

-  Clean water
-  Domestic use
-  Civil use



### ※ Quiet, energy-efficient stainless steel multi-stage pumps

- ※ Pump body: **Stainless steel AISI 304**
- ※ Cover: **Stainless steel AISI 304**
- ※ Impellers: **Stainless steel AISI 304**
- ※ Shaft: **Stainless steel AISI 431**

### PERFORMANCE RANGE

- Flow rate up to **130 l/min** (7.8 m<sup>3</sup>/h)
- Head up to **67 m**

### INSTALLATION AND USE

Quiet performance and efficient energy use make them perfect for water supply and pressurization tasks. They integrate with pressure tanks for optimal water distribution, making them suitable for a wide range of uses from industrial applications to irrigation systems.

### 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.

### KEY FEATURES

- ※ Stainless steel components extend service life and enhance efficiency.
- ※ Multi-stage design results in exceptionally quiet operation.

### APPLICATION LIMITS

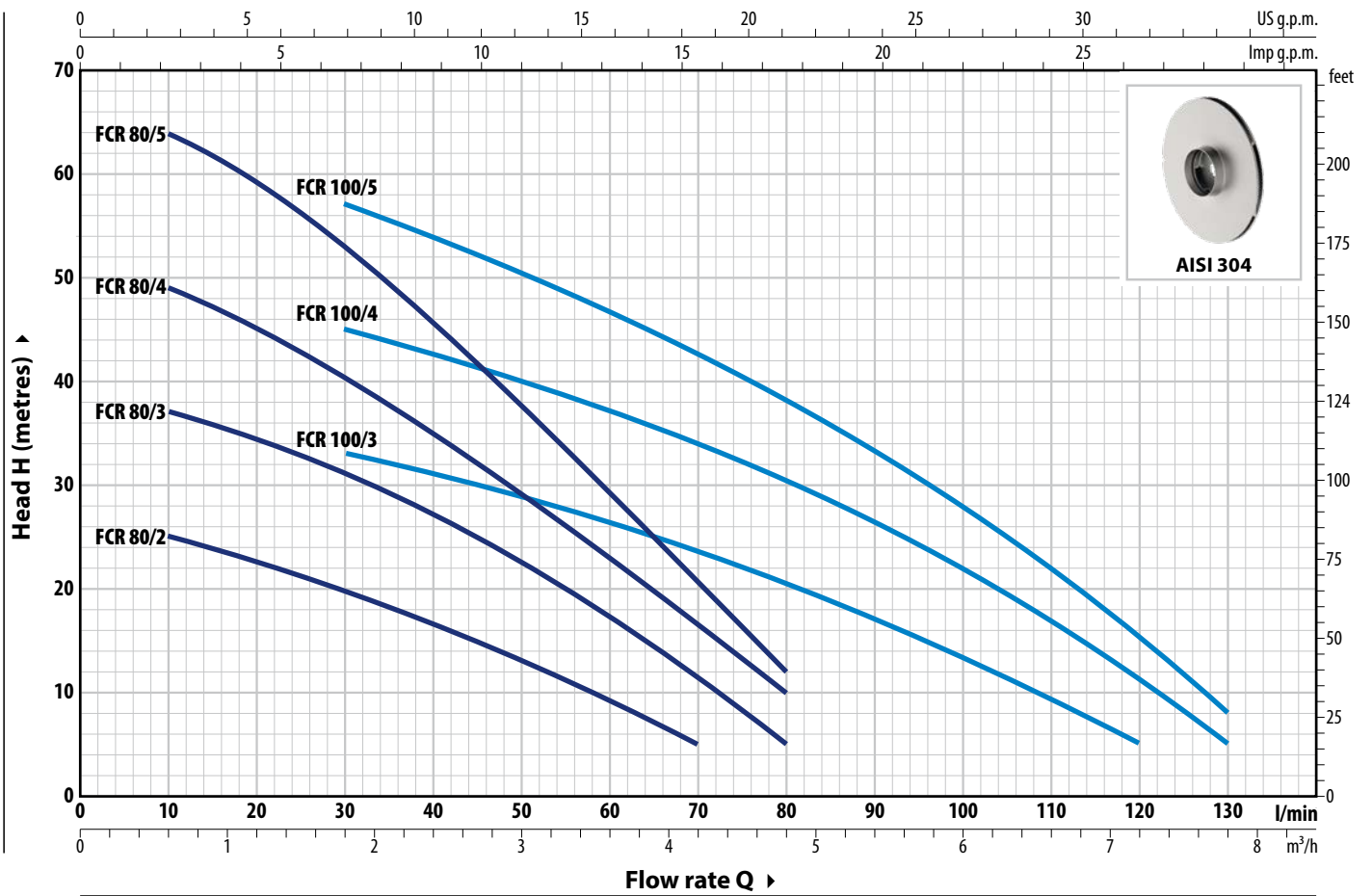
- Manometric suction head up to **7 m**
- Liquid temperature between **-10 °C** and **+60 °C**
- Ambient temperature up to **+40 °C**
- Maximum working pressure **7 bar**

