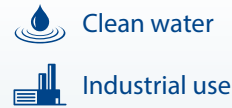


Pumps with peripheral impeller



PERFORMANCE RANGE

- Flow rate up to **45 l/min** (2.7 m³/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
ISO 14001: ENVIRONMENT



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

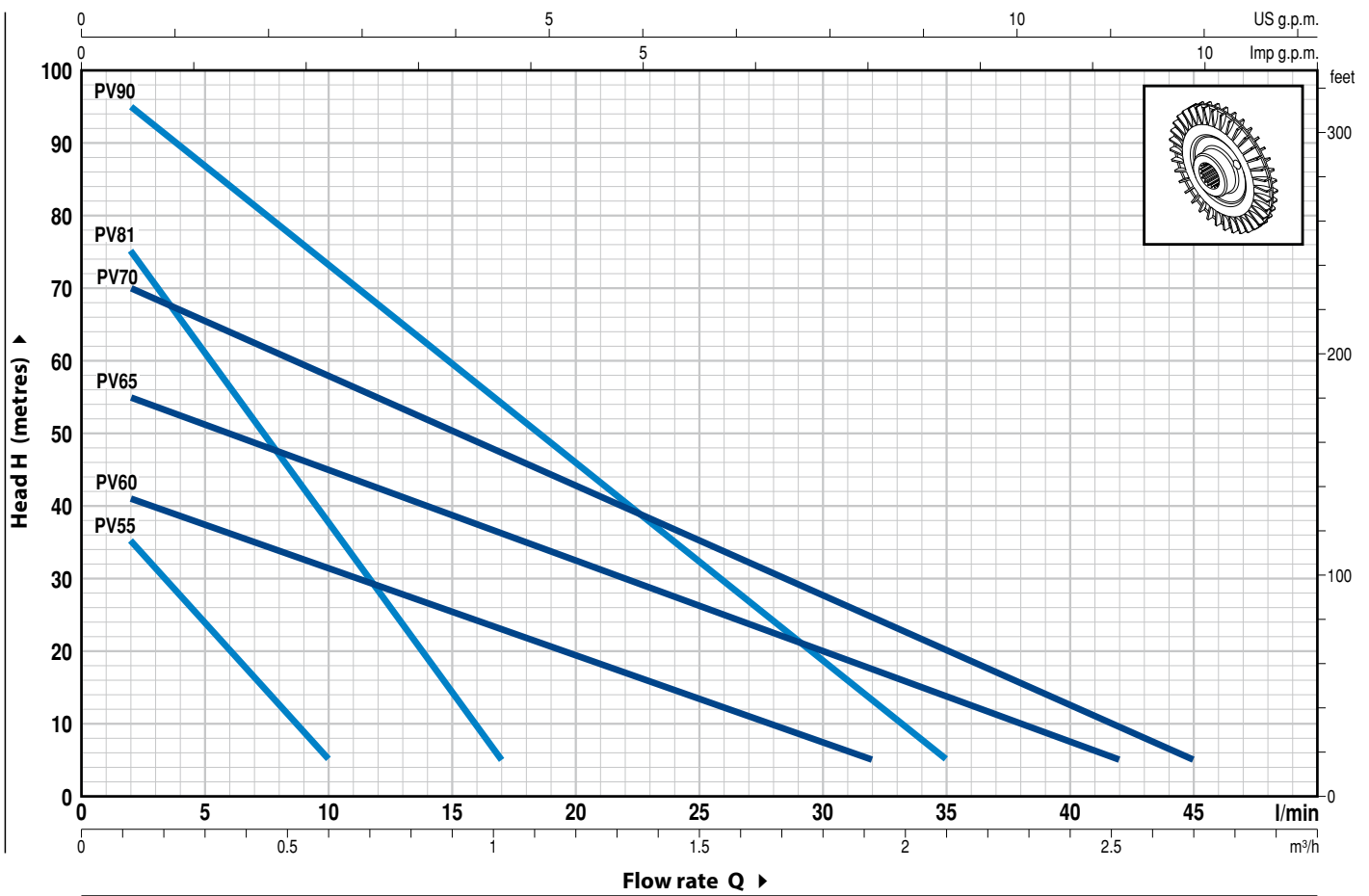
- Shaft: patent n. 0000275945 (PV55)

OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency
- IP X5 class protection for PV70-90

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min⁻¹ HS= 0 m



MODEL		POWER (P ₂)			Q	Flow rate										
Single-phase	Three-phase	kW	HP	▲		m ³ /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	IE2	metres	50 Hz	42	35	31	27.5	24	20	16	12.5	9	5
						60 Hz	55	46	41.5	37	32.5	28	23.5	19	14.5	10

⇒ The Pvm55 and PV55 pumps are designed to work also at 60 Hz

MODEL		POWER (P ₂)			Q	Flow rate																
Single-phase	Three-phase	kW	HP	▲		m ³ /h	0	0.12	0.30	0.60	0.90	1.02	1.2	1.5	1.8	1.9	2.1	2.5	2.7			
						l/min	0	2	5	10	15	17	20	25	30	32	35	42	45			
Pvm 60	PV 60	0.37	0.50	IE2	H metres	50 Hz	43	41	37.5	31.5	25.5	23	19.5	13	7.5	5						
						60 Hz	85	75	61	38	15	5										
Pvm 81	PV 81	0.37	0.50	IE2	H metres	50 Hz	58	55	51	45	39	36	32.5	26	20	17.5	14	5				
						60 Hz	74	70	65.5	58	50	47	43	35	28	25	20	9.5	5			
Pvm 70	PV 70	0.90	1.20	IE3	H metres	50 Hz	100	95	87	73	59.5	54	46	32	19	13	5					
						60 Hz																

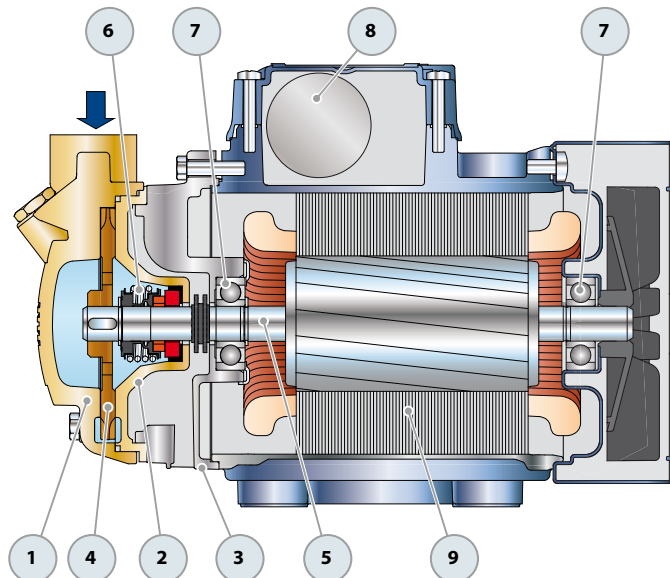
Q = Flow rate H = Total manometric head HS = Suction height

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

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

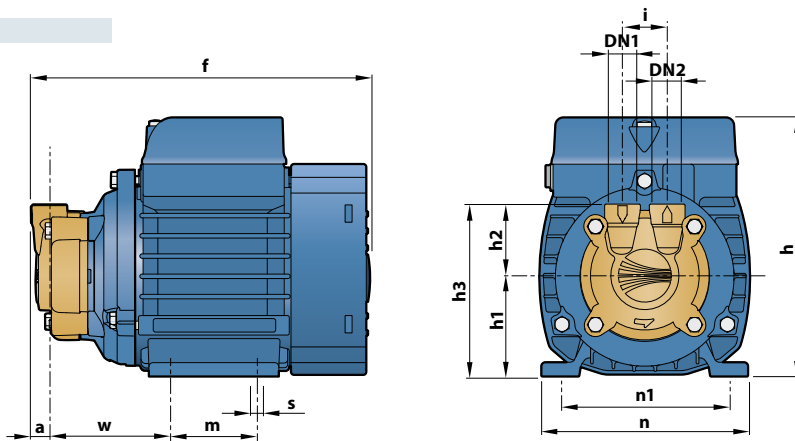
POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Brass complete with threaded ports in compliance with ISO 228/1					
2	PUMP BODY BACK-PLATE	Brass					
3	MOTOR BRACKET	Aluminium					
4	IMPELLER	Brass with peripheral radial vanes					
5	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104					
6	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>
		PV 55	ST1-12E	Ø 12 mm	Silicon carbide	Graphite	EPDM
		PV 60-65-70-81-90	ST1-12	Ø 12 mm	Silicon carbide	Graphite	NBR
7	BEARINGS	<i>Pump</i>	<i>Model</i>				
		PV 55-60-65-81	6201 ZZ / 6201 ZZ				
		PV 70-90	6203 ZZ / 6203 ZZ				
8	CAPACITOR	<i>Pump</i>	<i>Capacitance</i>				
		<i>Single-phase</i>	<i>(220-230 V o 240 V)</i>				
		PVm 55	10 µF - 450 VL				
		PVm 60	10 µF - 450 VL				
		PVm 81	14 µF - 450 VL				
		PVm 65	14 µF - 450 VL				
		PVm 70	16 µF - 450 VL				
		PVm 90	20 µF - 450 VL				
9	ELECTRIC MOTOR	<p>PVm: single-phase 220-230 V - 50 Hz (50/60 Hz for Pvm55) with thermal overload protector incorporated into the winding.</p> <p>PV: three-phase 230/400 V - 50 Hz (50/60 Hz for PV55).</p> <p>⇒ The three-phase pumps are fitted with high performance motors up to P₂=0.60 kW in class IE2 and from P₂=0.90 kW in class IE3 (IEC 60034-30-1)</p> <ul style="list-style-type: none"> - Insulation: class F - Protection: IP X4 					

