



-  Clean water
-  Domestic use
-  Civil use
-  Agricultural use

### PERFORMANCE RANGE

- Flow rate up to **180 l/min** (10.8 m<sup>3</sup>/h)
- Head up to **114 m**

### INSTALLATION AND USE

Compact and cost-effective vertical multistage centrifugal pumps suitable for water supply, clean liquids, and pressurization in domestic, civil, and agricultural systems, as well as irrigation.

### ELECTRIC MOTOR

The three-phase pumps are equipped with newly developed electric motors designed to work with inverters, which guarantee stable and quiet operation.

Efficiency class **IE3** for three-phase motors and **IE2** for single-phase motors, with class F insulation and IPX4 protection.

### APPLICATION LIMITS

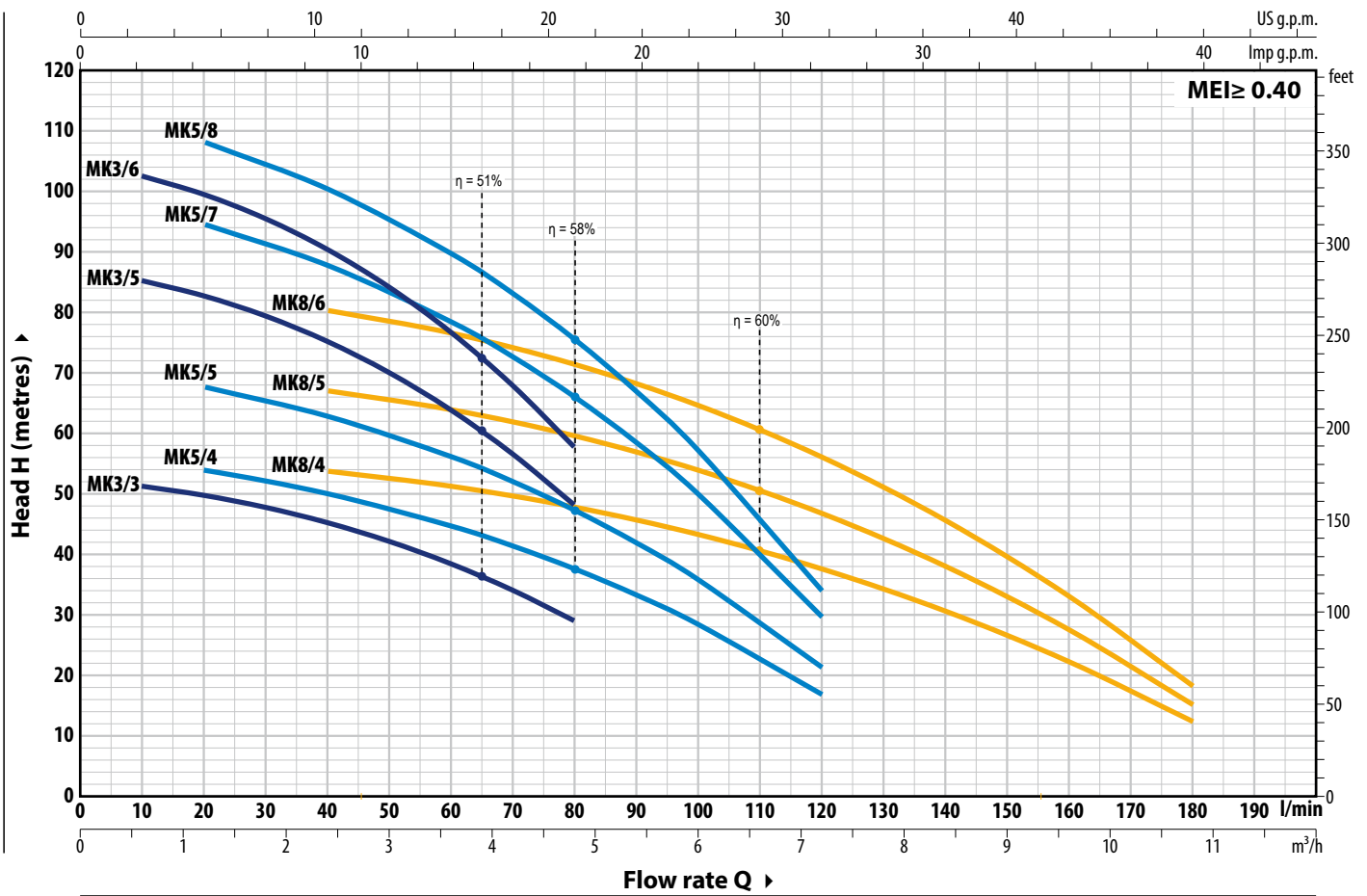
- Manometric suction head up to **7 m**
- Liquid temperature between **-10 °C** and **+60 °C**
- Ambient temperature up to **+40 °C**
- Maximum working pressure **11 bar**

