

-  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**
- ※ Diffusers: **Stainless steel AISI 304**
- ※ Impellers: **Stainless steel AISI 304**
- ※ Shaft: **Stainless steel AISI 431**

#### PERFORMANCE RANGE

- Flow rate up to **240 l/min** (14.4 m<sup>3</sup>/h)
- Head up to **133 m**

#### INSTALLATION AND USE

Designed to transfer clean water free from abrasive particles and safe liquids that will not damage any of the pump's components. Highly reliable and quiet, they are suitable for domestic applications.

They work seamlessly with small to medium-sized pressure tanks, offering an ideal setup for all irrigation requirements.

#### 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 **+90 °C**
- Ambient temperature up to **+40 °C**
- Maximum working pressure **11 bar**

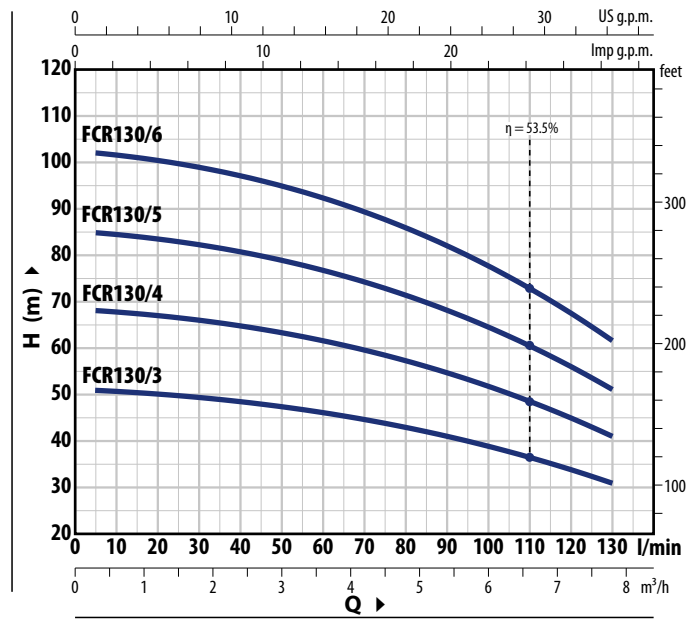
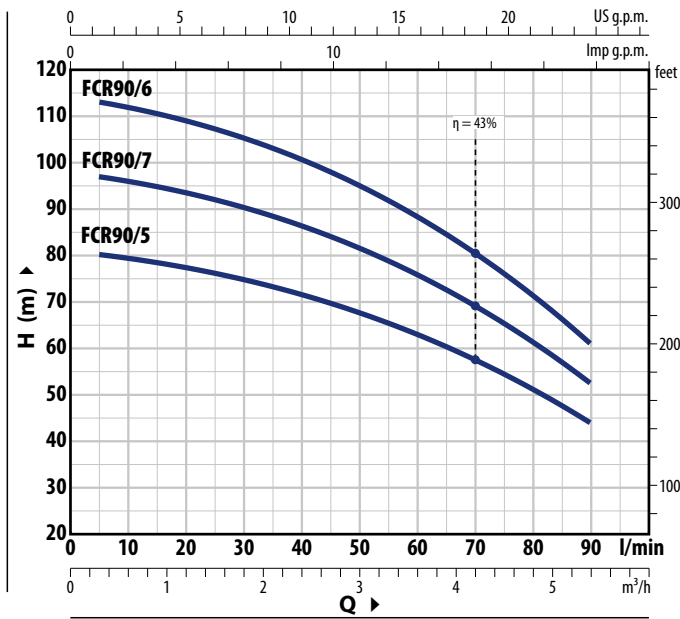
#### AVAILABLE UPON REQUEST

- ※ Technopolymer impeller (cost-effective version)
- ※ Mechanical seal options available
- ※ Different voltage requirements 60 Hz frequency
- ※ IPX5 protection
- ※ Certified pumps 
- ※ ISO 228/1 standard flanges for suction and discharge openings, made of AISI 304 stainless steel

