DIMENSIONS mm																	kg		
Single-ph.	Three-ph.	DN1	DN2	a	f	h	h1	h2	h3	h4	i	i1	m	m1	m2	n	n1	n2	t	w	s	1~	3~
PVm 55	PV 55	1/4"	1/4"	10.5	194	145	56	40	96	112	25	12.5	55	65.5	8	116	94/100	55.5	116	63	7	4.4	4.4
PVm 60	PV 60	1/2"	1/2"	26	243.5	152	63	62	125	120.5	35	17.5	80	69.5	11.5	120	98/102	76.5	116	68	7	5.5	5.5
PVm 81	PV 81			26.5	241			65	128											65		6.8	6.8
PVm 65	PV 65	3/4"	3/4"	27	243.5	179*	71	66	129	139	45	22.5	90	80.5	21	134	110/114	78	142	67	7	6.8	6.8
PVm 70	PV 70			26.5	276															79		10.2	9.5
PVm 90	PV 90			28	275															76.5		10.0	9.3

(\*) h=196 mm for single phase versions at 110 V

## ABSORPTION

MODEL	VOLTAGE
<b>Single-phase</b>	220 V
PVm 55 (50 Hz)	1.6 A
PVm 55 (60 Hz)	2.0 A
PVm 60	3.3 A
PVm 81	3.3 A
PVm 65	4.5 A
PVm 70	7.0 A
PVm 90	6.5 A

MODEL	VOLTAGE	
<b>Three-phase</b>	220 V	380 V
PV 55 (50/60 Hz)	1.7 A	1.0 A
PV 60	2.6 A	1.5 A
PV 81	2.3 A	1.3 A
PV 65	3.1 A	1.8 A
PV 70	5.0 A	2.9 A
PV 90	4.8 A	2.8 A