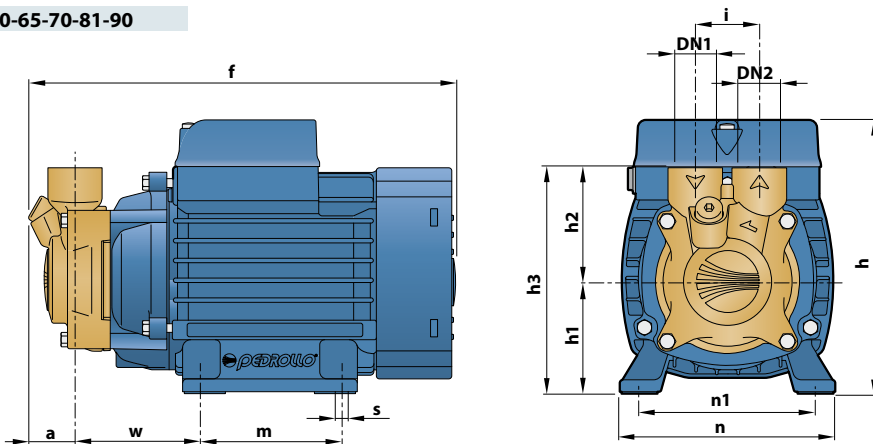


DIMENSIONS AND WEIGHT

PV 55



PV 60-65-70-81-90



When rotating the pump body it is also necessary to rotate the pump body back-plate

MODEL		PORTS		DIMENSIONS mm												kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~
PVm 55	PV 55	1/4"	1/4"	11	188	145	56	40	96	25	55	118	93-100	63	7	4.5	4.5
PVm 60	PV 60	1/2"	1/2"	24	221	152	63	62	125	35	80	120	100	60		5.5	5.5
PVm 81	PV 81			26	228			65	128					78		5.8	5.5
PVm 65	PV 65	25	266	180 *		71	66	137	45	90	134	112	61	5.8		5.5	
PVm 70	PV 70	3/4"			3/4"								24	263		71	66
PVm 90	PV 90		24	263		180 *	71	66	137	45	90	134	112	69		8.9	8.9

(*) h=199 mm for single phase versions at 110 V

ABSORPTION

MODEL	VOLTAGE
Single-phase	230 V
PVm 55 (50 Hz)	1.6 A
PVm 55 (60 Hz)	2.0 A
PVm 60	2.8 A
PVm 81	2.8 A
PVm 65	4.4 A
PVm 70	6.7 A
PVm 90	6.0 A

MODEL	VOLTAGE	
Three-phase	230 V	400 V
PV 55 (50 Hz)	1.7 A	1.0 A
PV 55 (60 Hz)		
PV 60	2.1 A	1.2 A
PV 81	2.1 A	1.2 A
PV 65	2.6 A	1.5 A
PV 70	4.5 A	2.6 A
PV 90	4.2 A	2.4 A