

**Model** VORTEX 400 E / 23

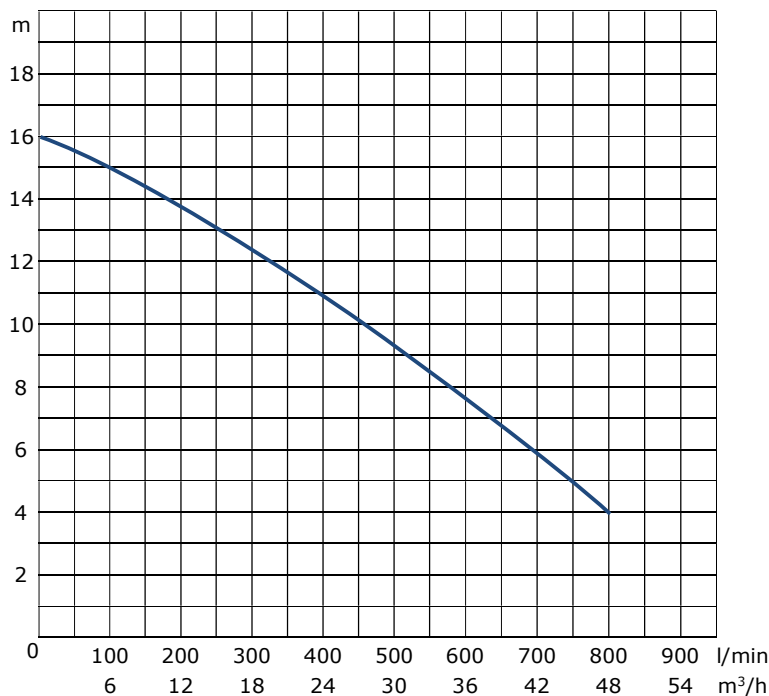
**Description** Top-quality heavy-duty construction pump suitable to pump dirty water. It can be used in many applications such as industrial plants or farms whenever it is required a pump with a high head.



**Pumped fluid**  
*Application* Dirty water  
*Max Density* 1100 kg/m<sup>3</sup>  
*Temperature range* 0-40 °C 32-104 °F  
*pH range* 6-10 pH

**Performance**

Model		Head (m)					
		4	6	8	10	12	14
		Capacity					
VORTEX 400 E / 23	l/min	800	695	590	455	320	180
	m <sup>3</sup> /h	48,0	41,7	35,4	27,3	19,2	10,8
	l/s	13,33	11,58	9,83	7,58	5,33	3,00



**Hydraulic**

<i>Impeller type</i>	Back open impeller "vortex" type
<i>Outlet</i>	DN 80 – vertical, PN 10, oval counterflange threaded 3" BSP
<i>Free passage</i>	45 mm
<i>Max head</i>	16 m (1.6 bar)
<i>Min head</i>	4 m
<i>Max capacity</i>	800 l/min
<i>Min suction level</i>	130 mm

**Electric characteristics**

Model	Power (P <sub>2</sub> )		rpm	Voltage	ph	I <sub>N</sub>	Built-in float-switch
	HP	kW					
VORTEX 400 E / 23	4.0	3.0	2850	400	3~	4,6	NO

**Technical characteristics**

<i>IP</i>	68
<i>Sealing</i>	Double mechanical seal in oil bath
<i>Max. immersion</i>	5 meters
<i>Protective coating</i>	Two-component epoxy paint anti-corrosion
<i>Sound pressure level</i>	< 70dB

**Components & Materials**

<i>Cable</i>	Neoprene H07RNF, length 10 meters, 4G1,5 with free ends Resined cable gland for watertight sealing of the cable
<i>Impeller</i>	Cast-iron EN-GJL-200
<i>Pump support</i>	Cast-iron EN-GJL-200
<i>Discharge body</i>	Cast-iron EN-GJL-200
<i>Motor case</i>	Stainless steel AISI 304 1.4301 (A2)
<i>Pump cover</i>	Cast-iron EN-GJL-200
<i>Motor shaft</i>	Stainless steel AISI 410 1.4006
<i>Screws</i>	Stainless steel AISI 304 1.4301 (A2)
<i>Mechanical seal</i>	Lower: Silicon carbide / NBR / AISI 304 Upper: Alumina / Graphite / AISI 304
<i>Kit o-ring</i>	NBR
<i>Ball bearings</i>	Lower: 6305-LU, upper: 6303-LU
<i>Oil</i>	Dielectric, not polluting, not toxic

**Motor characteristics**

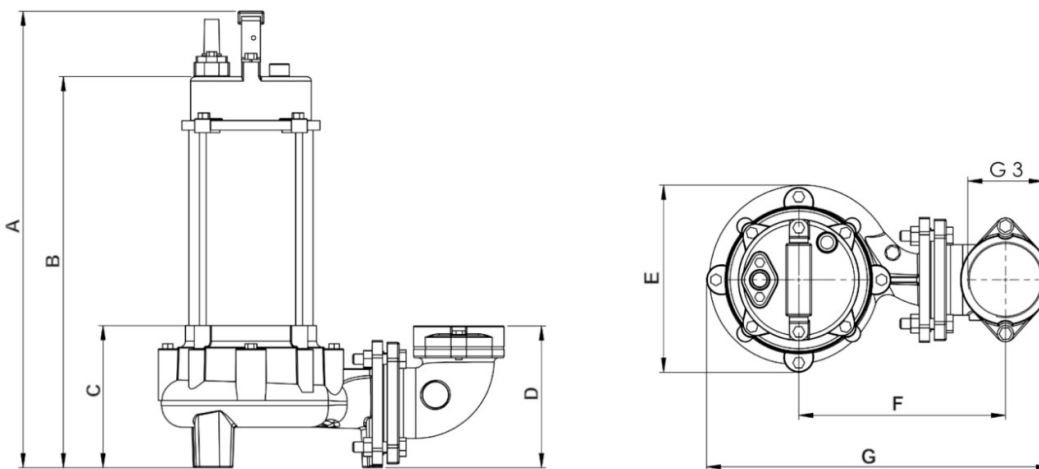
Type of motor	Hard-duty squirrel cage motor
Start type	DOL (Direct On Line)
Protection	Automatic reset built-in thermal protection; it is anyway suggested to connect the pump to an electric board with a magnetothermic switch (see optional section for electric boards)
Insulation class	Class F
Nos. of 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 for VORTEX 400-550-750 E (connection DN80)
Hose connection	Storz connection 3" – DN80
Electric board	Model F6-0.5/10-3
No return valve	Professional no-return flanged 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
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	F	G			
VORTEX 400 E / 23	530	454	165	165	218	241	401	460x270xH640	37	6