



PERFORMANCE RANGE

- Flow rate up to **180 l/min** (10.8 m³/h)
- Head up to **103 m**

APPLICATION LIMITS

- Manometric suction lift up to **7 m**
- Liquid temperature between **-10 °C** and **+40 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure **10 bar**
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1	EN 60034-1	
IEC 60335-1	IEC 60034-1	
CEI 61-150	CEI 2-3	

REGULATION (EU) N. 547/2012

CERTIFICATIONS



INSTALLATION AND USE

Suitable for use with clean water and liquids that are not chemically aggressive towards the materials from which the pump is made. The high efficiency and adaptability of these pumps to even the most unusual of applications, makes them ideal for use in the domestic, civil and industrial sectors; in particular for the distribution of water in combination with pressure sets and for pressure boosting.

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

OPTIONALS AVAILABLE ON REQUEST

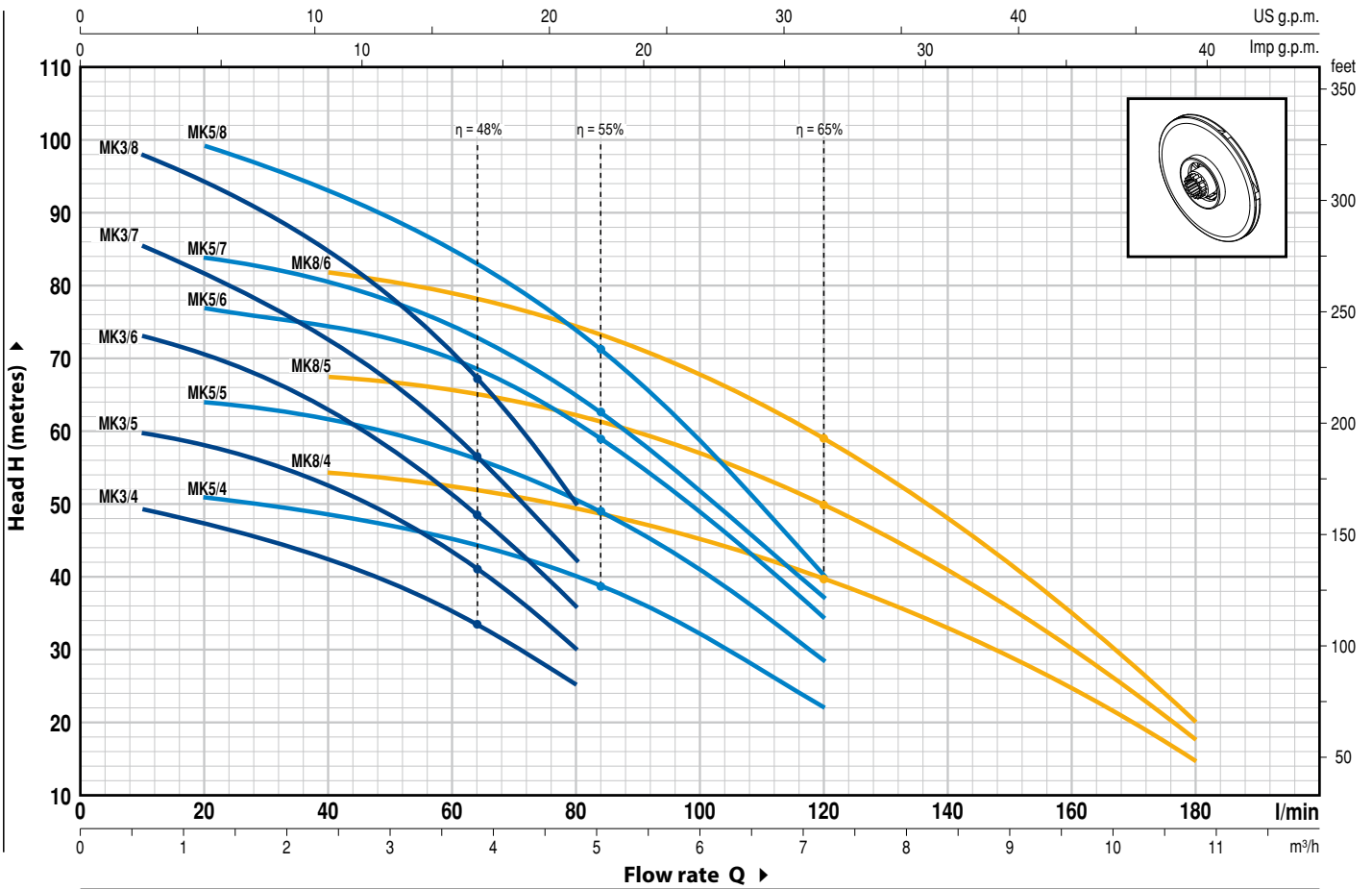
- Suction and delivery ports with threaded flanges in compliance with ISO 228/1 (1" - 1¼" - 1½")
- Other voltages or 60 Hz frequency

