

## Pumps with Peripheral Impeller

 Clean Water

 Industrial



PQA 50 - PQA 60

PQA 70 - PQA 72 - PQA 70 - PQA 90

### PERFORMANCE RANGE

- Flow Rate up to 13 GPM (**50 l/min**) (3.0 m<sup>3</sup>/h)
- Head up to **295 feet** (90 m)

### APPLICATION LIMITS

- Maximum Suction Lift up to **26 feet** (8 m)
- Liquid Temperature between **14°F** (-10°C) and **194°F** (+90°C)
- Ambient Temperature between **14°F** (-10°C) and **104°F** (+40°C) (**122°F** (+50°C) for PQA 50-60)
- Maximum Working Pressure **145 psi** (10 bar)
- 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
- Brass pump body
- Resistant to rust

### APPLICATIONS AND MARKETS

- Industrial
- Water Well Service
- Water Distribution
- Pressure Boosting Systems
- Small Pressure Tanks
- OEM Equipment
- Laundries

### PATENTS - TRADE MARKS - MODELS

- Motor Bracket: Patent No. IT1243605
- Shaft: Patent No. 0000275945 (PQA 50-60)

### OPTIONS AVAILABLE ON REQUEST

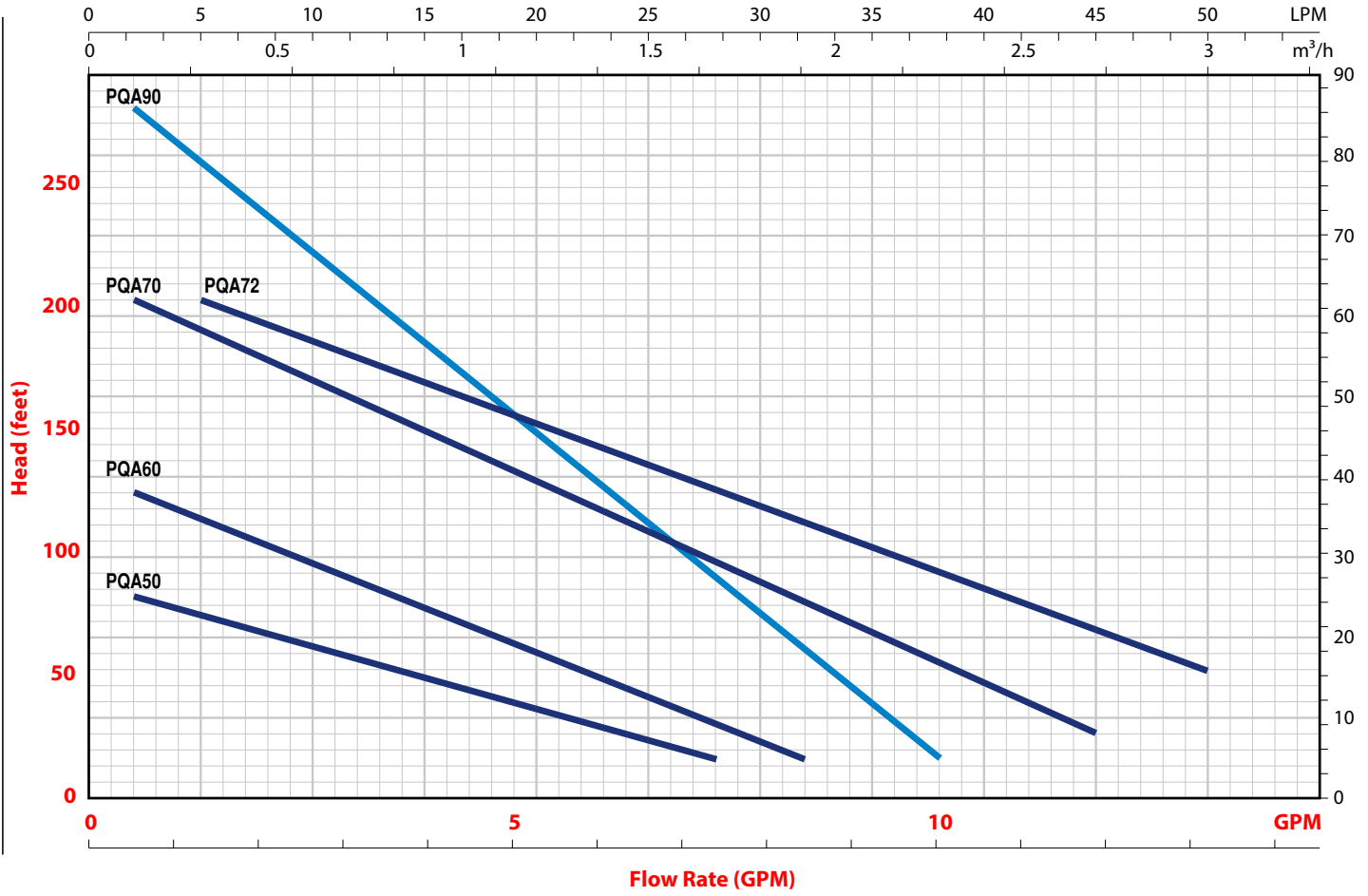
- Special mechanical seal
- EN 10088-3 - 1.4401 (AISI 316) stainless steel pump shaft
- Other voltages
- IP X5 class protection for PQA70-90

