

Model VORTEX 1000 E / 23

Description Top-quality heavy-duty construction pump suitable to pump dirty water. It can be used in many applications such as industrial plants or civil plants whenever it is required a pump with a high head.

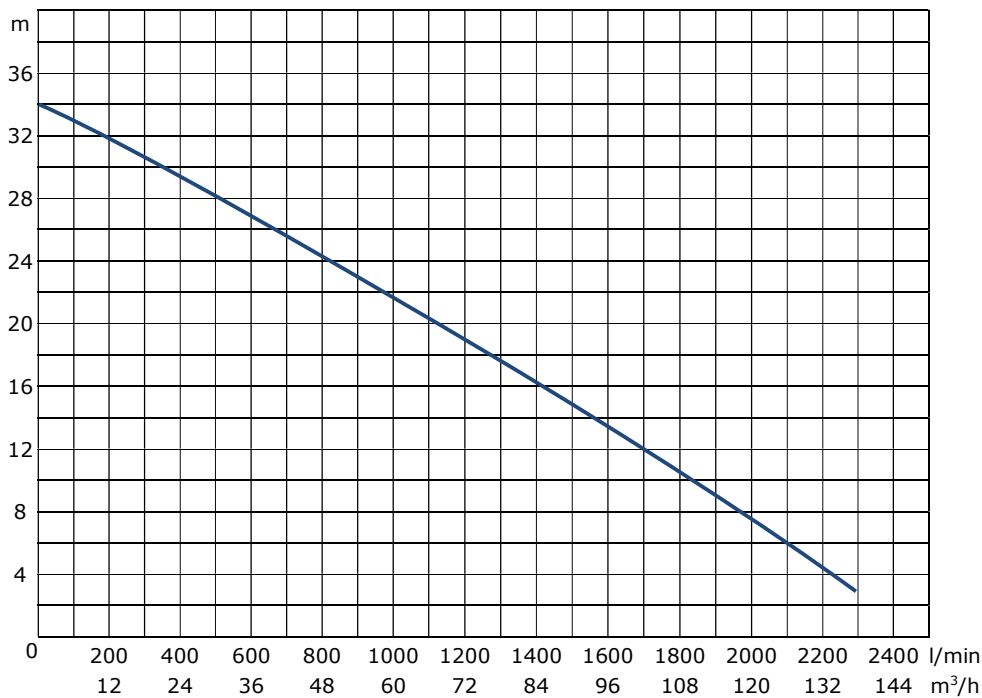
Pumped fluid

Application Dirty water
Max Density 1100 kg/m³
Temperature range 0-40 °C
pH range 6-10 pH



Performance

Model		Head (m)							
		4	8	12	16	20	24	28	32
VORTEX 1000 E / 23		Capacity							
	l/min	2230	1970	1700	1410	1115	820	500	180
	m ³ /h	133,8	118,2	102,0	84,6	66,9	49,2	30,0	10,8
	l/s	37,17	32,83	28,33	23,50	18,58	13,67	8,33	3,00



Hydraulic

<i>Impeller type</i>	Single-channel impeller
<i>Outlet</i>	DN 80 – horizontal, PN 16
<i>Free passage</i>	56 mm
<i>Max head</i>	34 m (3.4 bar)
<i>Min head</i>	3 m
<i>Max capacity</i>	2.250 l/min
<i>Min suction level</i>	255 mm

Electric characteristics

Model	Power(P₂)		rpm	Voltage	ph	I_N	Built-in float-switch
	HP	kW					
VORTEX 1000 E / 23	10	7.5	2850	400	3~	16,3	NO

Technical characteristics

<i>IP</i>	68
<i>Sealing</i>	Double mechanical seal in oil bath
<i>Max. immersion</i>	20 meters (with a feeding cable of suitable length)
<i>Protective coating</i>	Two-component epoxy paint anti-corrosion
<i>Sound pressure level</i>	< 70dB
<i>Humidity probe</i>	Included. To be connected to a suitable electric board

Components & Materials

<i>Cable</i>	07RN8F, length 10 meters, 4G2,5 + 3x0,5 free ends. 3x0,5: 2 wires for temperature probe on the winding, 1 wire for humidity probe on the mechanical seals' chamber
<i>Impeller</i>	Cast-iron EN-GJL-250
<i>Pump support</i>	Galvanized iron
<i>Discharge body</i>	Cast-iron EN-GJL-250
<i>Motor case</i>	Cast-iron EN-GJL-250
<i>Intermediate flange</i>	Cast-iron EN-GJL-250
<i>Pump cover</i>	Cast-iron EN-GJL-250
<i>Motor shaft</i>	Stainless steel AISI 420 1.4028
<i>Screws</i>	Stainless steel AISI 304 1.4301 (A2)
<i>Mechanical seal</i>	Lower: Silicon carbide / NBR / AISI 304 Upper: Alumina / Graphite / NBR / AISI 304
<i>Kit o-ring</i>	NBR
<i>Ball bearings</i>	Lower: 3306-ZZ, upper: 6206-2RS1
<i>Oil</i>	Dielectric, not polluting, not toxic