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		m ³ /h	0	0.6	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8			
				l/min	0	10	20	40	60	80	100	120	140	160	180				
MK3/4	MK 3/4	0.75	1	H metres	50	49	47	42.5	35	25									
MK3/5	MK 3/5	0.75	1		62	60	58.5	52.5	43.5	30									
MK3/6	MK 3/6	1.1	1.5		75	73	70	62.5	51.5	36									
MK3/7	MK 3/7	1.1	1.5		88	85	81.5	73	59.5	42									
MK3/8	MK 3/8	1.5	2		100	98	94	85	70.5	50									
MK5/4	MK 5/4	1.1	1.5		53	-	51	48	45	40	32	22							
MK5/5	MK 5/5	1.5	2		67	-	64	61	57.5	51	41.5	29							
MK5/6	MK 5/6	1.8	2.5		80	-	77	74	70	61	49	34							
MK5/7	MK 5/7	2.2	3		87	-	84	80	75	64.5	51.5	37							
MK5/8	MK 5/8	2.2	3		103	-	99	93	85	74.5	58.5	40							
MK8/4	MK 8/4	1.5	2		56.0	-	-	54.0	52.0	50.0	46.0	39.0	31.5	24.0	15.0				
MK8/5	MK 8/5	1.8	2.5		70.0	-	-	67.5	66.0	63.0	58.0	50.0	40.0	30.0	18.0				
MK8/6	MK 8/6	2.2	3		86.0	-	-	82.0	78.0	74.0	68.0	58.0	46.5	35.0	20.0				

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

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

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS				
1	SUCTION BODY	Cast iron, complete with threaded suction port in compliance with ISO 228/1				
2	EXTERNAL SLEEVE	Stainless steel AISI 304				
3	DELIVERY BODY	Cast iron, complete with threaded suction port in compliance with ISO 228/1				
4	IMPELLERS AND DIFFUSERS	Noryl GFN2V				
5	DIAPHRAGMS	Stainless steel AISI 304 complete with anti-wear rings				
6	MOTOR SHAFT	Stainless steel EN 10088-3 - 1.4104				
7	MECHANICAL SEAL	<i>Shaft</i>	<i>Position</i>	<i>Materials</i>		
		<i>Diameter</i>		<i>Stationary ring</i>	<i>Rotational ring</i>	<i>Elastomer</i>
		FN-18	Ø 18 mm	Graphite	Ceramic	NBR

8 BEARINGS

Model

6304 ZZ / 6204 ZZ

9 CAPACITOR

<i>Pump</i>	<i>Capacitance</i>	
<i>Single-phase</i>	<i>(230 V or 240 V)</i>	<i>(110 V)</i>
MKm 3/4	25 µF 450 VL	60 µF 250 VL
MKm 3/5	25 µF 450 VL	60 µF 250 VL
MKm 3/6	25 µF 450 VL	60 µF 250 VL
MKm 3/7	25 µF 450 VL	60 µF 250 VL
MKm 3/8	31.5 µF 450 VL	60 µF 250 VL
MKm 5/4	25 µF 450 VL	60 µF 250 VL
MKm 5/5	31.5 µF 450 VL	60 µF 250 VL
MKm 5/6	45 µF 450 VL	-
MKm 5/7	50 µF 450 VL	-
MKm 5/8	50 µF 450 VL	-
MKm 8/4	31.5 µF 450 VL	60 µF 250 VL
MKm 8/5	45 µF 450 VL	-
MKm 8/6	50 µF 450 VL	-

