Pumps with Peripheral Impeller

Clean Water

Residential

PERFORMANCE RANGE

- Flow rate up to **23 GPM** (90 l/min) (5.4 m^3/h)
- Head up to **328 feet** (100 m)

APPLICATION LIMITS

- Maximum Suction Lift up to **26 feet** (8 m)
- Liquid Temperature between **14°F** (-10 °C) and **140°F** (+60 °C)
- Ambient Temperature up to **104°F** (+40 °C) (**122°F** (+50 °C) for PK 60)
- Maximum Working Pressure:
  - **87 psi** (6 bar) for PK 60, PK 60-MD, PK 65,
  - **101 psi** (7 bar) for PK 70, PK 80
  - **145 psi** (10 bar) for PK 90, PK 100, PK 200, PK 300
- 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
- Easy to Use
- Low Energy Consumption

APPLICATIONS AND MARKETS

- Residential
- Irrigation
- Water Distribution
- Small Pressure Tanks
- Water Well Service
- Pressure Boosting Systems
- OEM Equipment

PATENTS - TRADE MARKS - MODELS

- Motor Bracket: Patent No. IT1243605
- Shaft: Patent No. 0000275945 (PK60, PK65)
- Pump Body: Patent No. 0000275946 (PK60, PK65)
- Registered EU Design No. 004673192
- PKm 60® Registered Trade Mark No. 009875394

OPTIONS AVAILABLE ON REQUEST

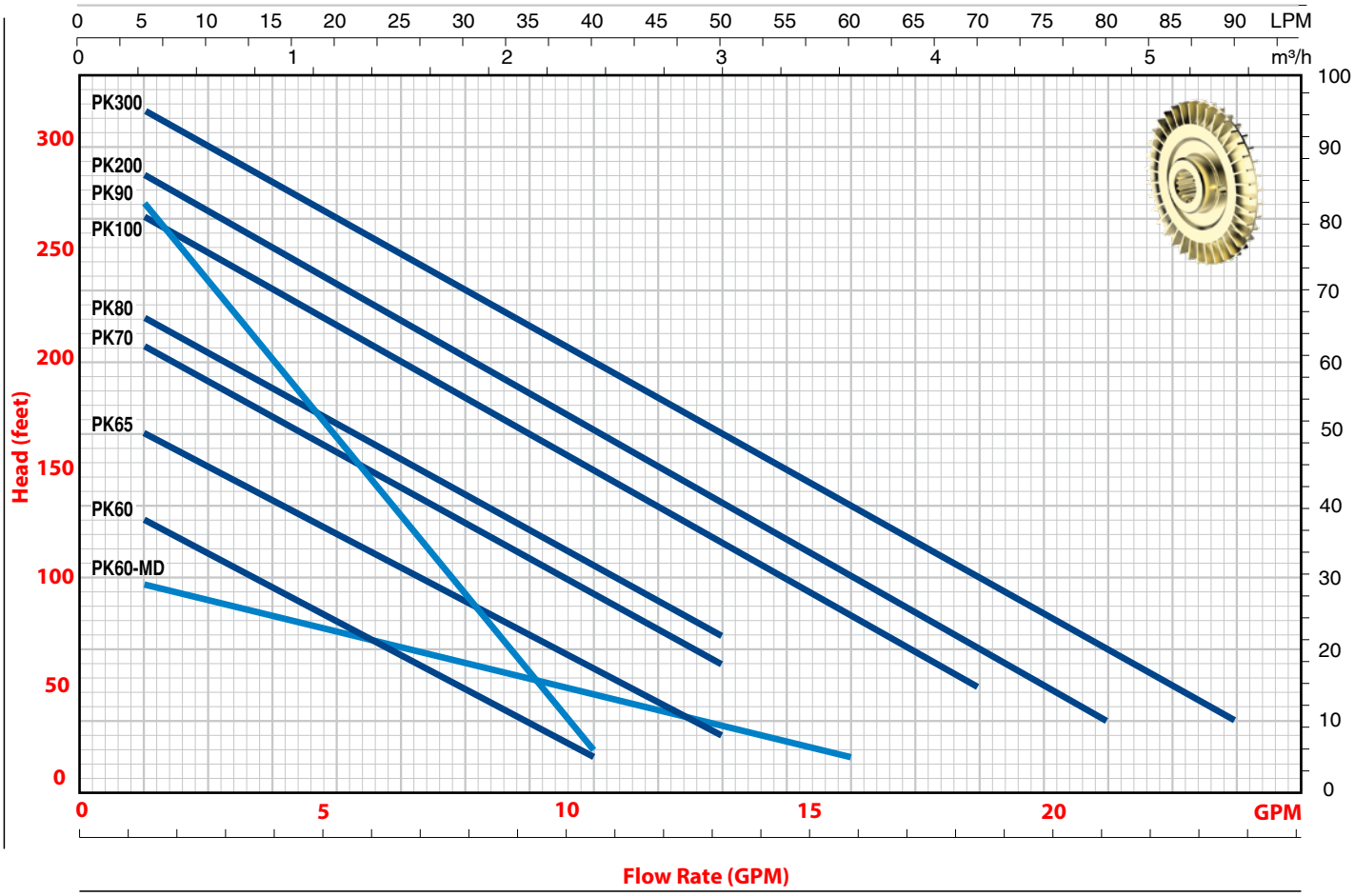
- Pump Body with GAS ANSI B 1.20.1 Threaded Ports
- Special Mechanical Seals
- Other Voltages Available
- IP X5 Class Protection for PQ 70/80/90/100/200/300

