PQ-PRO

INDUSTRIAL USE

Pumps with peripheral impeller

Clean water

Industrial use



PERFORMANCE RANGE

- Flow rate up to **15 l/min** (0.9 m^3/h)
- Head up to **80 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**
- 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

CE

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 hydraulic characteristics of these pumps, coupled with their compactness, makes them suitable for use in industrial applications. Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

PATENTS - TRADE MARKS - MODELS

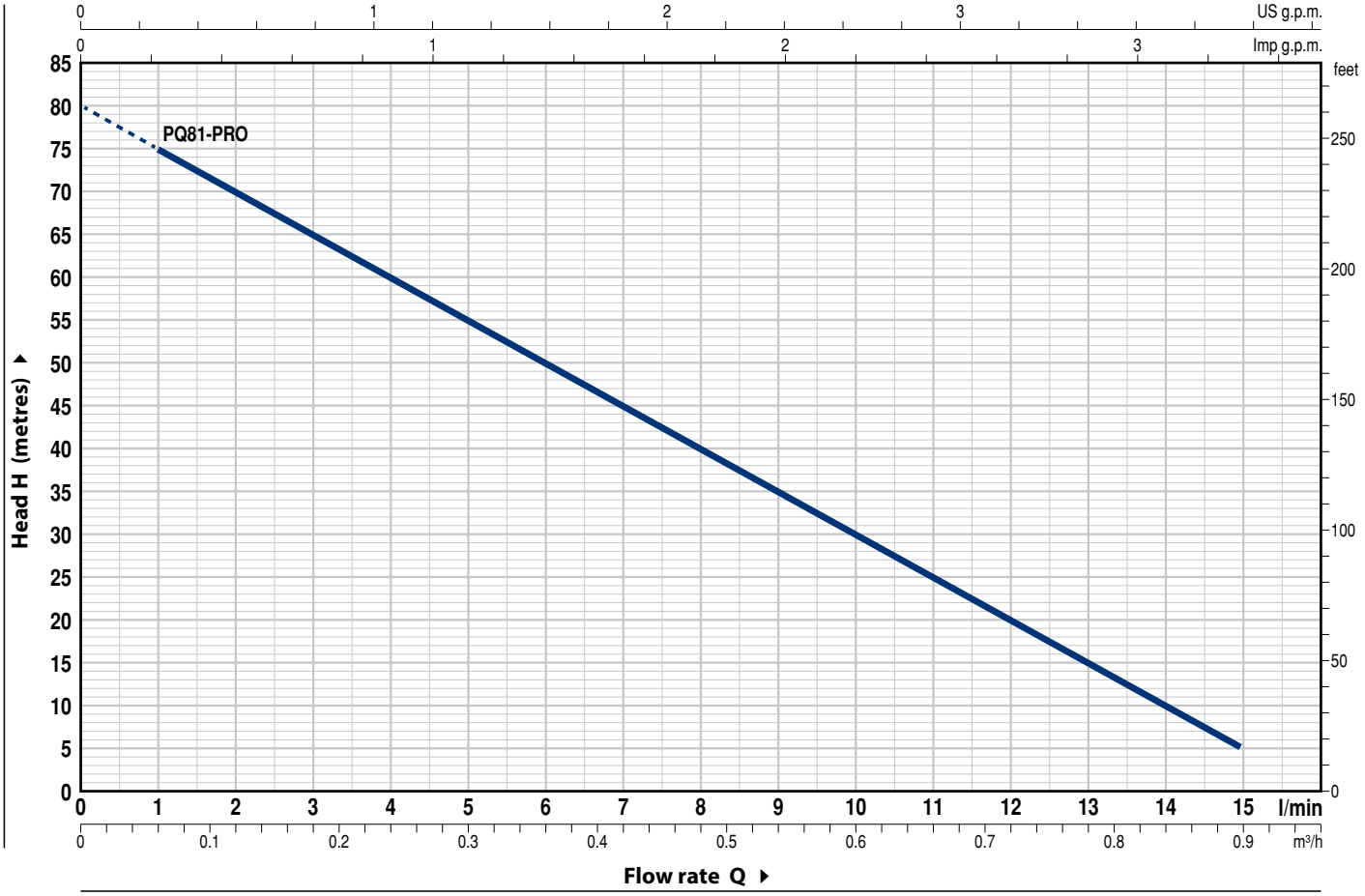
- Motor bracket: patent n. IT1243605

OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- EN 10088-3 - 1.4401 (AISI 316) stainless steel pump shaft
- Other voltages or 60 Hz frequency

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz **n= 2900 min^{-1}** HS= 0 m



MODEL		POWER (P2)			Q	m³/h	0	0.06	0.12	0.18	0.24	0.30	0.36	0.42	0.48	0.54	0.60	0.66	0.72	0.78	0.84	0.90
Single-phase	**Three-phase**	**kW**	**HP**	▲		l/min	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
PQm 81-PRO	**PQ 81-PRO**	0.45	0.60	**IE3**	**H**	metres	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	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)

