

Self-priming liquid ring pumps

► With double anti-seize frontal inserts

 Clean water

 Civil use

 Industrial use

 Agricultural use



PERFORMANCE RANGE

- Flow rate up to **50 l/min** (3 m³/h)
- Head up to **51 m**

APPLICATION LIMITS

- Manometric suction lift up to **9 m** (HS)
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure **6 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



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 a specific principle of their operating performance these pumps are an excellent solution in every case where a compact self-priming pump is required or when the fluid flow is irregular or contains air.

Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

PATENTS - TRADE MARKS - MODELS

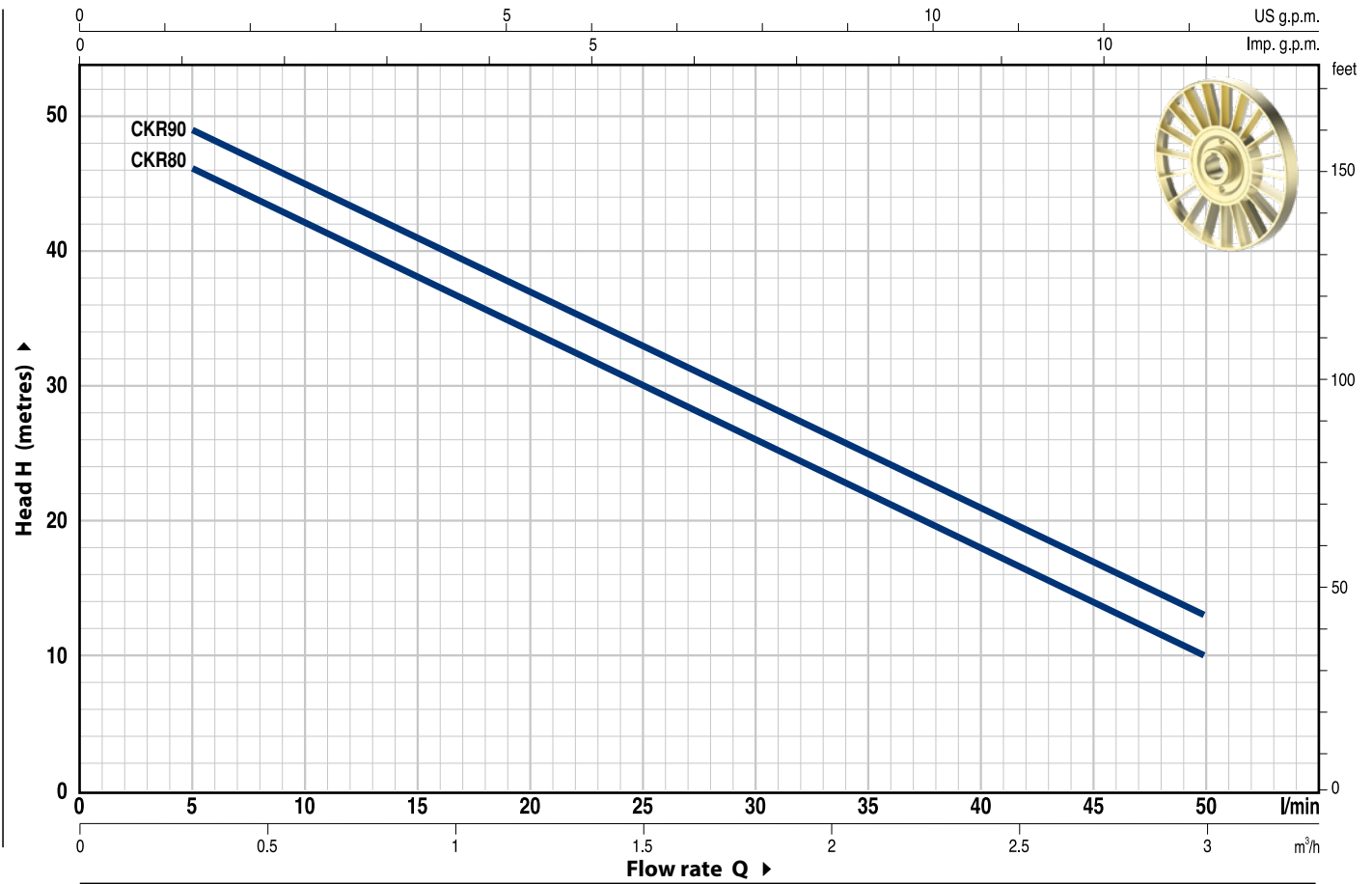
- Motor bracket: patent n. IT1243605
- Registered EU Design n. 342159-0008

OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages
- IP X5 class protection

