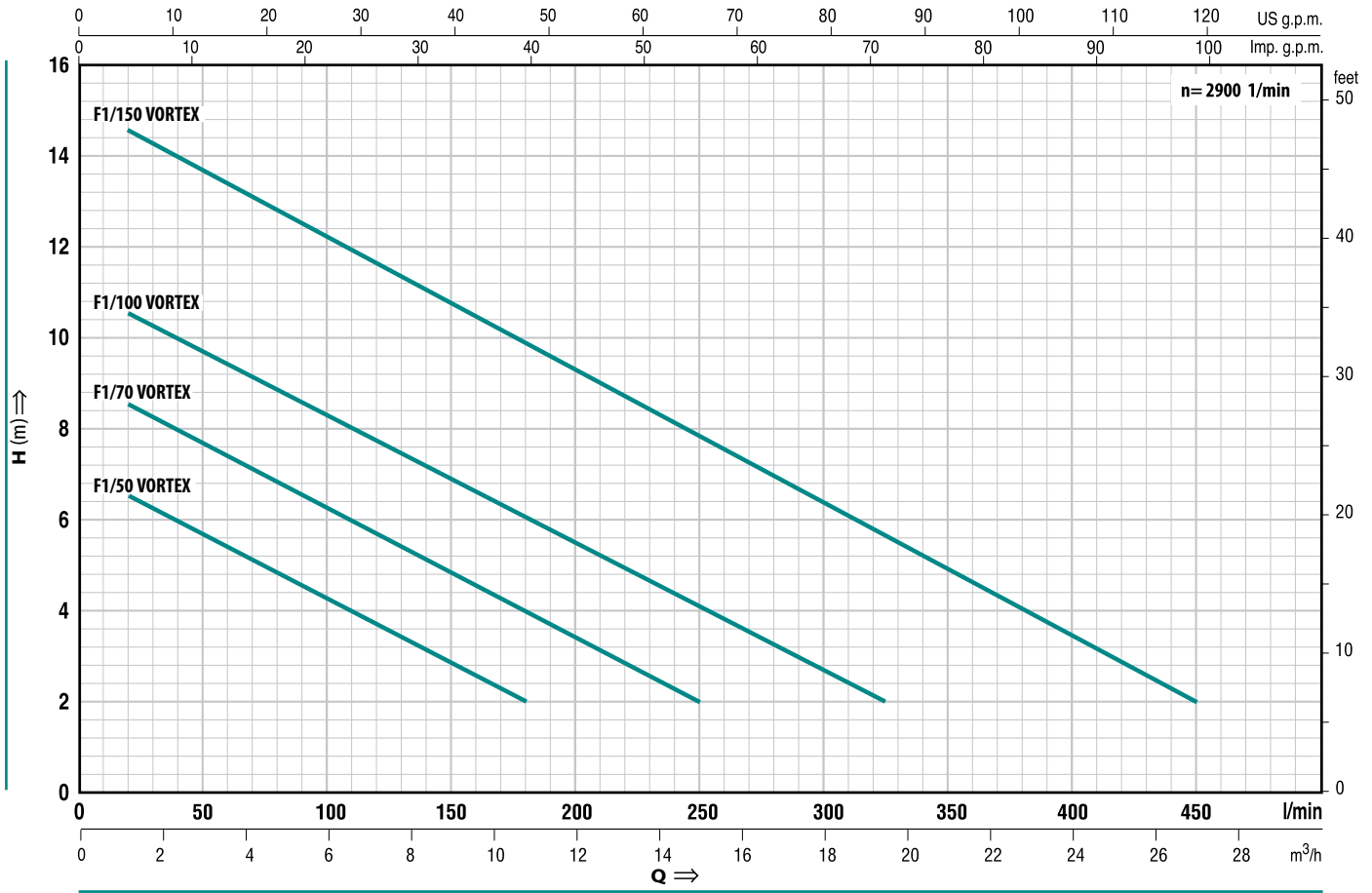




# F1 VORTEX

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	H metres																
Single-phase	Three-phase	kW	HP		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
F1/50M VORTEX	F1/50 VORTEX	0.37	0.50	0	20	40	60	80	100	120	140	160	180	200	250	300	325	350	400	450	
				7	6.5	6	5.4	4.8	4.3	3.7	3.1	2.5	2								
				9	8.5	8	7.4	6.8	6.3	5.7	5.1	4.5	4	3.4	2						
				11	10.5	10	9.4	8.8	8.3	7.7	7.1	6.6	6	5.5	4	2.7	2				
				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							500	500	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 m<sup>3</sup>/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

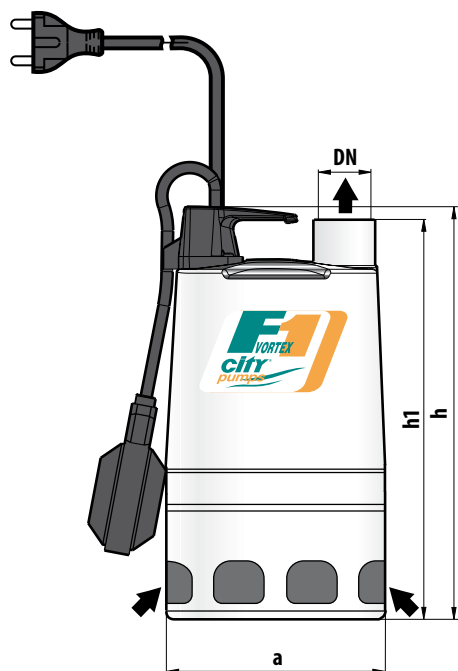
IEC 34-1

CEI 61-150

CEI 2-3



## DIMENSIONS



#### Typical single-phase installation

