



### PERFORMANCE RANGE

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

### APPLICATION LIMITS

- Manometric suction lift up to **9 m** (HS)
- Liquid temperature between **-10 °C** and **+90 °C**
- Temperature of diesel up to **+55 °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



### INSTALLATION AND USE

Suitable for use with diesel, clean water that does not contain abrasive particles and liquids that are not chemically aggressive towards the materials from which the pump is made.

As a specific result of the pump's operating principle they are suitable for use in all situations where a compact self-priming pump is required or where the fluid supply is limited, irregular or contains air.

The pump should be installed in an enclosed environment, or at least sheltered from inclement weather.

### PATENTS - TRADE MARKS - MODELS

- Motor bracket: patent n° IT1243605
- CK 80/90 Registered Community Design n° 342159-0008

### OPTIONALS AVAILABLE ON REQUEST

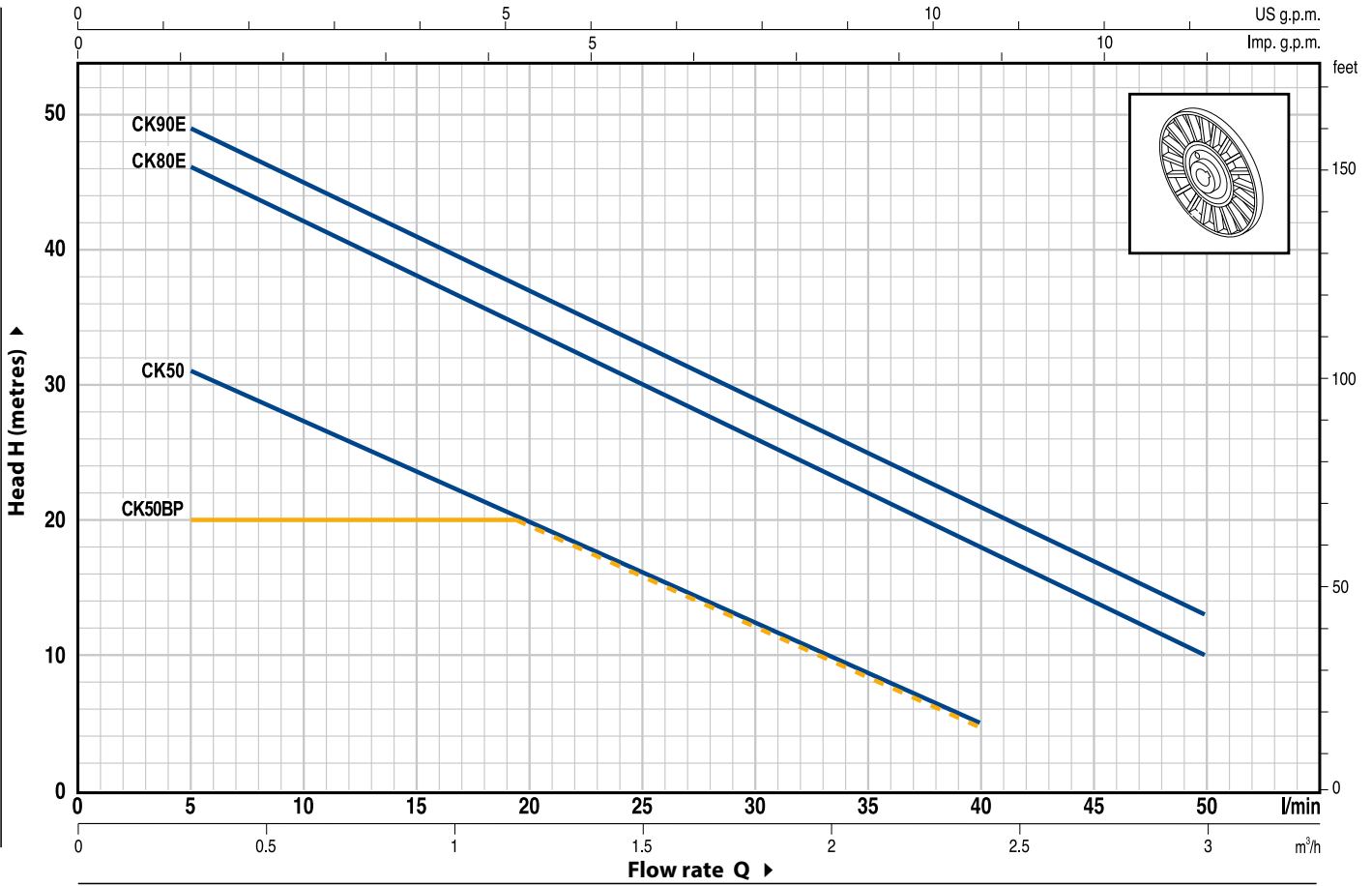
- Special mechanical seal
- Other voltages or 60 Hz frequency
- IP X5 class protection for CK 80E-90E