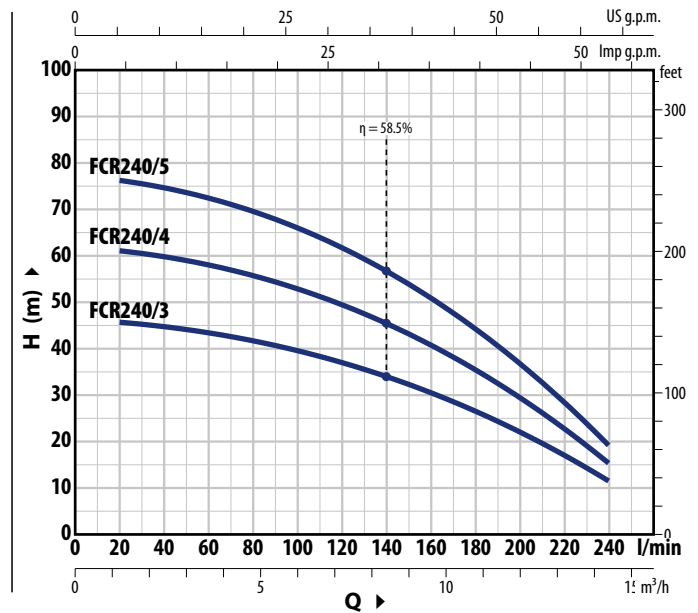
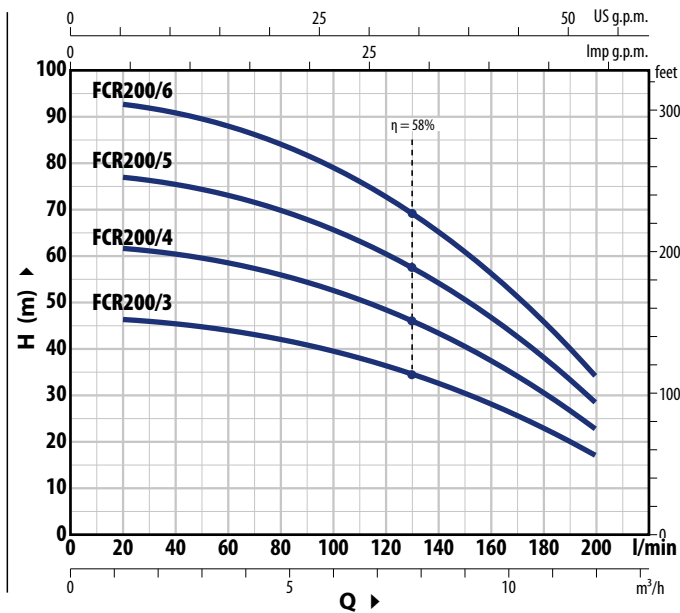


### CURVES AND PERFORMANCE DATA – HS=0 m

### 50 Hz



TYPE		POWER (P <sub>2</sub> )		1~3~	Q	m <sup>3</sup> /h										
Single-ph.	Three-ph.	kW	HP			0	0.3	0.6	1.2	2.4	3.6	4.8	5.4	6.0	7.8	
FCRm 90/5	FCR 90/5	1.1	1.5	IE2 IE3	H metres	0	5	10	20	40	60	80	90	100	130	
FCRm 90/6	FCR 90/6	1.5	2			81	80	79	77	71	62.5	51	44			
FCRm 90/7	FCR 90/7	1.8	2.5			97	96	95	93	86	75	61	52			
FCRm 130/3	FCR 130/3	1.1	1.5	IE2 IE3	H metres	0	0.3	0.6	1.2	2.4	3.6	4.8	5.4	6.0	7.8	
FCRm 130/4	FCR 130/4	1.5	2			51.5	51.5	51	50.5	49	46.5	43	41	39	31	
FCRm 130/5	FCR 130/5	1.8	2.5			68.5	68.5	68	67	65	62	57.5	55	52	41	
FCRm 130/6	FCR 130/6	2.2	3			86	85	85	84	81	77	72	68.5	65	51.5	
						103	103	102	101	98	93	86	82	78	62	



TIPO		POTENZA (P <sub>2</sub> )		1~3~	Q	m <sup>3</sup> /h													
Monofase	Trifase	kW	HP			0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0	13.2	14.4	
FCRm 200/3	FCR 200/3	1.1	1.5	IE2 IE3	H metres	0	20	40	60	80	100	120	140	160	180	200	220	240	
FCRm 200/4	FCR 200/4	1.5	2			47	46.5	45.5	44	42	39.5	36.5	32.5	28	23.1	17			
FCRm 200/5	FCR 200/5	1.8	2.5			62.5	62	60.5	58.5	56	53	48.5	43.5	37.5	31	23			
FCRm 200/6	FCR 200/6	2.2	3			78	77.5	76	73	70	66	61	54.5	47	38.5	28.5			
						94	93	91	88	84	79	73	65.5	56.5	46	34.5			
✳ FCRm 240/3	FCR 240/3	1.5	2	IE2 IE3	H metres	46.5	46	45	43.5	42	39.5	37	34	30.5	26.6	22	17	11.5	
✳ FCRm 240/4	FCR 240/4	1.8	2.5			62	61	60	58	55.5	53	49.5	45.5	41	35.5	29.5	22.8	15.5	
✳ FCRm 240/5	FCR 240/5	2.2	3			77	76.5	75	73	69.5	66	62	57	51	44.5	37	28.5	19	

Q = Portata H = Prevalenza manometrica totale HS = Altezza di aspirazione

Tolleranza delle curve di prestazione secondo EN ISO 9906 Grado 3B.

