PKS

Self-priming pumps with peripheral impeller

Clean water

Domestic use



PERFORMANCE RANGE

- Flow rate up to **50 l/min** (3.0 m^3/h)
- Head up to **70 m**

APPLICATION LIMITS

- Manometric suction lift up to **9 m** (HS)
- Liquid temperature between **-10 °C** and **+60 °C**
- Ambient temperature up to **+40 °C** (**+50 °C** for PKS 60)
- Max. working pressure:
  – **6 bar** for PKS 60, PKS 65
  – **7 bar** for PKS 70, PKS 80
- 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

EAC

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.
Because of their compactness, reliability and the fact that they are easy to use, they are suitable for use in domestic applications such as the distribution of water in combination with small pressure tanks, for the irrigation of gardens and orchards, for drawing water from tanks and for all those other situations where air or gas may be present in the water to be pumped. The pump comes complete with a flap-check valve.
Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

PATENTS - TRADE MARKS - MODELS

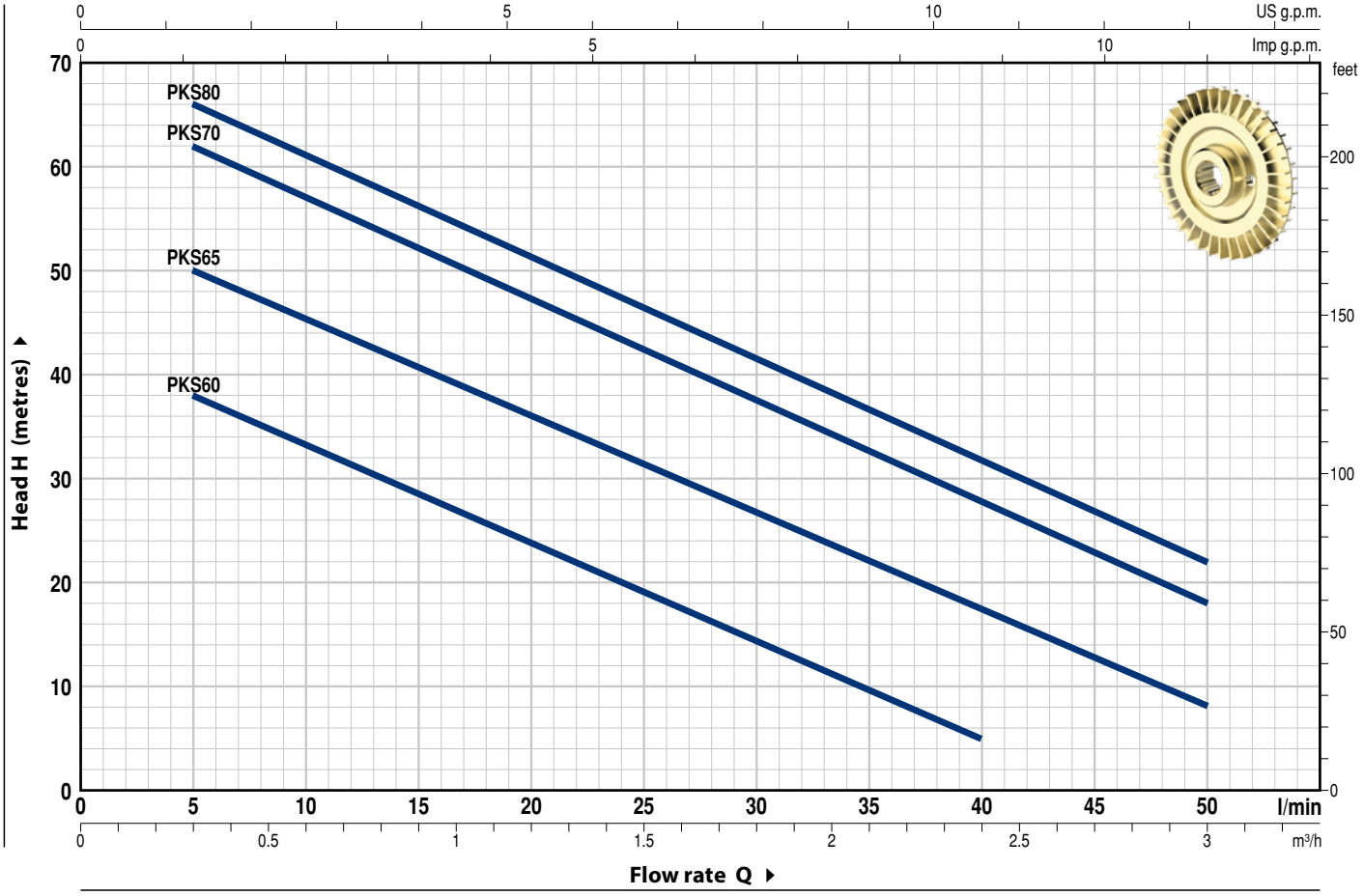
- Motor bracket: patent n. IT1243605
- Shaft: patent n. 0000275945 (PKS60, PKS65)

OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages or 60 Hz frequency
- IP X5 class protection for PKS 70, PKS 80

CHARACTERISTIC CURVES AND PERFORMANCE DATA

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



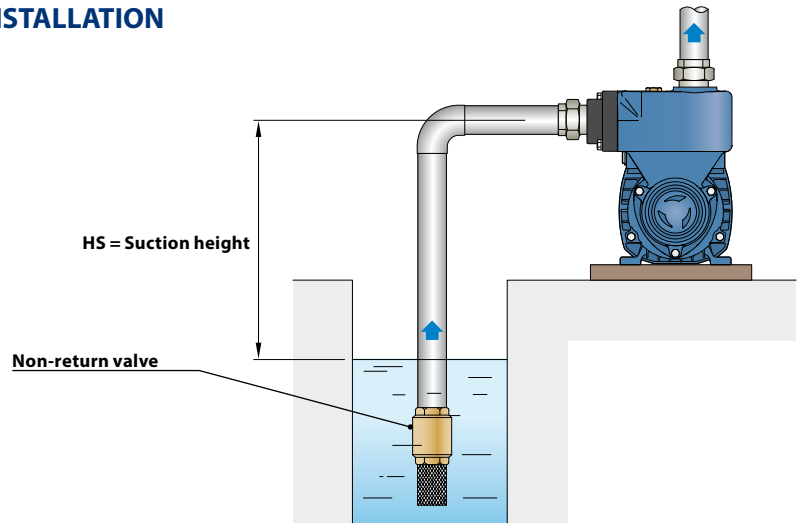
MODEL		POWER (P2)			Q	m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0
Single-phase	**Three-phase**	**kW**	**HP**	▲		l/min	**0**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**
PKSm 60	**PKS 60**	0.37	0.50	IE2	H	metres	40	38	33.5	29	24	19.5	15	10	5		
PKSm 65	**PKS 65**	0.55	0.75				55	50	45.5	40.5	36	31	27	22	17	12.5	8
PKSm 70	**PKS 70**	0.60	0.85	IE3			65	62	57	52	47	42	37	32	27	22	18
PKSm 80	**PKS 80**	0.75	1				70	66	61	56	51	46	41	36.5	31	27	22

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)

STANDARD INSTALLATION



POS. COMPONENT — CONSTRUCTION CHARACTERISTICS

1 PUMP BODY

Cast iron with threaded ports in compliance with ISO 228/1
and a built-in flap-check valve in the suction port

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 (EN 10088-3 - 1.4104 for PKS 60, PKS 65)

5 MECHANICAL SEAL

Seal	*Shaft*	*Materials*		
Model	*Diameter*	*Stationary ring*	*Rotational ring*	*Elastomer*
AR-12	**Ø 12** mm	Ceramic	Graphite	NBR

