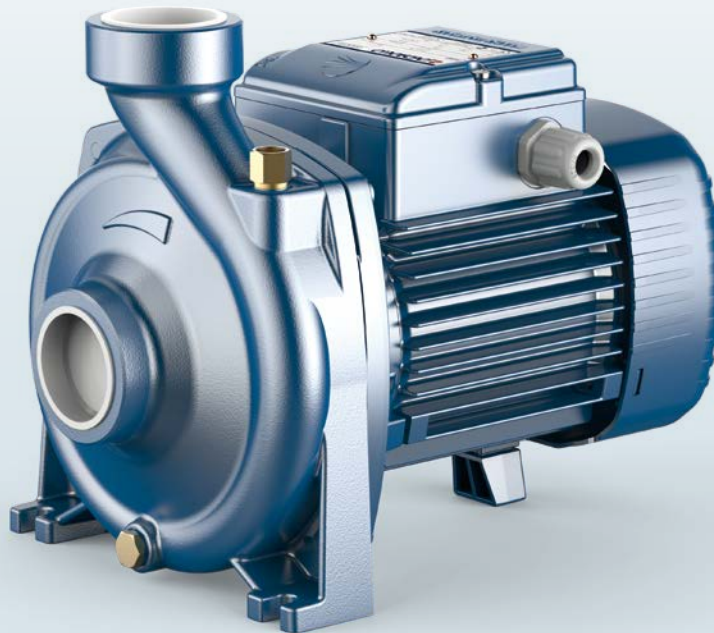


HF Centrifugal pumps

Medium flow range

-  Clean water
-  Agricultural use
-  Industrial use



PERFORMANCE RANGE

- Flow rate up to **700 l/min** (42 m³/h)
- Head up to **38 m**

INSTALLATION AND USE

Designed for civil and agricultural use.

Their high-efficiency levels and capability for continuous operation make them an ideal choice for furrow and sprinkler irrigation, in addition to drawing water from lakes, rivers, and wells. They are also suitable for a wide range of industrial applications that require substantial flow rates at medium-low head pressures.

APPLICATION LIMITS

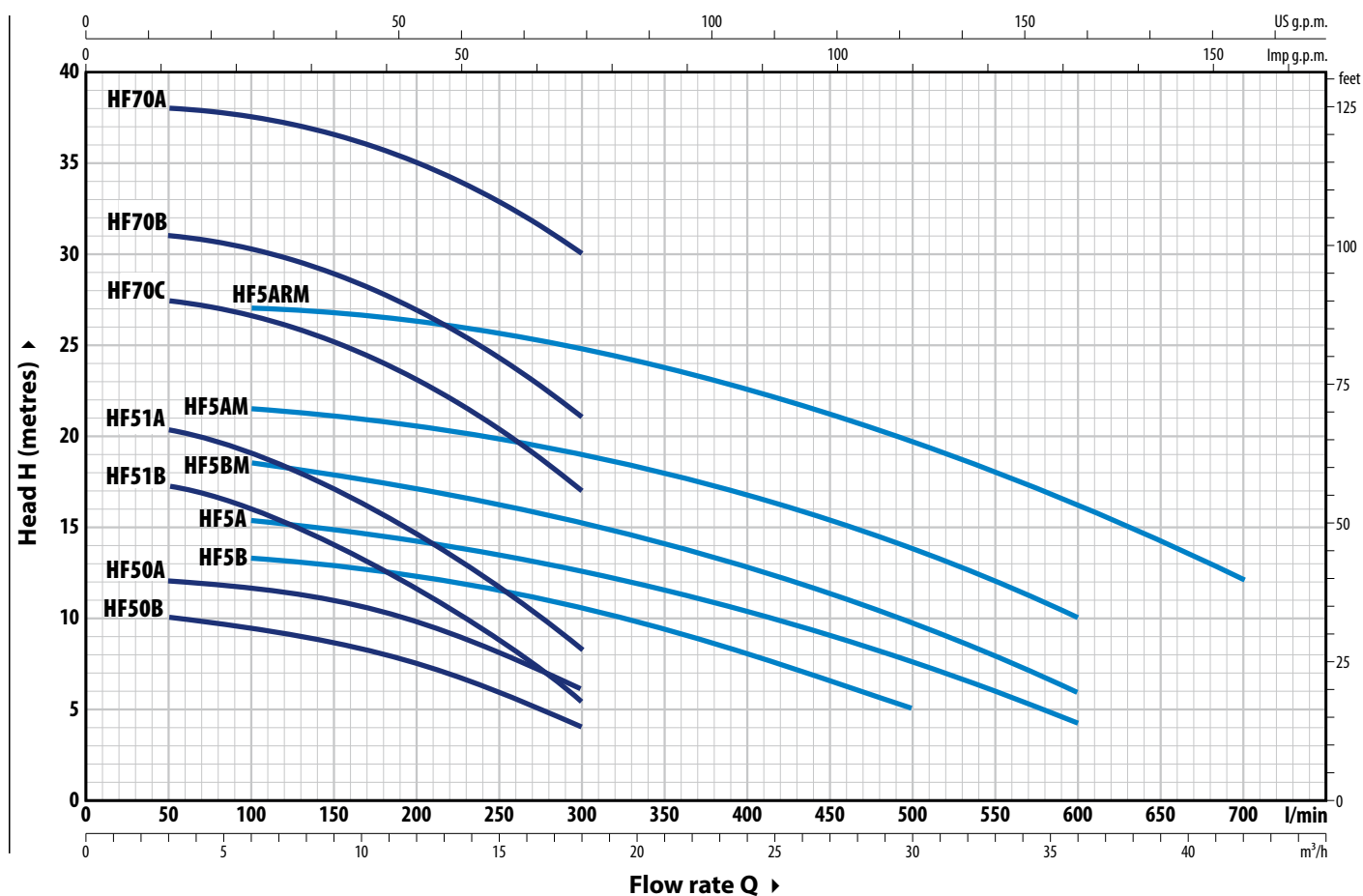
- Manometric suction head up to **7 m**
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Maximum working pressure:
 - **6 bar** for HF 5-50-51
 - **10 bar** for HF 5M-70