10 ELECTRIC MOTOR

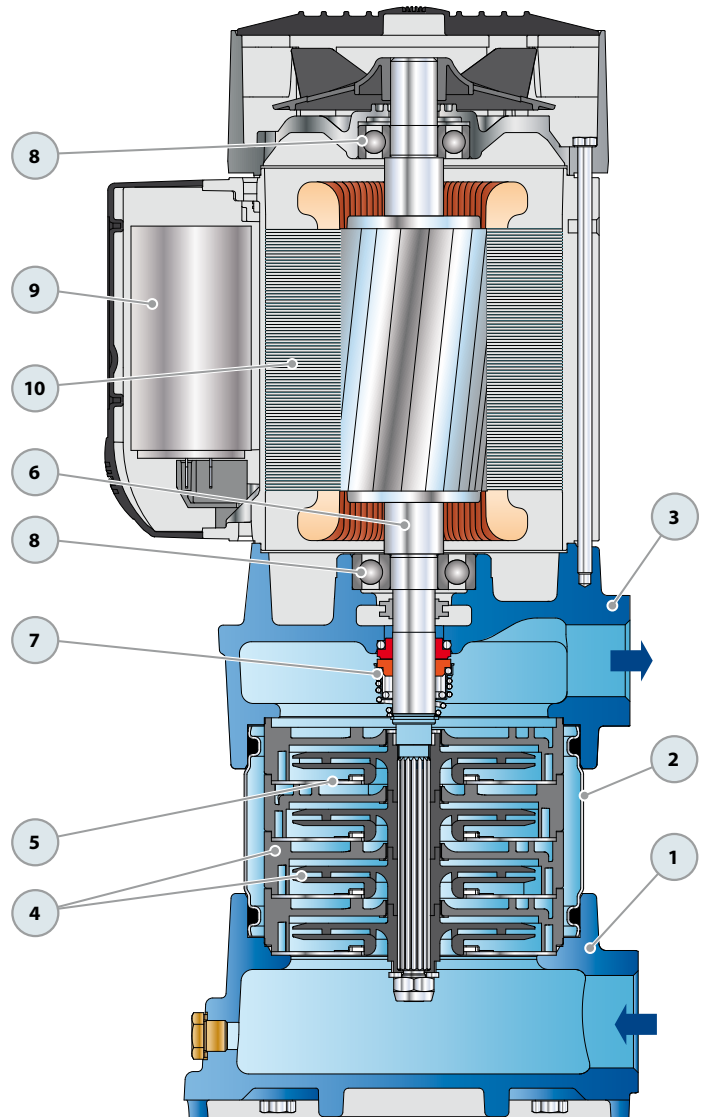
⇒ Pumps fitted with the three-phase motor option offer IE2 (IEC 60034-30) class high performance

MKm: single-phase 230 V - 50 Hz
with thermal overload protector built-in to the winding.

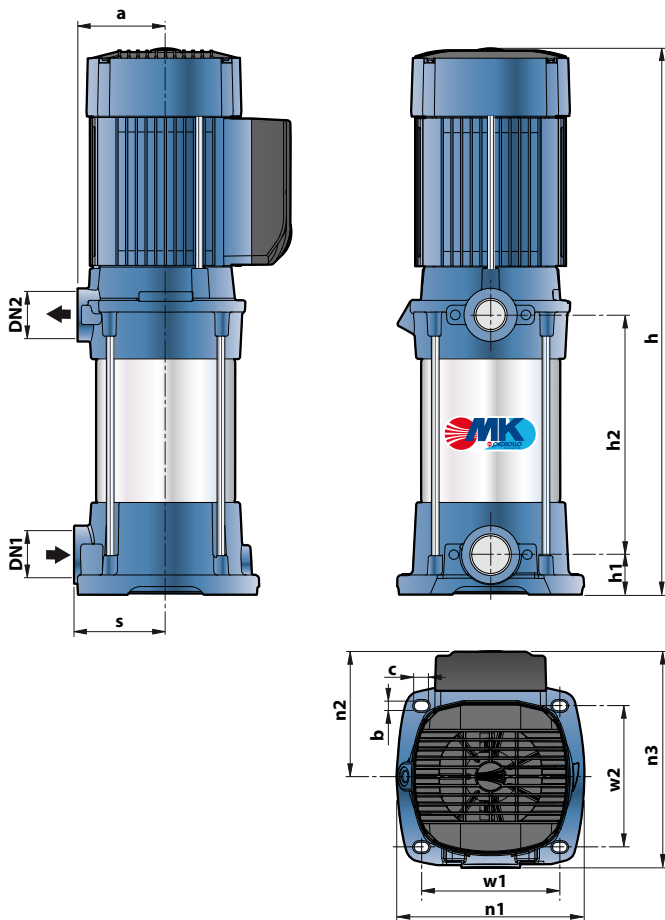
MK: three-phase 230/400 V - 50 Hz.

- Insulation: F class.

- Protection: IP X4.