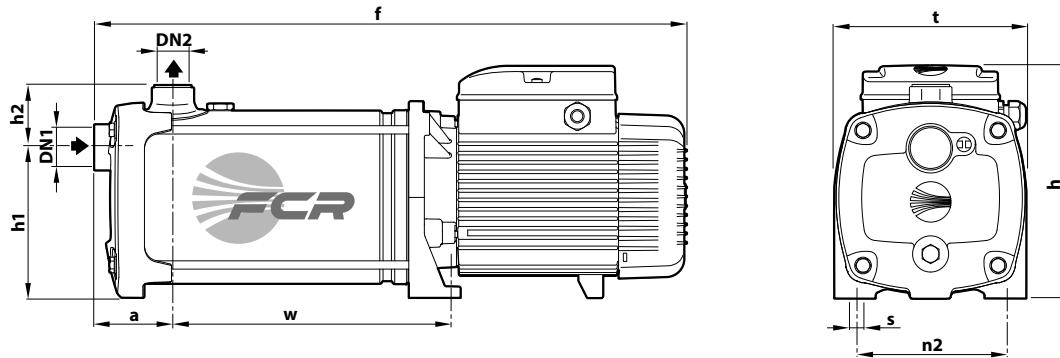
## ABSORPTION

TYPE	VOLTAGE
<b>Single-phase</b>	<b>230 V</b>
FCRm 90/5	9.0 A
FCRm 90/6	10.5 A
FCRm 90/7	12.5 A
FCRm 130/3	8.5 A
FCRm 130/4	10.3 A
FCRm 130/5	12.5 A
FCRm 130/6	13.5 A
FCRm 200/3	8.7 A
FCRm 200/4	10.5 A
FCRm 200/5	12.5 A
FCRm 200/6	14.0 A
FCRm 240/3	8.5 A
FCRm 240/4	10.5 A
FCRm 240/5	12.5 A

TYPE	VOLTAGE	
	230 V - Δ	400 V - 人
FCR 90/5	6.1 A	3.5 A
FCR 90/6	6.9 A	4.0 A
FCR 90/7	8.3 A	4.8 A
FCR 130/3	5.5 A	3.2 A
FCR 130/4	6.9 A	4.0 A
FCR 130/5	8.6 A	5.0 A
FCR 130/6	9.0 A	5.2 A
FCR 200/3	5.9 A	3.4 A
FCR 200/4	7.3 A	4.2 A
FCR 200/5	8.6 A	5.0 A
FCR 200/6	9.5 A	5.5 A
FCR 240/3	5.7 A	3.3 A
FCR 240/4	7.6 A	4.4 A
FCR 240/5	8.6 A	5.0 A

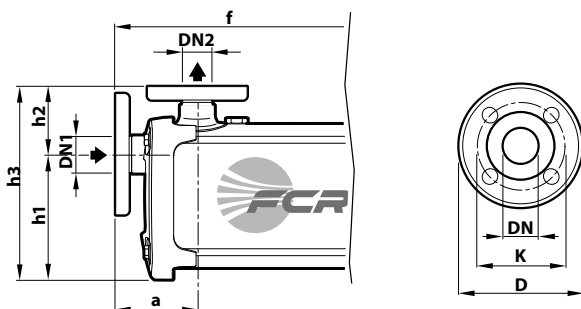
## DIMENSIONS AND WEIGHT

※ WITH THREADED PORTS



TYPE		PORTS		DIMENSIONS mm									kg	
Single-phase	Three-phase	DN1	DN2	a	f	h	h1	h2	t	n2	w	s	1~	3~
FCRm 90/5	FCR 90/5	1 1/4"	1"	75	492	228	145	59	185	145	191	11	20.0	20.0
FCRm 90/6	FCR 90/6				518						217		22.0	22.0
FCRm 90/7	FCR 90/7				564						243		25.7	25.7
FCRm 130/3	FCR 130/3				440						139		18.0	18.0
FCRm 130/4	FCR 130/4				466						165		20.2	20.2
FCRm 130/5	FCR 130/5				512						191		23.7	23.7
FCRm 130/6	FCR 130/6				538						217		24.7	24.7
FCRm 200/3	FCR 200/3				440						139		18.0	18.0
FCRm 200/4	FCR 200/4				466						165		20.2	20.2
FCRm 200/5	FCR 200/5				512						191		23.7	23.7
FCRm 200/6	FCR 200/6				538						217		24.7	24.7
FCRm 240/3	FCR 240/3				440						139		19.2	19.2
FCRm 240/4	FCR 240/4				486						165		22.7	22.7
FCRm 240/5	FCR 240/5				512						191		23.7	23.7

※ WITH FLANGED PORTS



TYPE	PORTS		DIMENSIONS mm				
	DN1	DN2	a	f	h1	h2	h3
FCR 90/5	25	32	97.5	515	145	82	227
FCR 90/6				541			
FCR 90/7				587			
FCR 130/3				463			
FCR 130/4				489			
FCR 130/5				535			
FCR 130/6				561			
FCR 200/3				463			
FCR 200/4				489			
FCR 200/5				535			
FCR 200/6				561			
FCR 240/3				463			
FCR 240/4				509			
FCR 240/5				535			

FLANGES DN	D (mm)	K (mm)	N° HOLES	Ø (mm)
25	85	115	4	14
32	100	140	4	18

## MATERIALS AND COMPONENTS

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

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

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

**4 Diffusers** Stainless steel **AISI 304**

5 Mechanical seal	Seal	Shaft	Materials
	<b>FN-18</b>	Ø 18 mm	Graphite / Ceramic / 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**