### AVAILABLE UPON REQUEST

- ※ Mechanical seal options available
- ※ Different voltage requirements 60 Hz frequency
- ※ Certified pumps 

**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			0	0.3	0.6	0.9	1.2	1.5	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.8			
					l/min	0	5	10	15	20	25	30	40	50	60	70	80	90	100	110	120	130			
FCRm 80/2	FCR 80/2	0.30	0.40	IE2 IE3	H metres	27	26	25	24	22.5	21	20	16.5	13	9	5									
FCRm 80/3	FCR 80/3	0.45	0.60			40	38	37	36	34.5	33	31	27	22.5	17	11	5								
FCRm 80/4	FCR 80/4	0.55	0.75			52	50	49	47	44.5	42	40	34	28.5	22.5	16	10								
FCRm 80/5	FCR 80/5	0.75	1			67	66	64	62	59	56	53	45.5	37.5	29.5	20.5	12								
FCRm 100/3	FCR 100/3	0.55	0.75			38	37	36	35	34.5	33.5	33	31	28	26	23	20	17	13.5	10	5				
FCRm 100/4	FCR 100/4	0.75	1			50	50	49	48	47	46	45	42	39.5	37	34	30.5	26.5	22	17	11	5			
FCRm 100/5	FCR 100/5	0.90	1.25			63	62	61.5	60.5	59.5	58	57	53.5	50.5	46.5	42.5	38	33	28	22	15	8			

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

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

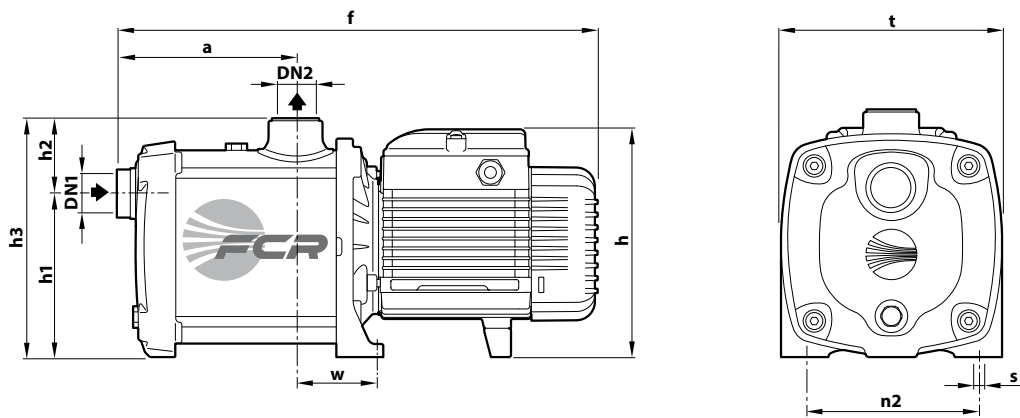
## ABSORPTION

TYPE	VOLTAGE
<b>Single-phase</b>	<b>230 V</b>
<b>FCRm 80/2</b>	2.1 A
<b>FCRm 80/3</b>	3.2 A
<b>FCRm 80/4</b>	3.9 A
<b>FCRm 80/5</b>	5.5 A
<b>FCRm 100/3</b>	3.9 A
<b>FCRm 100/4</b>	5.8 A
<b>FCRm 100/5</b>	6.8 A