PQ-PRO

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**PUMP BODY**	Cast iron with an anti-block treatment and threaded ports in compliance with ISO 228/1
2	**MOTOR BRACKET**	Aluminium with brass insert (patented), reduces the risk of impeller seizure
3	**IMPELLER**	Brass with peripheral radial vanes
4	**MOTOR SHAFT**	Stainless steel AISI 431
5	**MECHANICAL SEAL**	***Seal*** ***Shaft*** *Materials*

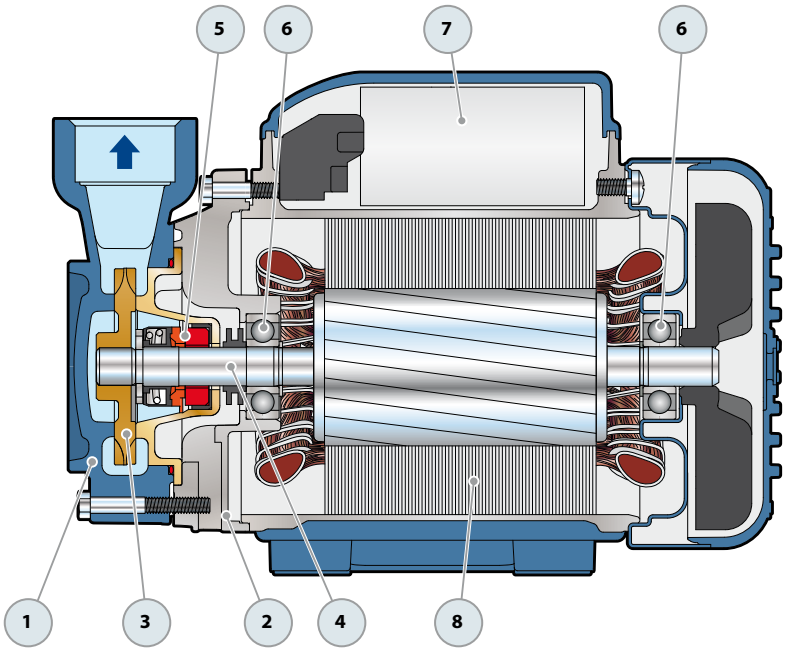
Model	***Diameter***	*Stationary ring*	*Rotational ring*	*Elastomer*
ST1-12	**Ø 12** mm	Silicon carbide	Graphite	NBR

6	**BEARINGS**	**6201 ZZ / 6201 ZZ**

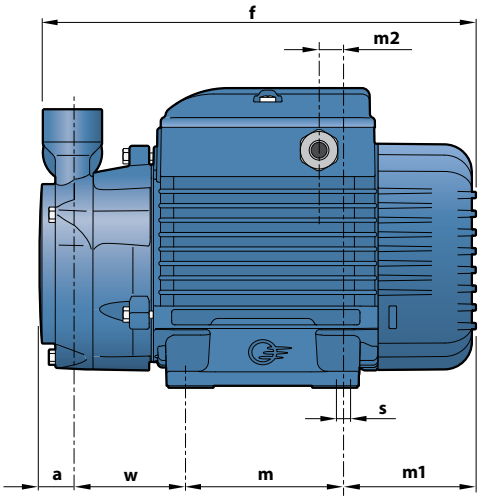
7	**CAPACITOR**	***Capacitance***

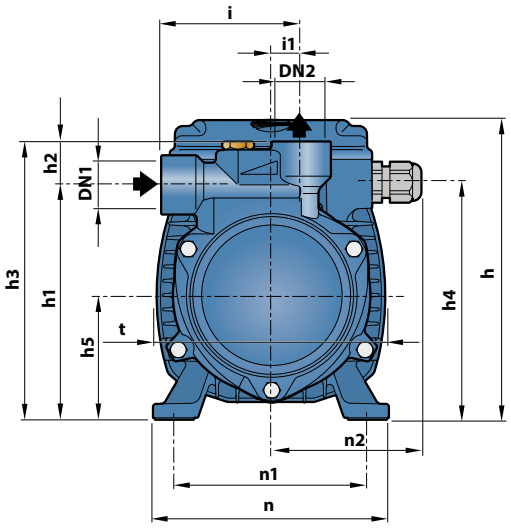
(230 V or 240 V)	***(110 V)***
12.5 µF - 450 VL	**25** µF - 250 VL

8	**ELECTRIC MOTOR**	**PQm-PRO**: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding. **PQ-PRO**: three-phase 230/400 V - 50 Hz. ➠ **The pump is fitted with a high performance motor in class IE3 (IEC 60034-30-1)** – 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	h4	h5	i	i1	m	m1	m2	n	n1	n2	t	w	s	1~	3~
PQm 81-PRO	**PQ 81-PRO**	**½"**	**½"**	19	224	153	119	22	141	120.5	63	71	15	80	69	11.5	120	100	77	117	55	7	**6.9**	**6.2**

ABSORPTION

MODEL	VOLTAGE	
Single-phase	230 V	110 V
PQm 81-PRO	**2.7** A	**5.4** A

MODEL	VOLTAGE	
Three-phase	230 V	400 V
PQ 81-PRO	**1.8** A	**1.0** A