Motor characteristics

Type of motor	Hard-duty squirrel cage motor in oil bath
Start type	DOL (Direct On Line). See section "Special features on request"
Protection	The pump must be connected to an electric board with a magnetothermic switch. The pump is also supplied with a thermal probe on the motor winding to be connected to a suitable electric board.
Insulation class	Class F
Nos. of poles	2
Service type	S1 (with pump completely immersed into pumped fluid)
Cooling	Ensured by the immersion of the pump into the fluid

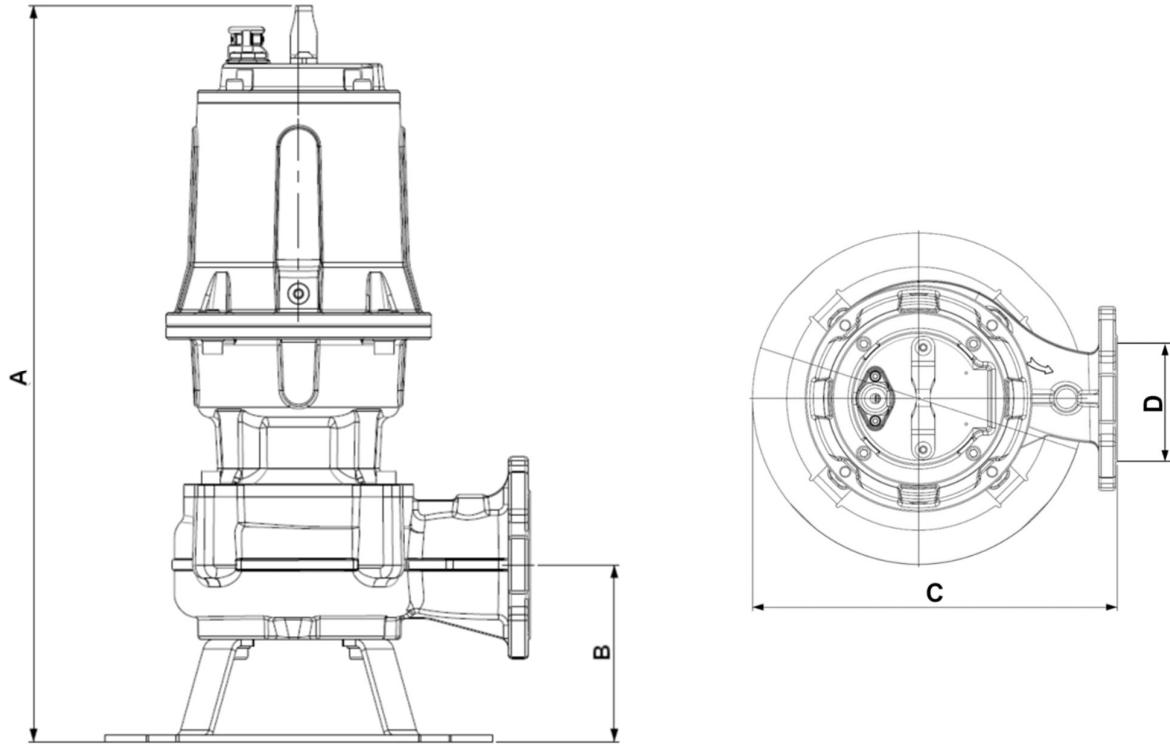
Optional available

Coupling foot	Coupling foot model DN80 (connection DN80)
Hose connection	90° elbow flanged DN 80 hose connection
Electric board	Model F6-0.5/10-3
No return valve	Professional flanged no-return ball check valve DN80 in cast-iron with NBR ball
Separated float switch	10 meters cable or 20 meters cable float-switch to be connected to an electric board F6-0.5/10-3
Anods	To avoid corrosion by galvanic currents

Special features on request

Metallized impeller	Metallic coating of the impeller in molybdenum carbide for very abrasive applications
Star/Delta motor	Pump is available as an optional also with star / delta starting motor

Dimensions & weight



Model	Dimensions (mm)					Weight kg	Pumps per layer on EPAL
	A	B	C	D	Carton box		
VORTEX 1000 E / 23	685	164	395	DN 80	490x400xH860	95	4