### GUARANTEE

**2 YEARS** subject to terms and conditions

**PERFORMANCE CURVES AND DATA**

**60 Hz RPM = 3450**

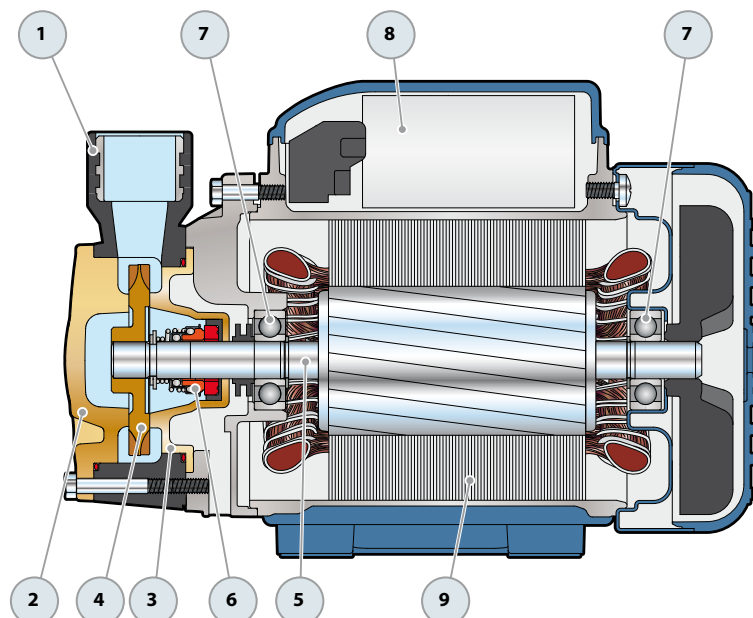


MODEL NUMBER		MOTOR SIZE			LPM	0	2	5	10	15	20	25	28	30	32	38	45	50	
Single-phase	Three-phase	kW	HP	EFF	GPM	0	0.5	1.3	2.6	3.9	5.3	6.6	7.4	7.9	8.4	10.0	11.9	13.2	
PQAm 50	PQA 50	0.18	0.25	IE3	HEAD (feet)	85.3	82.0	72.2	62.3	49.2	36.1	26.2	16.4						
PQAm 60	PQA 60	0.37	0.50			131.2	124.7	114.8	95.1	77.1	59.1	41.0	29.5	22.9	16.4				
PQAm 70	PQA 70	0.55	0.75			213.2	203.4	190.3	170.6	149.3	129.6	108.3	98.4	88.6	78.7	55.8	26.2		
PQAm 72	PQA 72	0.55	0.75			213.2	-	203.4	219.8	170.6	150.9	137.8	124.7	118.1	111.5	91.9	68.9	59.1	
PQAm 90	PQA 90	0.75	1.00			295.3	282.2	259.2	223.1	187.0	147.6	111.5	88.6	75.5	59.1	16.4			

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

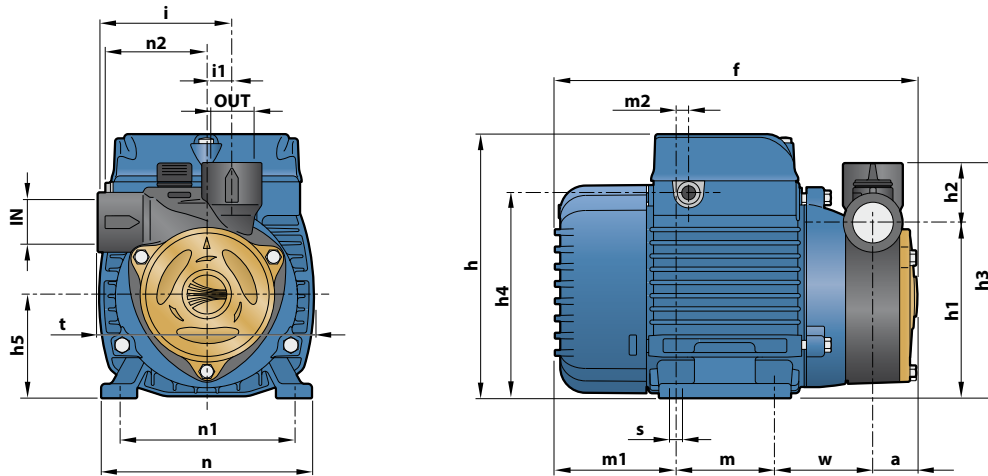
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