### GUARANTEE

2 years subject to terms and conditions

**CHARACTERISTIC CURVES AND PERFORMANCE DATA**

**50 Hz n= 2900 1/min HS= 0 m**



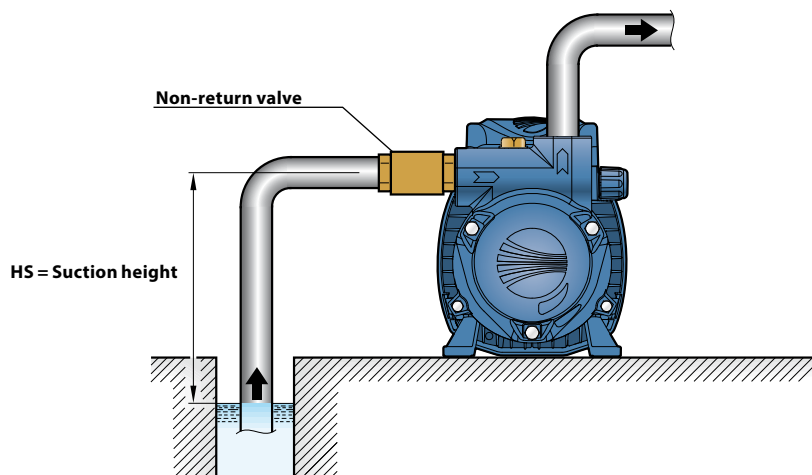
MODEL		POWER		Q	Flow rate												
Single-phase	Three-phase	kW	HP		m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0		
				l/min	0	5	10	15	20	25	30	35	40	50			
CKm 50	CK 50	0.37	0.50	H metres	35	31	27	24	20	16	13	9	5				
CKm 50-BP	CK 50-BP	0.25	0.33		20	20	20	20	20	16.5	13	9	5				
CKm 80E	CK 80E	0.55	0.75		48	46	42	38	34	30	26	22	18	10			
CKm 90E	CK 90E	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 3.

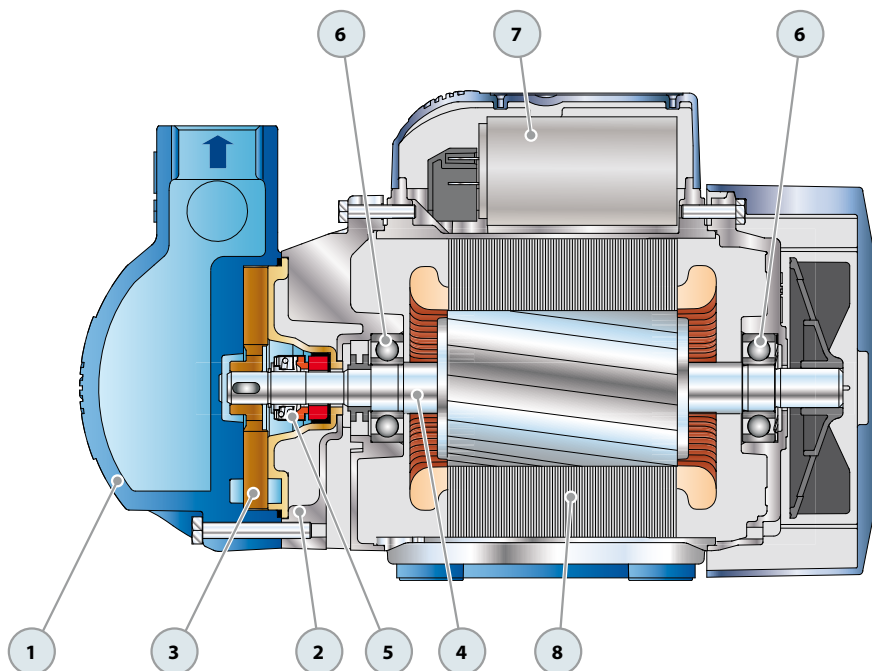
**CK 50-BP = pump with integral by-pass**