TYPE	VOLTAGE	
	230 V - $\Delta$	400 V - $\text{Y}$
<b>FCR 80/2</b>	1.6 A	0.9 A
<b>FCR 80/3</b>	2.2 A	1.3 A
<b>FCR 80/4</b>	2.9 A	1.7 A
<b>FCR 80/5</b>	4.0 A	2.3 A
<b>FCR 100/3</b>	2.9 A	1.7 A
<b>FCR 100/4</b>	4.0 A	2.3 A
<b>FCR 100/5</b>	4.3 A	2.5 A

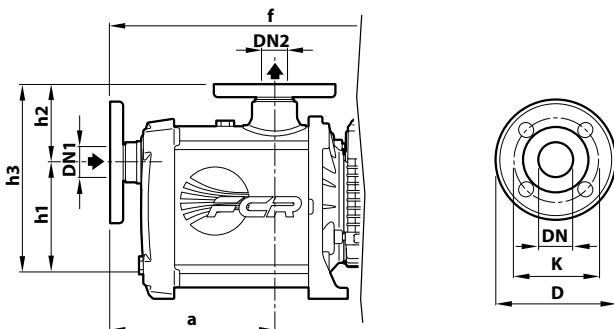
## DIMENSIONS AND WEIGHT

### WITH THREADED PORTS



MODEL		PORTS		DIMENSIONS mm										kg	
Single-ph.	Three-ph.	DN1	DN2	a	f	h	h1	h2	h3	t	n2	w	s	1~	3~
<b>FCRm 80/2</b>	<b>FCR 80/2</b>	1"	1"	107	333	171	122	56	178	160	125	56.5	9	6.9	6.9
<b>FCRm 80/3</b>	<b>FCR 80/3</b>													7.9	7.9
<b>FCRm 80/4</b>	<b>FCR 80/4</b>			132	358	189								9.3	9.1
<b>FCRm 80/5</b>	<b>FCR 80/5</b>				377									11.8	11.8
<b>FCRm 100/3</b>	<b>FCR 100/3</b>			107	333	171								8.8	8.1
<b>FCRm 100/4</b>	<b>FCR 100/4</b>			132	377	189								11.6	11.6
<b>FCRm 100/5</b>	<b>FCR 100/5</b>	12.4	12.1												

### WITH FLANGED PORTS



TYPE	PORTS		DIMENSIONS mm				
	DN1	DN2	a	f	h1	h2	h3
<b>FCR 80/2</b>	25	25	129	355	122	78	200
<b>FCR 80/3</b>				380			
<b>FCR 80/4</b>			399				
<b>FCR 80/5</b>			129	355			
<b>FCR 100/3</b>			154	399			
<b>FCR 100/4</b>							
<b>FCR 100/5</b>							

FLANGE	D	K	HOLES	
			N°	Ø (mm)
<b>DN</b>	mm	mm		
<b>25</b>	85	115	4	14
<b>25</b>	85	115	4	14

## MATERIALS AND COMPONENTS

**1 Pump body** Stainless steel **AISI 304**, provided with ISO 228/1 threaded ports

**2 Cover** Stainless steel **AISI 304**

**3 Impellers** Stainless steel **AISI 304**

**4 Diffusers** Noryl™ complete with wear rings

<b>5 Mechanical seal</b>	Seal	Shaft	Materials
	<b>AR-13</b>	Ø 13 mm	Ceramic / Graphite / NBR

**6 Motor shaft** Stainless steel **AISI 431**

**7 Electric motor** **FCRm**: single-phase 230 V - 50 Hz with winding integrated thermal motor protection  
**FCR**: 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**