NO.	COMPONENT	CONSTRUCTION CHARACTERISTICS				
1	<b>PUMP BODY</b>	PPS complete with threaded metallic port inserts in compliance with ISO 228/1				
2	<b>BODY PLATE</b>	Brass				
3	<b>MOTOR BRACKET</b>	Aluminium with brass insert (patented), reduces the risk of impeller seizure				
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>
		ST1-12	Ø 0.4 in	Silicon carbide	Graphite	NBR
7	<b>BEARINGS</b>	<i>Pump</i>	<i>Model</i>			
		PQA 50-60	6201 ZZ / 6201 ZZ			
		PQA 70-72-90	6203 ZZ / 6203 ZZ			
8	<b>CAPACITOR</b>	<i>Pump</i>	<i>Capacitance</i>			
		<i>Single-phase</i>	(230 V)	(115 V or 127 V)		
		PQAm 50-60	10 µF - 450 VL	25 µF - 250 VL		
		PQAm 70-72	16 µF - 450 VL	60 µF - 300 VL		
		PQAm 90	20 µF - 450 VL	60 µF - 300 VL		
9	<b>ELECTRIC MOTOR</b>	<p><b>PQAm:</b> single-phase 230 V - 60 Hz with thermal overload protector incorporated into the winding.  <b>PQA:</b> three-phase 220/380 V - 60 Hz or 230/460 V - 60 Hz.</p> <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>				

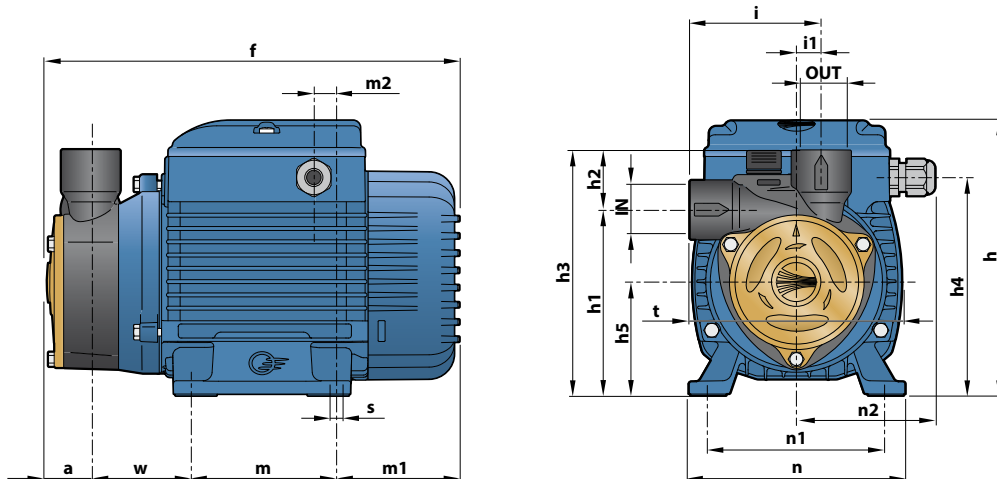


## DIMENSIONS AND WEIGHT

### PQA 50-60



### PQA 70-72-90



MODEL NUMBER		PORTS		DIMENSIONS (inches)																	Lbs				
Single-phase	Three-phase	IN	OUT	a	f	h	h1	h2	h3	h4	h5	i	i1	m	m1	m2	n	n1	n2	t	w	s	1~	3~	
PQAm 50	PQA 50	½"	½"	0.9	7.8	5.7	3.8	1.3	5.1	4.4	2.2	2.8	0.5	2.2	2.5	0.3	4.6	3.7/3.9	2.2	4.6	2.1	0.3	10.4	10.4	
PQAm 60	PQA 60			1.1	10.3	7.0	4.6	1.3	5.9			2.8	0.5										2.5	20.5	20.5
PQAm 70	PQA 70			1.1	10.3	7.0	4.6	1.3	5.9			2.8	0.5										2.5	20.5	20.5
PQAm 72	PQA 72	1"	1"	1.0	10.2	7.0	4.7	1.2	5.9	5.5	2.8	3.3	0.8	3.5	3.2	0.8	5.3	4.4	3.1	5.5	2.4	0.3	20.5	20.5	
PQAm 90	PQA 90	½"	½"	1.0	10.2	7.0	4.7	1.4	6.1		2.9	0.6								2.4	20.7		20.7		

## ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	115 V	127 V
PQAm 50	2.1 A	4.2 A	3.7 A
PQAm 60	2.6 A	6.0 A	5.2 A
PQAm 70	6.5 A	13.0 A	11.3 A
PQAm 72	6.5 A	13.0 A	11.3 A
PQAm 90	5.6 A	11.2 A	9.7 A

MODEL	VOLTAGE			
Three-phase	220 V	380 V	230 V	460 V
PQA 50	2.0 A	1.15 A	2.0 A	1.1 A
PQA 60	2.0 A	1.15 A	2.0 A	1.1 A
PQA 70	3.4 A	1.95 A	3.5 A	2.0 A
PQA 72	3.4 A	1.95 A	3.5 A	2.0 A
PQA 90	4.2 A	2.4 A	3.7 A	2.2 A