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 min⁻¹ HS= 0 m



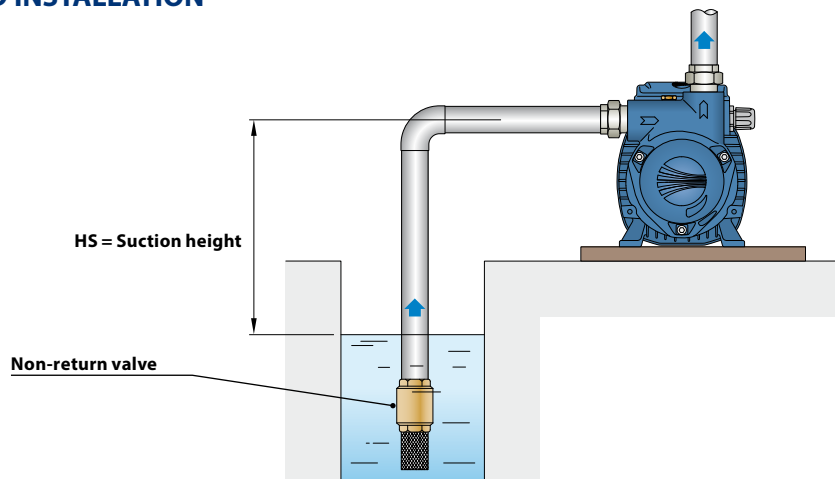
MODEL		POWER (P ₂)			Q										
Single-phase	Three-phase	kW	HP	▲		m ³ /h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4
					l/min	0	5	10	15	20	25	30	35	40	50
CKRm 80	CKR 80	0.55	0.75	IE3	H metres	48	46	42	38	34	30	26	22	18	10
CKRm 90	CKR 90	0.75	1			51	49	45	41	37	33	29	25	21	13

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

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

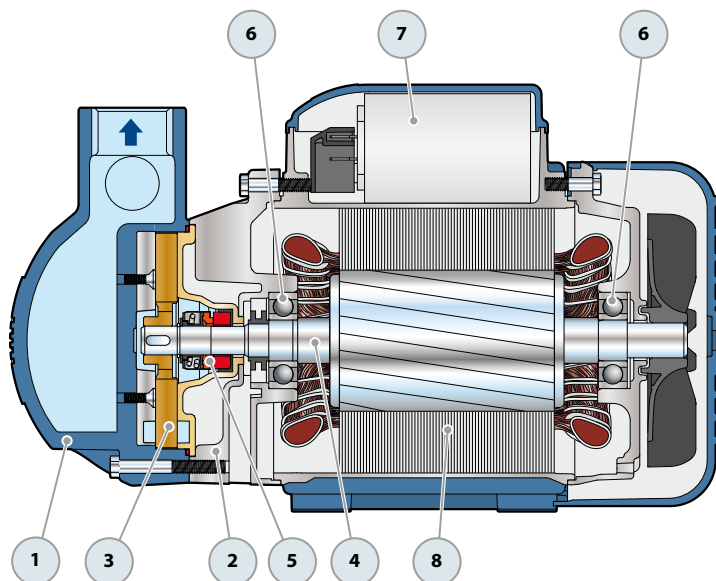
▲ Three-phase motor efficiency class (IEC 60034-30-1)

STANDARD INSTALLATION

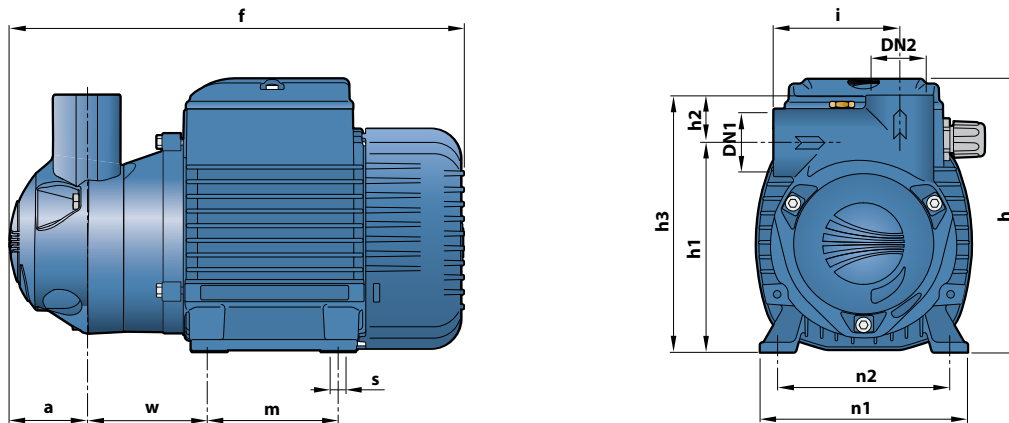


POS. COMPONENT CONSTRUCTION CHARACTERISTICS

1	PUMP BODY	Cast iron with stainless steel insert to prevent impeller seizure due to the formation of rust . The pump body is complete with 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 star type with open radial vanes			
4	MOTOR SHAFT	Stainless steel AISI 431			
5	MECHANICAL SEAL	Seal	Shaft	Materials	
		<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>
		AR-12V	Ø 12 mm	Ceramic	Graphite
					Elastomer
					Viton
6	BEARINGS	6203 ZZ / 6203 ZZ			
7	CAPACITOR	Pump	Capacitance		
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>	
		CKRm 80	16 µF - 450 VL	60 µF - 300 VL	
		CKRm 90	20 µF - 450 VL	60 µF - 300 VL	
8	ELECTRIC MOTOR	<p>CKRm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.</p> <p>CKR: three-phase 230/400 V - 50 Hz.</p> <p>⇒ The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30-1)</p> <ul style="list-style-type: none"> - 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	n1	n2	w	s	1~	3~
CKRm 80	CKR 80	1"	1"	50	296	180	136	31	167	81	90	140	112	77	7	10.9	10.9
CKRm 90	CKR 90															10.8	10.8

ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	240 V	110 V
CKRm 80	5.0 A	4.8 A	10.0 A
CKRm 90	5.1 A	4.9 A	10.2 A

MODEL	VOLTAGE					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
CKR 80	3.5 A	2.0 A	1.2 A	3.3 A	1.9 A	1.1 A
CKR 90	3.6 A	2.1 A	1.2 A	3.5 A	2.0 A	1.2 A