

Model VORTEX 400 / 23

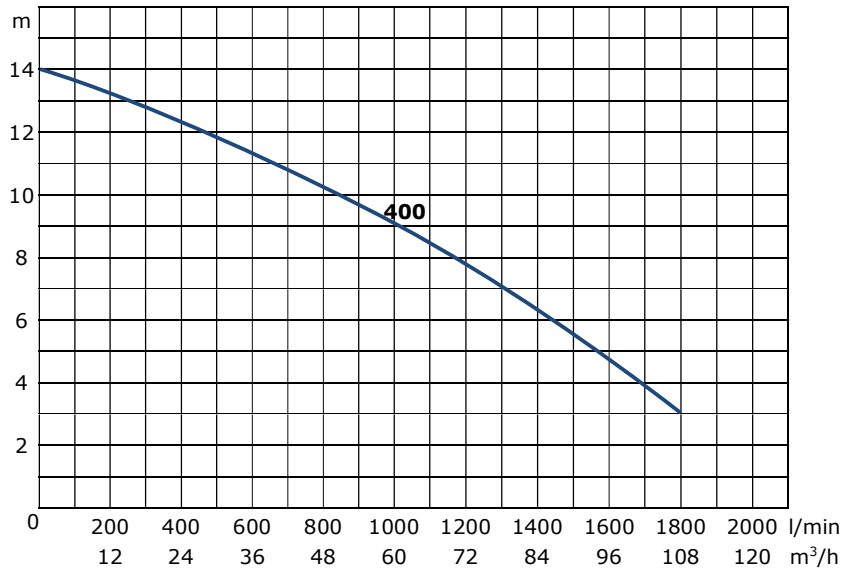
Description Top-quality heavy-duty construction pump suitable to pump heavy sewage water. They are generally installed in waste water treatment plants, in industrial plants and in pumping stations for civil applications.



Pumped fluid
Application Heavy sewage water with large solid parts
Max Density 1100 kg/m³
Temperature range 0-40 °C 32-104 °F
pH range 6-10 pH

Performance

Model		Head (m)					
		3	4	6	8	10	12
		Capacity					
VORTEX 400 / 23	l/min	1800	1700	1440	1150	830	450
	m ³ /h	108,0	102,0	86,4	69,0	49,8	27,0
	l/s	30,00	28,33	24,00	19,17	13,83	7,50



Hydraulic

<i>Impeller type</i>	Single-channel impeller
<i>Outlet</i>	DN 100 – horizontal, PN 16
<i>Free passage</i>	85 mm
<i>Max head</i>	14m (1.4 bar)
<i>Min head</i>	3 m
<i>Max capacity</i>	1.800 l/min
<i>Min suction level</i>	215 mm

Electric characteristics

Model	Power (P₂)		rpm	Voltage	ph	I_N	Built-in float-switch
	HP	kW					
VORTEX 400 / 23	4.0	3.0	1450	400	3~	7,1	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>	Neoprene H07RN8F, length 10 meters, 4G1,5 + 3x1,5 free ends. 3x1,5: 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: 3205-ZZ, upper: 6205-2RS
<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)
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. See optional section for electric boards.
Insulation class	Class F
Nos. of poles	4
Service type	S1 (with pump completely immersed into pumped fluid)
Cooling	Ensured by the immersion of the pump into the fluid

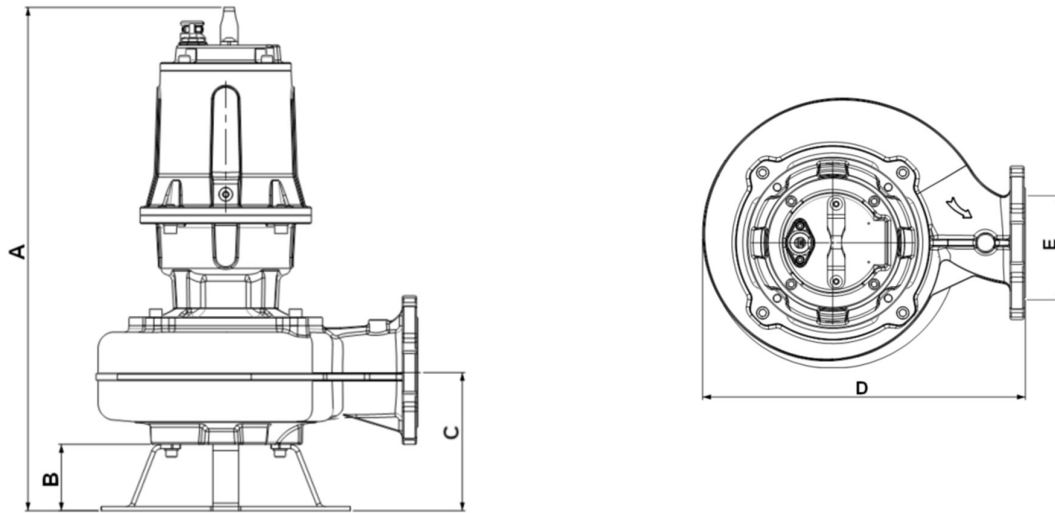
Optional available

Coupling foot	Coupling foot model DN100 for VORTEX 400-550-750 / 23 (connection DN100)
Hose connection	90° elbow flanged DN 100 hose connection
Electric board	Model F6-0.5/10-3
No return valve	Professional flanged no-return ball check valve DN100 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
Anodes	To avoid corrosion by galvanic currents

Special features on request

Metallized impeller	Metallic coating of the impeller in molybdenum carbide for very abrasive applications
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Dimensions & weight



Model	Dimensions (mm)					Carton box	Weight kg	Pumps per layer on EPAL
	A	B	C	D	E			
VORTEX 400 / 23	611	75	159	399	DN 100	420X340XH630	70	6