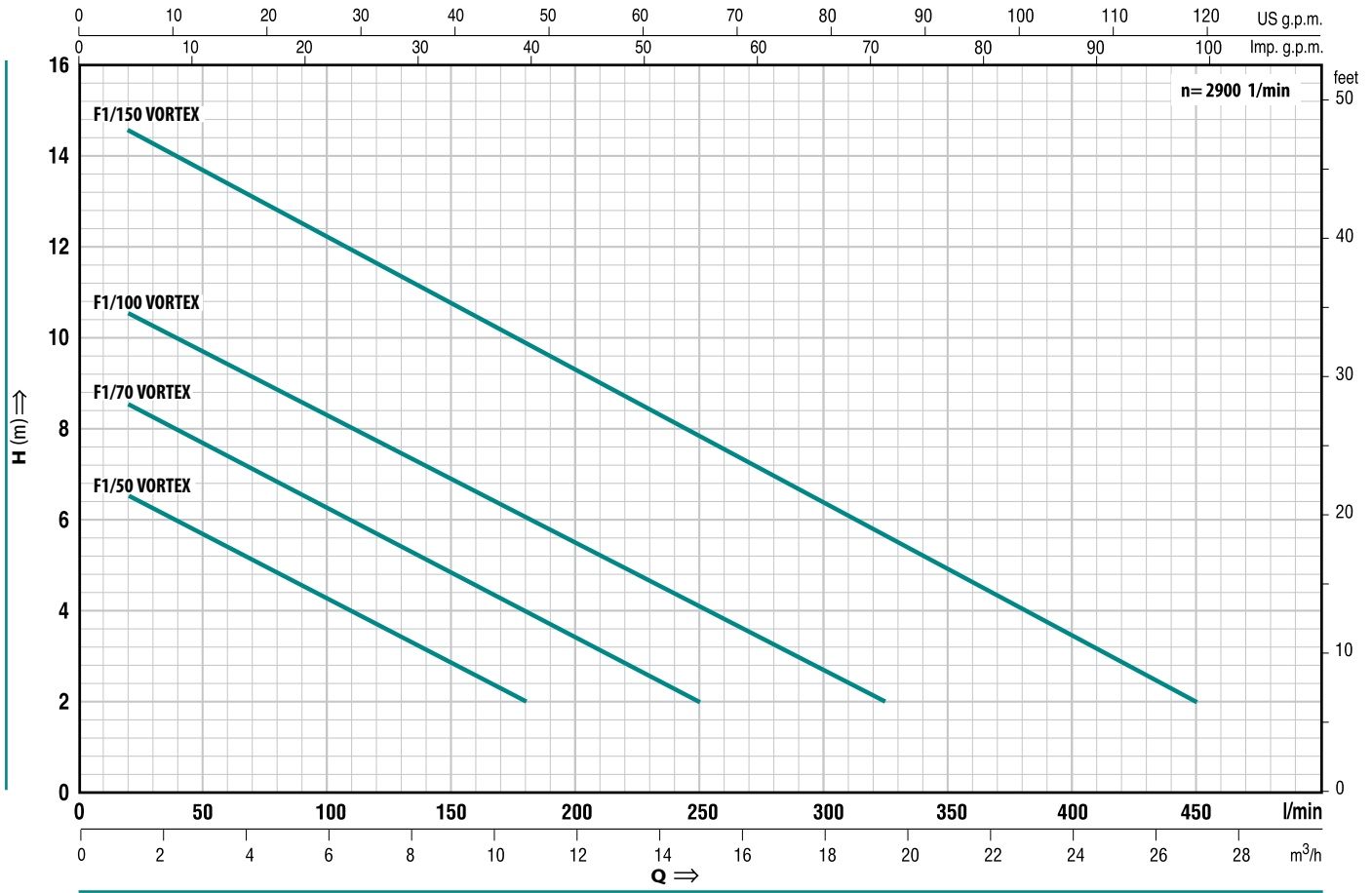




F1 VORTEX

VORTEX submersible pumps



Q = Flow rate H = Total manometric head

Tolerance of the performance curves according to EN ISO 9906 App. A.