WARRANTY

2 YEARS subject to terms and conditions

PERFORMANCE CURVES AND DATA

60 Hz RPM = 3450



MODEL NUMBER		MOTOR SIZE			LPM	0	5	10	15	20	25	30	35	40	50	60	70	80	90
Single-phase	**Three-phase**	kW	**HP**	**EFF**	**GPM**	**0**	**1.3**	**2.6**	**3.9**	**5.2**	**6.6**	**7.9**	**9.2**	**10.6**	**13.2**	**15.8**	**18.5**	**21.1**	**23.8**
PKm 60	**PK 60**	0.37	**0.50**			131	124	109	95	78	63	49	32	16	-	-	-	-	-
PKm 60-MD	**PK 60-MD**	0.37	**0.50**	**IE2**		98	95	85	80	73	67	59	52	44	31	16	-	-	-
PKm 65	**PK 65**	0.55	**0.75**			180	164	149	132	118	101	88	72	55	26	-	-	-	-
PKm 70	**PK 70**	0.60	**0.85**			213	203	187	170	154	137	121	104	88	59	-	-	-	-
PKm 80	**PK 80**	0.75	**1.00**		**HEAD** (feet)	229	216	200	183	167	150	134	119	101	72	-	-	-	-
PKm 90	**PK 90**	0.75	**1.00**			295	269	232	196	160	124	88	55	16	-	-	-	-	-
PKm 100	**PK 100**	1.10	**1.50**	**IE3**		278	262	246	229	213	196	180	164	147	114	82	49	-	-
PKm 200	**PK 200**	1.50	**2.00**			295	282	265	249	232	214	196	180	164	131	98	65	32	-
PKm 300	**PK 300**	2.20	**3.00**			328	311	295	278	262	246	229	213	196	164	131	98	65	10

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

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

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**PUMP BODY**	Cast iron, with threaded ports in compliance with ISO 228/1 (PK 60, PK 60-MD with an Epoxy Electro Coating treatment)
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 PK 60, PK 60-MD, PK 65)

5 MECHANICAL SEAL

Pump	*Seal*	*Shaft*	*Materials*		
Model	*Model*	*Diameter*	*Stationary ring*	*Rotational ring*	*Elastomer*
PK 60-65-70-80 **PK 60-MD**	**AR-12**	**Ø 0.4** in	Ceramic	Graphite	NBR
PK 90	**ST1-12**	**Ø 0.4** in	Silicon carbide	Graphite	NBR
PK 100-200-300	**FN-14**	**Ø 0.5** in	Graphite	Ceramic	NBR

6 BEARINGS

Pump	*Model*
PK 60-65 **PK 60-MD**	**6201 ZZ / 6201 ZZ**
PK 70-80-90	**6203 ZZ / 6203 ZZ**
PK 100-200-300	**6204 ZZ / 6204 ZZ**