AVAILABLE UPON REQUEST

- ✗ Mechanical seal options available
- ✗ Different voltage or frequency
- ✗ IP X5 protection for HF 5M-70

CURVES AND PERFORMANCE DATA – HS=0 m

60 Hz



MODEL		POWER (P ₂)		3~	Q m³/h l/min	0	3	6	9	12	15	18	21	24	30	36	42		
Single-phase	Three-phase	kW	HP			0	50	100	150	200	250	300	350	400	500	600	700		
HFm 50B	HF 50B	0.37	0.50	IE2	H m	10	10	9.5	8.5	7.5	6	4							
HFm 50A	HF 50A	0.55	0.75			12	12	11.5	11	9.6	8	6							
HFm 51B	HF 51B	0.60	0.85	IE3		18.2	17.2	16	14	11.5	9	5.4							
HFm 51A	HF 51A	0.75	1			21.2	20.2	19	17	14.5	11.6	8.4							
HFm 70C	HF 70C	1.1	1.5			27.5	27.5	26.5	25.1	23	20.3	17							
HFm 70B	HF 70B	1.5	2			31	31	30.1	28.8	26.8	24.2	21							
–	HF 70A	2.2	3			38	38	37.5	36.5	35	32.8	30							
HFm 5B	HF 5B	0.75	1			IE3	13.7	–	13.2	13	12.5	11.6	10.5	9.2	8	5			
HFm 5A	HF 5A	1.1	1.5	16			–	15.4	14.9	14.2	13.5	12.6	11.5	10.4	7.6	4.3			
HFm 5BM	HF 5BM	1.1	1.5	19			–	18.5	18	17	16	15.2	14	12.8	9.7	6			
HFm 5AM	HF 5AM	1.5	2	22			–	21.5	21	20.5	19.8	19	18	16.8	13.8	10			
HFm 5ARM	HF 5ARM	2.2	3	27			–	27	26.8	26.4	25.6	24.8	23.8	22.5	19.8	16.2	12		

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

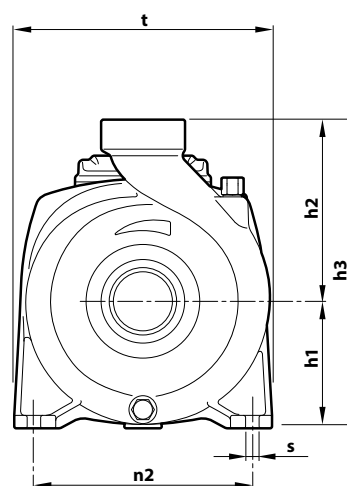
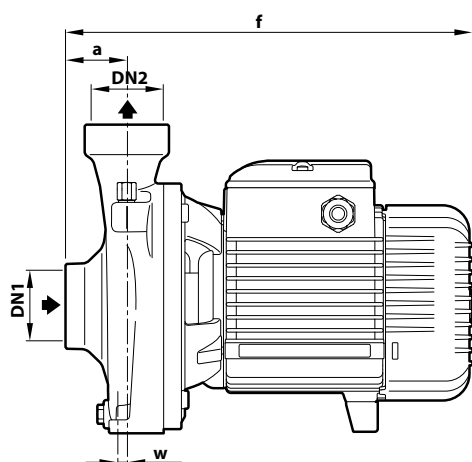
Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