TYPE		POWER		m³/h l/min	0	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8	12	15	18	19.5	21	24	27		
Single-phase	Three-phase	kW	HP		0	20	40	60	80	100	120	140	160	180	200	250	300	325	350	400	450		
F1/50M VORTEX	F1/50 VORTEX	0.37	0.50	H metres	7	6.5	6	5.4	4.8	4.3	3.7	3.1	2.5	2									
F1/70M VORTEX	F1/70 VORTEX	0.55	0.75		9	8.5	8	7.4	6.8	6.3	5.7	5.1	4.5	4	3.4	2							
F1/100M VORTEX	F1/100 VORTEX	0.75	1		11	10.5	10	9.4	8.8	8.3	7.7	7.1	6.6	6	5.5	4	2.7	2					
F1/150M VORTEX	F1/150 VORTEX	1.1	1.5		15	14.5	14	13.3	12.8	12.2	11.6	11	10.4	9.8	9.2	7.8	6.3	5.6	4.9	3.5	2		

DIMENSIONS AND WEIGHTS

TYPE		PORT DN	DIMENSIONS mm							kg	
Single-phase	Three-phase		a	h	h1	d	e	p	∅	1~	3~
F1/50M VORTEX	F1/50 VORTEX	1 1/4"	147	286	278	25	adjustable	350	350	5.9	5.7
F1/70M VORTEX	F1/70 VORTEX	1 1/2"	215	405	386	40		500	500	12.4	11.1
F1/100M VORTEX	F1/100 VORTEX									13.4	12.1
F1/150M VORTEX	F1/150 VORTEX									14.4	13.1



RANGE OF PERFORMANCE

Flow rate up to 450 l/min (27 m³/h)

Head up to 14.5 m

LIMITS OF USE

Depth up to 10 m

Liquid temperature up to + 50°C

Liquid temperature up to + 60°C for intermittent duty.

Liquid temperature up to + 90°C for intermittent duty maximum 3 minutes.

Passage of solid bodies:

up to 20 mm for F1/50 - up to 40 mm for F1/70-100-150

Drainage level from the bottom:

25 mm for F1/50 - 40 mm for F1/70-100-150

CONSTRUCTION CHARACTERISTICS

• **DELIVERY BODY:** stainless steel AISI 304, with threaded port ISO 228/1.

• **SUCTION GRID:** stainless steel AISI 304.

• **IMPELLER:** stainless steel AISI 304.

• **MOTOR SUPPORT:** stainless steel AISI 304.

• **MOTOR SHAFT:** stainless steel EN 10088-3 - 1.4104.

• **DOUBLE SEAL:** mechanical seal silicon carbide - NBR, with oil barrier chamber and inner lip seal to protect the seal in the event of dry running.

• **MOTOR:** submersible asynchronous single-phase for continuous duty.

F1 M VORTEX: single-phase 220÷240 V - 50 Hz with capacitor and thermal overload protector.

F1 VORTEX: three-phase 380÷415 V - 50 Hz.

• **INSULATION:** class F.

• **PROTECTION:** IP 68.

INSTALLATION AND USE

F1 VORTEX PUMPS ARE SUITABLE FOR DRAINING DIRTY WATER. THE CONSTRUCTION GUARANTEES SIMPLE AND SAFE OPERATION, DUE TO THE COMPLETE COOLING OF THE MOTOR BY THE PUMPED WATER.

THEY ARE RECOMMENDED FOR DOMESTIC USE, FOR DRAINING DIRTY WATER CONTAINING SUSPENDED SOLIDS.

GUARANTEE 2 YEARS subject to our general terms of sale.

STANDARD FEATURES:

F1 M VORTEX (single-phase)

• Float switch.

• Neoprene power cable "H05 RN-F"

• Length **5 metres** with Schuko plug.

F1 VORTEX (three-phase)

• Neoprene power cable "H05 RN-F"

• Length **5 metres**.

OPTIONS ON REQUEST

⇒ special mechanical seal

⇒ 10 metres power cable.

N.B. required for outdoor use to comply with standard EN 60335-2-41

⇒ control box for three-phase pumps 1.1 kW

⇒ single-phase versions without float switch

⇒ other voltages or frequency 60 Hz

CONSTRUCTION AND SAFETY STANDARDS

EN 60 335-1

EN 60034-1

IEC 335-1

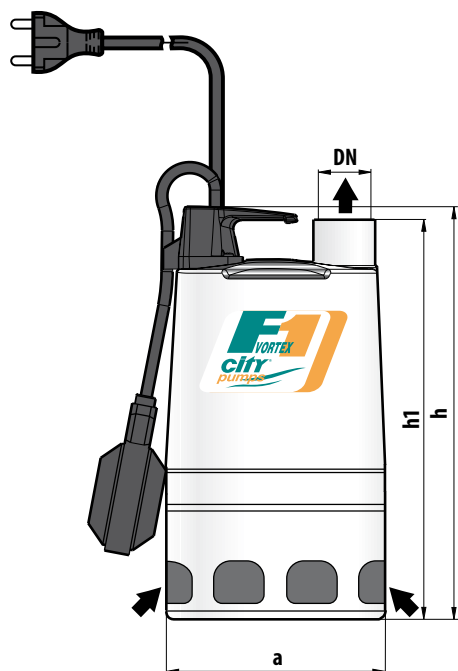
IEC 34-1

CEI 61-150

CEI 2-3



DIMENSIONS



Typical single-phase installation

