



### PERFORMANCE RANGE

- Flow rate up to **45 l/min** (2.7 m<sup>3</sup>/h)
- Head up to **65 m**

### APPLICATION LIMITS

- Manometric suction lift up to **8 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature between **-10 °C** and **+40 °C** (+45 °C for PQA 60)
- 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

The **PQA** pumps are recommended for pumping clean water without abrasive particles and with liquids which are not chemically aggressive towards the materials with which the pump is made. The RYTON and brass pump body construction guarantees against the formation of rust and oxidation. Because of these characteristics these pumps are suitable for use in industrial applications such as cooling, air conditioning, laundries, etc. The pump should be installed in an enclosed environment or sheltered from inclement weather.

### PATENTS - TRADE MARKS - MODELS

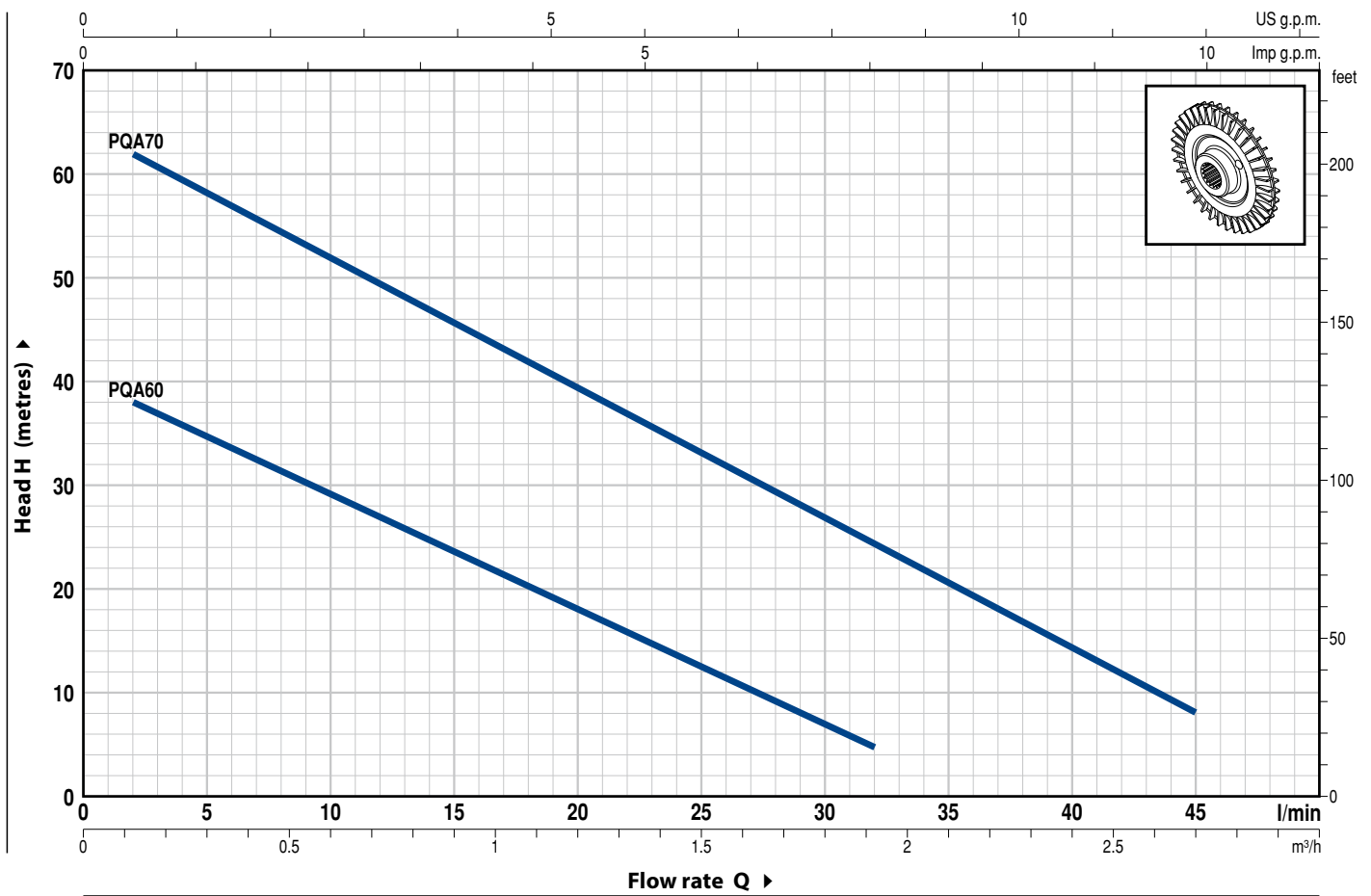
- Motor bracket: patent n. IT1243605
- Shaft: patent n. 0000275945 (PQA60)

### OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- EN 10088-3 - 1.4401 (AISI 316) stainless steel pump shaft
- Other voltages or 60 Hz frequency
- IP X5 class protection for PQA70

### CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 rpm HS= 0 m



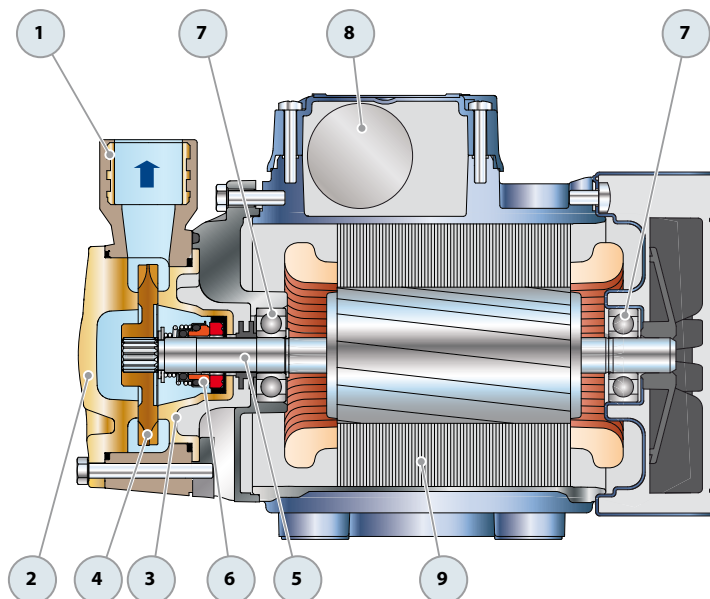
MODEL		POWER (P <sub>2</sub> )		Q	Flow rate													
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	0.1	0.3	0.6	0.9	1.2	1.5	1.8	1.9	2.3	2.7		
				l/min	0	2	5	10	15	20	25	30	32	38	45			
PQAm 60	PQA 60	0.37	0.50	H metres	40	38	35	29	23.5	18	12.5	7	5					
PQAm 70	PQA 70	0.55	0.75		65	62	58	52	45.5	39.5	33	27	24	16.5	8			

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

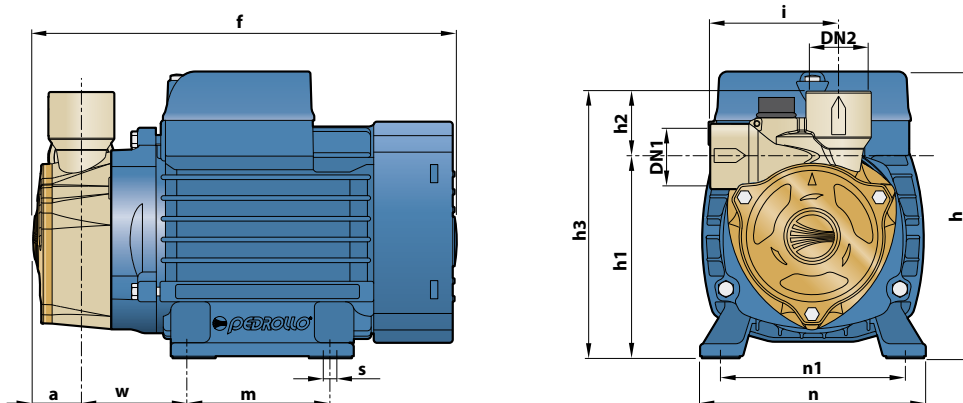
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

## POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	<b>PUMP BODY</b>	RYTON 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 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>
		<b>ST1-12</b>	<b>Ø 12 mm</b>	Silicon carbide	Graphite	NBR
7	<b>BEARINGS</b>	<i>Pump</i>	<i>Model</i>			
		<b>PQA 60</b>	<b>6201 ZZ / 6201 ZZ</b>			
		<b>PQA 70</b>	<b>6203 ZZ / 6203 ZZ</b>			
8	<b>CAPACITOR</b>	<i>Pump</i>	<i>Capacitance</i>			
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>		
		<b>PQAm 60</b>	<b>10 µF - 450 VL</b>	<b>25 µF - 250 VL</b>		
		<b>PQAm 70</b>	<b>16 µF - 450 VL</b>	<b>60 µF - 300 VL</b>		
9	<b>ELECTRIC MOTOR</b>	<b>PQAm:</b> single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding. <b>PQA:</b> three-phase 230/400 V - 50 Hz. – 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	i	m	n	n1	w	s	1~	3~
PQAm 60	PQA 60	½"	½"	25	192	145	96	33	129	72.5	55	118	93-100	53	7	4.7	4.7
PQAm 70	PQA 70			28	258	180 *	116.5	32.5	149		90	138	112	62		9.4	9.3

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

## ABSORPTION

MODEL	VOLTAGE		
	230 V	240 V	110 V
Single-phase	230 V	240 V	110 V
PQAm 60	2.5 A	2.4 A	5.2 A
PQAm 70	6.2 A	5.5 A	12.4 A

MODEL	VOLTAGE			
	230 V	400 V	240 V	415 V
Three-phase	230 V	400 V	240 V	415 V
PQA 60	2.0 A	1.15 A	1.9 A	1.1 A
PQA 70	4.2 A	2.4 A	3.7 A	2.2 A