# Pumps with peripheral impeller





#### **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)

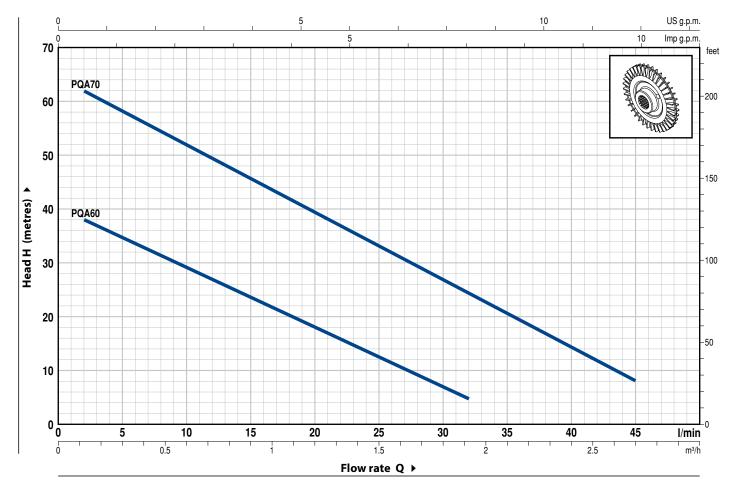
#### **OPTIONS AVAILABLE ON REQUEST**

- 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 (P2)		m³/h	0	0.1	0.3	0.6	0.9	1.2	1.5	1.8	1.9	2.3	2.7
Single-phase	Three-phase	kW	HP	l/min	0	2	5	10	15	20	25	30	32	38	45
PQAm 60	PQA 60	0.37	0.50		40	38	35	29	23.5	18	12.5	7	5		
PQAm 70	PQA 70	0.55	0.75	H metres	65	62	58	52	45.5	39.5	33	27	24	16.5	8

 $\mathbf{Q} = Flow rate \quad \mathbf{H} = Total manometric head \quad \mathbf{HS} = Suction height$ 

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

# PQA

# POS. COMPONENT CONSTRUCTION CHARACTERISTICS

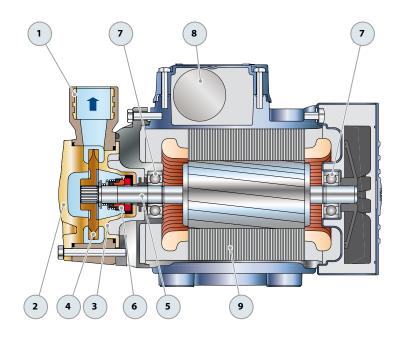
1	PUMP BODY RYTON complete with threaded metallic port inserts in compliance with ISO 228/1										
2	BODY PLATE	Brass									
3	MOTOR BRACKET	Aluminium with	brass insert (patented)	), reduces the risk o	f impeller seizure	2					
4	IMPELLER	Brass with periph	neral radial vanes								
5	MOTOR SHAFT	Stainless steel EN	l 10088-3 - 1.4104								
6	MECHANICAL SEAL	<b>Seal</b> Model	<b>Shaft</b> Diameter	Stationary ring	Materials Rotational ring	Elastomer					
		ST1-12	<b>Ø 12</b> mm	Silicon carbide	Graphite	NBR					
7	BEARINGS	Pump	Model								
		PQA 60 PQA 70	6201 ZZ / 6201 6203 ZZ / 6203								
8	CAPACITOR	Pump	Capacitance								
		Single-phase	(230 V or 240 V)	(110 V)							
		PQAm 60	<b>10</b> μF - 450 VL	<b>25</b> μF - 25							
		PQAm 70	<b>16</b> μF - 450 VL	<b>60</b> μF - 30	00 VL						

#### 9 ELECTRIC MOTOR

**PQAm:** single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding. **PQA:** three-phase 230/400 V - 50 Hz.

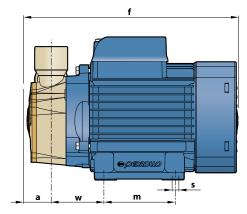
- Insulation: class F

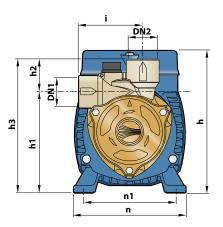
– Protection: IP X4





# **DIMENSIONS AND WEIGHT**





MODEL		PO	RTS	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	¥2″	1⁄2″	25	192	145	96	33	129	72.5	55	118	93-100	53		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		MODEL	VOLTAGE					
Single-phase	230 V	240 V	110 V	Three-phase	230 V	400 V	240 V	415 V		
PQAm 60	<b>2.5</b> A	<b>2.4</b> A	<b>5.2</b> A	PQA 60	<b>2.0</b> A	1.15 A	<b>1.9</b> A	<b>1.1</b> A		
PQAm 70	<b>6.2</b> A	<b>5.5</b> A	<b>12.4</b> A	PQA 70	<b>4.2</b> A	<b>2.4</b> A	<b>3.7</b> A	<b>2.2</b> A		