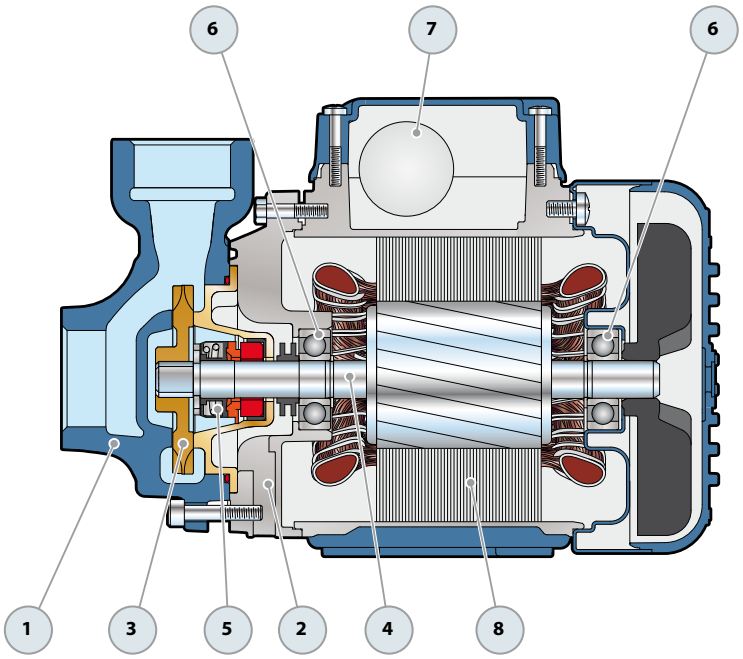
7 CAPACITOR — **EN 60252-1/A1**

8 ELECTRIC MOTOR

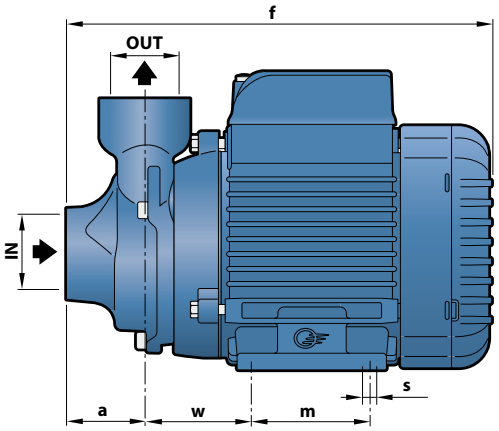
PKm: single-phase 220 V - 60 Hz with thermal overload protector incorporated into the winding.
PK: three-phase 220/380 V - 60 Hz or 230/460 V - 60 Hz.

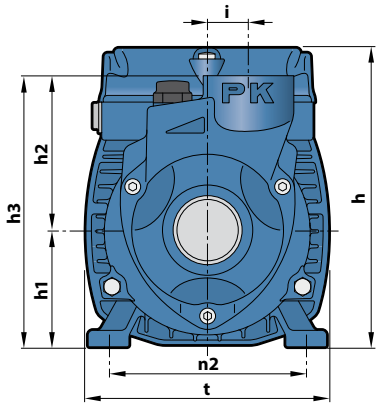
➠ **The three-phase pumps are fitted with high performance motors up to P_2=0.55 kW in class IE2 and from P_2=0.60 kW in class IE3 (IEC 60034-30-1)**

– Insulation: class F
– Protection: IP X4



DIMENSIONS AND WEIGHT





MODEL		PORTS		DIMENSIONS (inches)												Lbs	
Single-phase	**Three-phase**	**IN**	**OUT**	a	f	h	h1	h2	h3	i	m	t	n2	w	s	1-PH	3-PH
PKm 60®	**PK 60®**	**1"**	**1"**	1.4	8.1	5.7	2.2	2.9	5.1	0.7	2.1	4.6	3.7-3.9	2	0.2	**11.4**	**11.4**
PKm 60®-MD	**PK 60®-MD**				9.3	6	2.4				3.1	4. 7	3.9			**12.3**	**12.3**
PKm 65	**PK 65**								5.4							**15.4**	**13.8**
PKm 70	**PK 70**			2.1	11.2	7 *	2.7	3.3	6.1		3.5	5.5	4.4	2.4		**22.0**	**22.0**
PKm 80	**PK 80**															**21.8**	**22.0**
PKm 90	**PK 90**	**¾"**	**¾"**	1.8	10.9			3.3	6.1	0.7						**22.4**	**22.2**
PKm 100	**PK 100**	**1"**	**1"**	2.4	14	8.3	3.1	3.4	6.6	0.7	3.9	5.9	4.9	3.7	0.3	**33.0**	**32.8**
PKm 200	**PK 200**															**35.0**	**35.0**
PKm 300	**PK 300**				14.8											**41.0**	**41.0**

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

ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	110 V	127 V
PKm 60®	**2.6** A	**5.5** A	**5.3** A
PKm 60®-MD	**3.3** A	**6.5** A	**6.0** A
PKm 65	**5.8** A	**11.5** A	**10.0** A
PKm 70	**5.2** A	**10.8** A	**9.0** A
PKm 80	**6.5** A	**13.0** A	**12.0** A
PKm 90	**6.0** A	**12.0** A	**10.4** A
PKm 100	**9.0** A	**18.0** A	**15.6** A
PKm 200	**12.0** A	**24.0** A	**20.8** A
PKm 300	**12.5** A	–	–

MODEL	TENSIONE			
Trifase	230 V	380 V	230 V	460 V
PK 60®	**2.0** A	**1.15** A	**2.1** A	**1.2** A
PK 60®-MD	**2.4** A	**1.4** A	**2.5** A	**1.4** A
PK 65	**3.2** A	**1.85** A	**3.5** A	**2.0** A
PK 70	**3.8** A	**2.2** A	**3.8** A	**2.2** A
PK 80	**3.8** A	**2.2** A	**4.3** A	**2.4** A
PK 90	**4.2** A	**2.4** A	**4.2** A	**2.4** A
PK 100	**6.2** A	**3.6** A	**6.2** A	**3.15** A
PK 200	**9.2** A	**5.3** A	**7.0** A	**4.2** A
PK 300	**10.0** A	**5.8** A	**8.2** A	**4.8** A