DIMENSIONS AND WEIGHT



ABSORPTION

MODEL	VOLTAGE (single-phase)		
	230 V	240 V	110 V
Single-phase	230 V	240 V	110 V
MKm 3/4	5.0 A	4.8 A	10.0 A
MKm 3/5	6.0 A	5.8 A	12.0 A
MKm 3/6	6.5 A	6.3 A	13.0 A
MKm 3/7	7.0 A	6.8 A	14.0 A
MKm 3/8	9.0 A	8.7 A	18.0 A
MKm 5/4	6.5 A	6.3 A	13.0 A
MKm 5/5	8.5 A	8.2 A	17.0 A
MKm 5/6	9.5 A	9.1 A	19.0 A
MKm 5/7	10.5 A	10.2 A	21.0 A
MKm 5/8	11.5 A	11.0 A	23.0 A
MKm 8/4	8.5 A	8.2 A	17.0 A
MKm 8/5	9.5 A	9.1 A	19.0 A
MKm 8/6	11.5 A	11.0 A	23.0 A

MODEL	VOLTAGE (three-phase)					
	230 V	400 V	690 V	240 V	415 V	720 V
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
MKm 3/4	3.5 A	2.0 A	1.2 A	3.4 A	2.0 A	1.2 A
MKm 3/5	4.2 A	2.4 A	1.4 A	4.0 A	2.3 A	1.3 A
MKm 3/6	4.8 A	2.8 A	1.6 A	4.6 A	2.7 A	1.6 A
MKm 3/7	5.2 A	3.0 A	1.7 A	5.0 A	2.9 A	1.7 A
MKm 3/8	5.5 A	3.2 A	1.8 A	5.3 A	3.1 A	1.8 A
MKm 5/4	4.8 A	2.8 A	1.6 A	4.6 A	2.7 A	1.6 A
MKm 5/5	5.2 A	3.0 A	1.7 A	5.0 A	2.9 A	1.7 A
MKm 5/6	6.1 A	3.5 A	2.0 A	5.8 A	3.4 A	2.0 A
MKm 5/7	7.8 A	4.5 A	2.6 A	7.5 A	4.3 A	2.5 A
MKm 5/8	8.7 A	5.0 A	2.9 A	8.3 A	4.8 A	2.8 A
MKm 8/4	5.2 A	3.0 A	1.7 A	5.0 A	2.9 A	1.7 A
MKm 8/5	6.1 A	3.5 A	2.0 A	5.8 A	3.4 A	2.0 A
MKm 8/6	8.7 A	5.0 A	2.9 A	8.3 A	4.8 A	2.8 A

MODEL		PORTS		N° STAGES	DIMENSIONS mm										kg			
Single-phase	Three-phase	DN1	DN2		a	s	h	h1	h2	w1	w2	n1	n2	n3	b	c	1~	3~
MKm 3/4	MKm 3/4	1 1/4"	1"	4	91	94.5	41.5	469	143	146	194	130	225	9.5	14.5	22.3	21.6	
MKm 3/5	MKm 3/5			5				493								176	23.1	22.4
MKm 3/6	MKm 3/6			6				517								200	23.9	23.2
MKm 3/7	MKm 3/7			7				541								224	24.7	24.0
MKm 3/8	MKm 3/8			8				565								248	26.6	25.6
MKm 5/4	MKm 5/4			4				469								152	22.3	21.6
MKm 5/5	MKm 5/5			5				493								176	24.3	23.4
MKm 5/6	MKm 5/6			6				517								200	25.8	25.0
MKm 5/7	MKm 5/7	7	541	224	27.3	26.6												
MKm 5/8	MKm 5/8	8	565	248	28.0	27.3												
MKm 8/4	MKm 8/4	4	469	152	23.6	22.7												
MKm 8/5	MKm 8/5	5	493	176	25.1	24.3												
MKm 8/6	MKm 8/6	6	517	200	26.6	25.9												

PALLETIZATION

MODEL		GROUPAGE / CONTAINER			
Single-phase	Three-phase	n° pumps	H (mm)	kg	
				1~	3~
MKm 3/4	MKm 3/4	35	1440	798	773
MKm 3/5	MKm 3/5	35	1440	826	801
MKm 3/6	MKm 3/6	35	1440	854	829
MKm 3/7	MKm 3/7	35	1440	882	857
MKm 3/8	MKm 3/8	35	1440	948	913
MKm 5/4	MKm 5/4	35	1440	798	773
MKm 5/5	MKm 5/5	35	1440	868	836
MKm 5/6	MKm 5/6	35	1440	920	892
MKm 5/7	MKm 5/7	35	1440	973	948
MKm 5/8	MKm 5/8	35	1440	997	973
MKm 8/4	MKm 8/4	35	1440	843	812
MKm 8/5	MKm 8/5	35	1440	896	868
MKm 8/6	MKm 8/6	35	1440	948	924

REGULATION (EU) N. 547/2012

- Minimum efficiency index $MEI \geq 0,10$ for water pumps according to the (EU) Regulation current from the 1th of January 2013.
- The benchmark for most efficient water pumps is $MEI \geq 0,70$.
- The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.
- The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.
- Information on benchmark efficiency is available www.europump.org/efficiencycharts.