**INSTALLATION EXAMPLE**

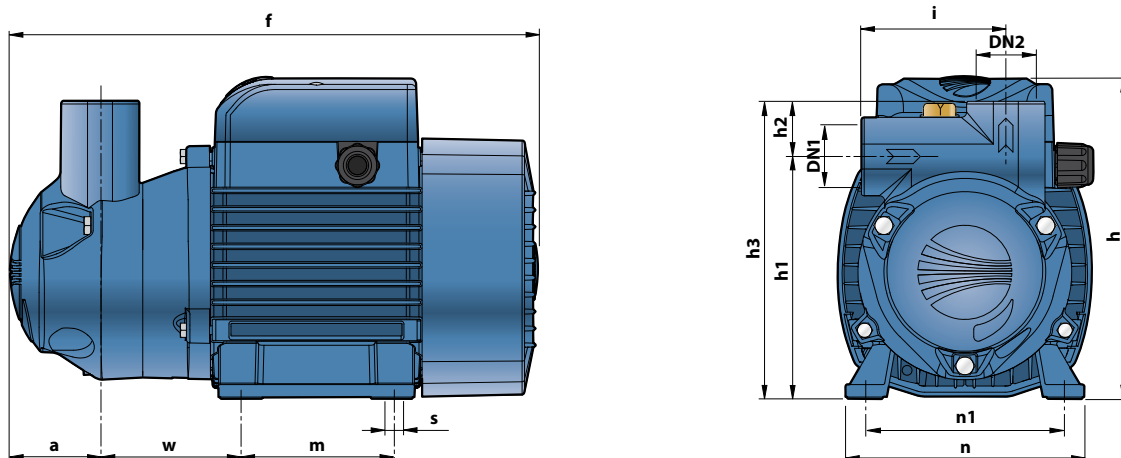


POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS				
1	PUMP BODY	Cast iron, complete with threaded ports in compliance with ISO 228/1				
2	MOTOR BRACKET	Aluminium with brass insert (patented), reduces the risk of impeller seizure				
3	IMPELLER	Brass, star type with open radial vanes				
4	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104				
5	MECHANICAL SEAL	<i>Seal</i>	<i>Shaft</i>	<i>Materials</i>		
		<i>Model</i>	<i>Diameter</i>	<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
		AR-12V	Ø 12 mm	Ceramic	Graphite	Viton
6	BEARINGS	<i>Pump</i>	<i>Model</i>			
		CK 50	6201 ZZ / 6201 ZZ			
		CK 50-BP	6201 ZZ / 6201 ZZ			
		CK 80E	6203 ZZ / 6203 ZZ			
CK 90E	6203 ZZ / 6203 ZZ					
7	CAPACITOR	<i>Pump</i>	<i>Capacitance</i>			
		<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>		
		CKm 50	12.5 µF 450 VL	25 µF 250 VL		
		CKm 50-BP	12.5 µF 450 VL	25 µF 250 VL		
		CKm 80E	16 µF 450 VL	60 µF 300 VL		
		CKm 90E	20 µF 450 VL	60 µF 300 VL		

- 8 ELECTRIC MOTOR** CKm: single-phase 230 V - 50 Hz with thermal overload protector built-in to the winding.  
 CK: three-phase 230/400 V - 50 Hz.
- ➔ **Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance**
- Insulation: F class.
  - 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	n	n1	w	s	1~	3~
CKm 50	CK 50	3/4"	3/4"	41	250	152	128	23	151	75	80	120	100	69	7	7.4	6.8
CKm 50-BP	CK 50-BP			45	254											10.8	9.9
CKm 80E	CK 80E	1"	1"	50	296	180	136	31	167	81	90	140	112	77		10.9	10.0
CKm 90E	CK 90E			10.9	10.0												

## ABSORPTION

MODEL	VOLTAGE (single-phase)		
Single-phase	230 V	240 V	110 V
CKm 50	3.0 A	2.9 A	6.2 A
CKm 50-BP	3.0 A	2.9 A	6.2 A
CKm 80E	5.0 A	4.8 A	9.8 A
CKm 90E	4.8 A	4.4 A	9.4 A

MODEL	VOLTAGE (three-phase)					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
CK 50	2.1 A	1.2 A	0.7 A	2.0 A	1.2 A	0.7 A
CK 50-BP	2.1 A	1.2 A	0.7 A	2.0 A	1.2 A	0.7 A
CK 80E	3.5 A	2.0 A	1.2 A	3.4 A	2.0 A	1.2 A
CK 90E	3.5 A	2.0 A	1.2 A	3.4 A	2.0 A	1.2 A

## PALLETIZATION

MODEL		GROUPAGE				CONTAINER			
Single-phase	Three-phase	n° pumps	H (mm)	kg		n° pumps	H (mm)	kg	
				1~	3~			1~	3~
CKm 50	CK 50	120	1280	910	840	180	1850	1350	1240
CKm 50-BP	CK 50-BP	120	1280	910	840	180	1850	1350	1240
CKm 80E	CK 80E	102	1370	1120	1030	136	1780	1490	1370
CKm 90E	CK 90E	102	1370	1130	1040	136	1780	1500	1380