ABSORPTION

TYPE	VOLTAGE	
	220 V	110 V
Single-ph.		
HFm 50B	2.5 A	5.0 A
HFm 50A	3.9 A	7.8 A
HFm 51B	4.6 A	9.2 A
HFm 51A	5.7 A	11.4 A
HFm 70C	8.0 A	–
HFm 70B	9.5 A	–
HFm 5B	6.1 A	12.2 A
HFm 5A	6.5 A	–
HFm 5BM	7.4 A	–
HFm 5AM	10.2 A	–
HFm 5ARM	13.0 A	–

TYPE	VOLTAGE			
	220 V - Δ	380 V - Δ	220 V - Δ	440 V - Δ
Three-ph.				
HF 50B	1.9 A	1.1 A	2.0 A	1.2 A
HF 50A	3.3 A	1.9 A	3.5 A	2.0 A
HF 51B	4.2 A	2.4 A	3.1 A	1.8 A
HF 51A	4.4 A	2.6 A	4.2 A	2.3 A
HF 70C	5.7 A	3.3 A	4.5 A	2.6 A
HF 70B	7.4 A	4.3 A	6.0 A	3.5 A
HF 70A	10.4 A	6.0 A	9.0 A	5.0 A
HF 5B	4.2 A	2.4 A	3.5 A	2.0 A
HF 5A	4.8 A	2.8 A	4.0 A	2.2 A
HF 5BM	5.9 A	3.4 A	4.8 A	2.8 A
HF 5AM	9.6 A	5.6 A	6.0 A	3.4 A
HF 5ARM	10.0 A	5.8 A	7.5 A	4.3 A

DIMENSIONS AND WEIGHT



TYPE		PORTS		DIMENSIONS mm									kg	
Single-ph.	Three-ph.	DN1	DN2	a	f	h1	h2	h3	t	n2	w	s	1~	3~
HFm 50B	HF 50B	1½"	1½"	42	270	82	118	200	166	135	-8	10	8.1	8.1
HFm 50A	HF 50A												8.9	8.2
HFm 51B	HF 51B			45	303	92	133	225	190	160	2		12.9	12.7
HFm 51A	HF 51A												13.2	13.2
HFm 70C	HF 70C			48.5	373	114	155	269	216	171	12	12	20.0	20.0
HFm 70B	HF 70B												21.5	21.5
—	HF 70A				393								—	24.3
HFm 5B	HF 5B	2"	2"	43	316	97	141	238	192	160	-68	10	14.1	14.1
HFm 5A	HF 5A												15.1	14.1
HFm 5BM	HF 5BM			59	386	110	150	260	208		12.5	11	20.3	20.3
HFm 5AM	HF 5AM												21.8	21.8
HFm 5ARM	HF 5ARM				406								24.6	24.6

MATERIALS AND COMPONENTS

- | | |
|--------------------|--|
| 1 Pump body | Cast iron with ISO 228/1 threaded ports |
| <hr/> | |
| 2 Cover | Stainless steel AISI 304 (cast iron for HF 5M-70) |

- | | |
|-------------------|--|
| 3 Impeller | Stainless steel AISI 304 HF50, HF51, HF70, HF5ARM |
|-------------------|--|

4 Mechanical seal	Water pump	Seal	Shaft	Materials
	HF 50	AR-12	Ø 12 mm	Ceramic / Graphite / NBR
	HF 5-51	AR-14	Ø 14 mm	Ceramic / Graphite / NBR
	HF 5M-70	FN-18	Ø 18 mm	Graphite / Ceramic / NBR

- | | |
|----------------------|---------------------------------|
| 5 Motor shaft | Stainless steel AISI 431 |
|----------------------|---------------------------------|

- 6 Electric motor**
- HFm:** single-phase 220 V - 60 Hz with winding integrated thermal motor protection
HF: three-phase 220/380 V - 60 Hz or 220/240 V - 60 Hz
- The three-phase pumps are fitted with high performance motors up to P₂=0.55 kW in class IE2 and from P₂=0.60 kW in class IE3 (IEC 60034-30-1)
 - Continuous running duty S1