6 BEARINGS

Pump	*Model*
PKS 60-65	**6201 ZZ / 6201 ZZ**
PKS 70-80	**6203 ZZ / 6203 ZZ**

7 CAPACITOR

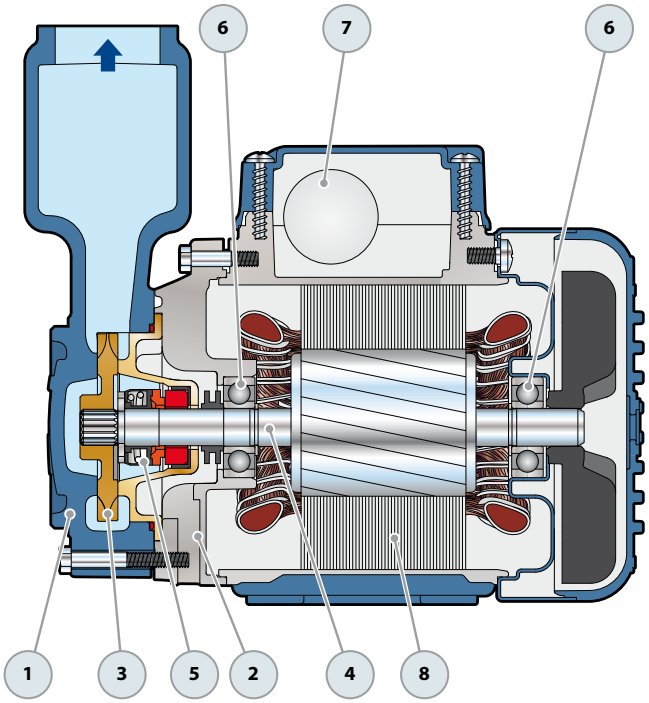
Pump	*Capacitance*	
Single-phase	*(230 V or 240 V)*	*(110 V)*
PKSm 60	**10** µF - 450 VL	**25** µF - 250 VL
PKSm 65	**14** µF - 450 VL	**25** µF - 250 VL
PKSm 70	**16** µF - 450 VL	**60** µF - 300 VL
PKSm 80	**20** µF - 450 VL	**60** µF - 300 VL

8 ELECTRIC MOTOR

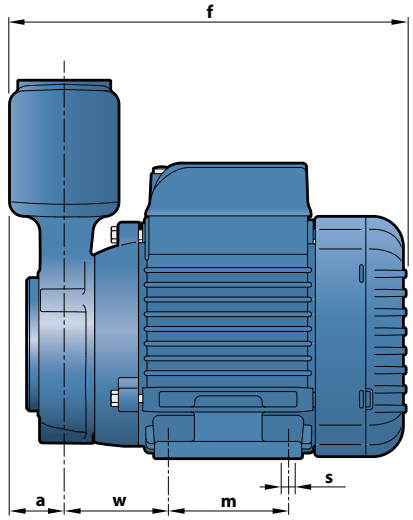
PKSm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.
PKS: three-phase 230/400 V - 50 Hz.

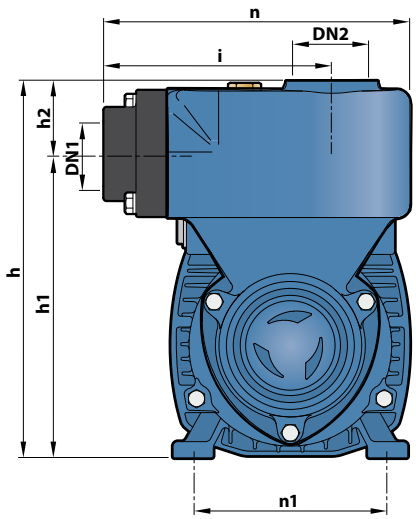
➠ **The three-phase pumps are fitted with high performance motors up to P_2=0.55 kW in class IE2 and from P_2=0.60 kW in class IE3 (IEC 60034-30-1)**

– 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	i	m	n	n1	w	s	1~	3~
PKSm 60	**PKS 60**	**1"**	**1"**	28	196	183	149	34	110	55	148	93-100	53	7	**5.6**	**5.6**
PKSm 65	**PKS 65**				227	190	156			80		100			**7.6**	**6.9**
PKSm 70	**PKS 70**				263	198	164			90	160	112	62		**10.5**	**10.5**
PKSm 80	**PKS 80**														**10.5**	**10.5**

ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	240 V	110 V
PKSm 60	**2.6** A	**2.5** A	**5.2** A
PKSm 65	**3.7** A	**3.5** A	**7.4** A
PKSm 70	**5.2** A	**4.8** A	**10.4** A
PKSm 80	**5.2** A	**4.8** A	**10.4** A

MODEL	VOLTAGE			
Three-phase	230 V	400 V	240 V	415 V
PKS 60	**2.0** A	**1.15** A	**1.9** A	**1.1** A
PKS 65	**3.0** A	**1.7** A	**2.8** A	**1.6** A
PKS 70	**3.8** A	**2.2** A	**3.6** A	**2.1** A
PKS 80	**3.8** A	**2.2** A	**3.8** A	**2.2** A

PALLETIZATION

MODEL		GROUPAGE	CONTAINER
Single-phase	**Three-phase**	n. pumps	n. pumps
PKSm 60	**PKS 60**	**224**	**288**
PKSm 65	**PKS 65**	**168**	**216**
PKSm 70	**PKS 70**	**96**	**144**
PKSm 80	**PKS 80**	**96**	**144**