### AVAILABLE UPON REQUEST

- ✘ Different voltage requirements 60 Hz frequency

**CURVES AND PERFORMANCE DATA – HS=0 m**

**50 Hz**



TYPE		POWER (P <sub>2</sub> )		1~3~	Q	H metres											
Single-ph.	Three-ph.	kW	HP			m <sup>3</sup> /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	
MKm 3/3	MK 3/3	0.75	1	IE2 IE3		52.5	51.5	50	45	38.5	29						
MKm 3/5	MK 3/5	1.1	1.5			87	85	83	75	64	48						
MKm 3/6	MK 3/6	1.5	2			105	103	100	90	77	58						
MKm 5/4	MK 5/4	0.75	1			57	–	54	50	45	37.5	28.5	17				
MKm 5/5	MK 5/5	1.1	1.5			71	–	67.5	62.5	56	47	35.5	21.5				
MKm 5/7	MK 5/7	1.5	2			99	–	95	88	78	66	50	30				
MKm 5/8	MK 5/8	2.2	3			114	–	108	100	90	75	57	34				
MKm 8/4	MK 8/4	1.1	1.5			56	–	–	53.5	51	47.5	43	37.5	30.5	22.1	12	
MKm 8/5	MK 8/5	1.5	2			70	–	–	67	64	59.5	54	47	38	27.5	15.5	
MKm 8/6	MK 8/6	2.2	3		84	–	–	80	77	72	64.5	56	45.5	33	18.5		

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

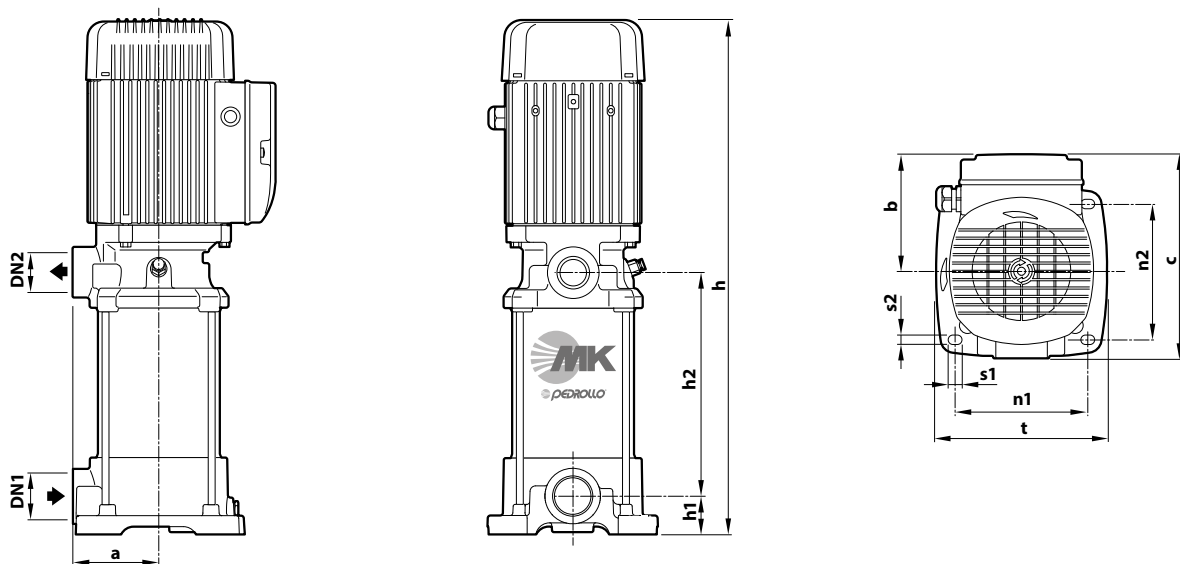
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

### ABSORPTION

TYPE	VOLTAGE
<b>Single-ph.</b>	<b>230 V</b>
<b>MKm 3/3</b>	5.7 A
<b>MKm 3/5</b>	7.8 A
<b>MKm 3/6</b>	9.5 A
<b>MKm 5/4</b>	5.7 A
<b>MKm 5/5</b>	7.1 A
<b>MKm 5/7</b>	9.3 A
<b>MKm 5/8</b>	10.0 A
<b>MKm 8/4</b>	7.8 A
<b>MKm 8/5</b>	9.7 A
<b>MKm 8/6</b>	11.1 A

TYPE	VOLTAGE	
	<b>230 V - Δ</b>	<b>400 V - ƿ</b>
<b>Three-ph.</b>		
<b>MK 3/3</b>	4.2 A	2.4 A
<b>MK 3/5</b>	5.2 A	3.0 A
<b>MK 3/6</b>	6.1 A	3.5 A
<b>MK 5/4</b>	4.3 A	2.5 A
<b>MK 5/5</b>	4.7 A	2.7 A
<b>MK 5/7</b>	6.1 A	3.5 A
<b>MK 5/8</b>	7.4 A	4.3 A
<b>MK 8/4</b>	5.2 A	3.0 A
<b>MK 8/5</b>	6.1 A	3.5 A
<b>MK 8/6</b>	7.8 A	4.5 A

### DIMENSIONS AND WEIGHT



TYPE		PORTS		DIMENSIONS mm										kg		
Single-ph.	Three-ph.	DN1	DN2	a	h	h1	h2	n1	n2	t	b	c	s1	s2	1~	3~
<b>MKm 3/3</b>	<b>MK 3/3</b>	<b>1 1/4"</b>	<b>1"</b>	93	447	41.5	132.5	143	146	185	127	220	14.5	10	21.3	20.0
<b>MKm 3/5</b>	<b>MK 3/5</b>				501		186.5								22.2	22.2
<b>MKm 3/6</b>	<b>MK 3/6</b>				528		213.5								24.0	24.0
<b>MKm 5/4</b>	<b>MK 5/4</b>				474		159.5								21.8	20.5
<b>MKm 5/5</b>	<b>MK 5/5</b>				501		186.5								21.9	22.0
<b>MKm 5/7</b>	<b>MK 5/7</b>				555		240.5								24.6	24.2
<b>MKm 5/8</b>	<b>MK 5/8</b>				602		267.5								25.5	24.5
<b>MKm 8/4</b>	<b>MK 8/4</b>				474		159.5								22.7	22.7
<b>MKm 8/5</b>	<b>MK 8/5</b>				501		186.5								23.4	23.0
<b>MKm 8/6</b>	<b>MK 8/6</b>				548		213.5								27.1	26.1

## MATERIALS AND COMPONENTS

**1 Suction body** Cast iron with cathaphoresis treatment, provided with ISO 228/1 threaded suction port

**2 External sleeve** Stainless steel **AISI 304**

**3 Delivery port** Cast iron with cathaphoresis treatment, provided with ISO 228/1 threaded delivery port

**4 Impellers and diffusers** Noryl™

**5 Diaphragms.** **AISI 304** stainless steel complete with wear rings

**6 Mechanical seal**

Seal	Shaft	Materials
<b>FN-18</b>	Ø 18 mm	Graphite / Ceramic / NBR

**7 Motor shaft** Stainless steel **AISI 431**

**8 Electric motor**

**MKm:** single-phase 230 V - 50 Hz with capacitor and winding integrated thermal motor protection

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

※ Pumps are equipped with high-efficiency motors (IEC 60034-30-1)

class **IE2** for single-phase models

class **IE3** for three-phase models

Continuous running duty **S1**

