

**Model** VORTEX 1000 SS 316 / 23

**Description** Top-quality heavy-duty construction pump suitable to pump aggressive dirty waters, acid and alkaline effluents, sea water, etc. Its most frequent applications are in the food industries, on chemical, galvanic and tanning plants, in the fish industries and in several seaport applications.

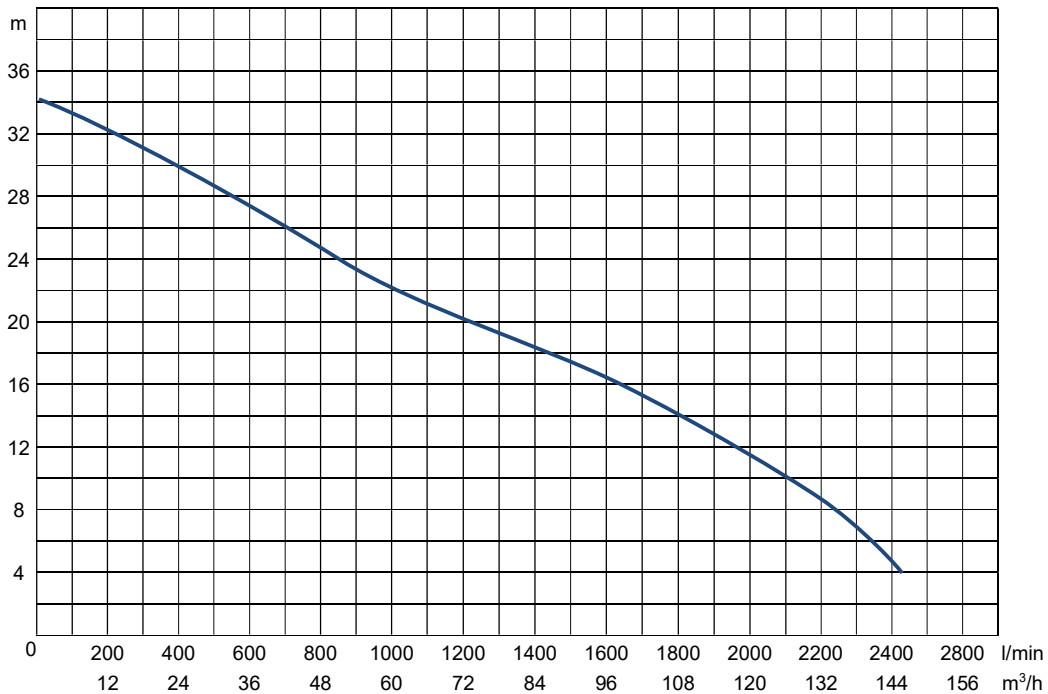


**Pumped fluid**

**Application** Acid, alkaline and corrosive effluents  
**Max Density** 1100 kg/m<sup>3</sup>  
**Temperature range** 0-40 °C 32-104 °F  
**pH range** 2-14 pH

**Performance**

Model		Head (m)							
		4	8	12	16	20	24	28	32
VORTEX 1000 SS 316 / 23		<b>Capacity</b>							
	l/min	2400	2250	1945	1635	1260	840	590	210
	m <sup>3</sup> /h	144,0	135,0	116,7	98,1	75,6	50,4	35,4	12,6
	l/s	40,00	37,50	32,42	27,25	21,00	14,00	9,83	3,50



**Hydraulic**

<i>Impeller type</i>	Bi-channel open impeller type
<i>Outlet</i>	DN 100 – vertical, PN 16, round counter-flange threaded 4" BSP
<i>Free passage</i>	35 mm
<i>Max head</i>	34 m (3.4 bar)
<i>Min head</i>	4 m
<i>Max capacity</i>	2400 l/min
<i>Min suction level</i>	210 mm

**Electric characteristics**

<b>Model</b>	<b>Power (P<sub>2</sub>)</b>		<b>rpm</b>	<b>Voltage</b>	<b>ph</b>	<b>I<sub>N</sub></b>	<b>Built-in float-switch</b>
	HP	kW					
VORTEX 1000 SS 316 / 23	10.0	7.5	2850	400	3~	16,5	NO

**Technical characteristics**

<i>IP</i>	68
<i>Sealing</i>	Double mechanical seal in oil bath + oil seal
<i>Max. immersion</i>	5 meters (with 10 meters cable)
<i>Protective coating</i>	None
<i>Sound pressure level</i>	< 70dB

**Components & Materials**

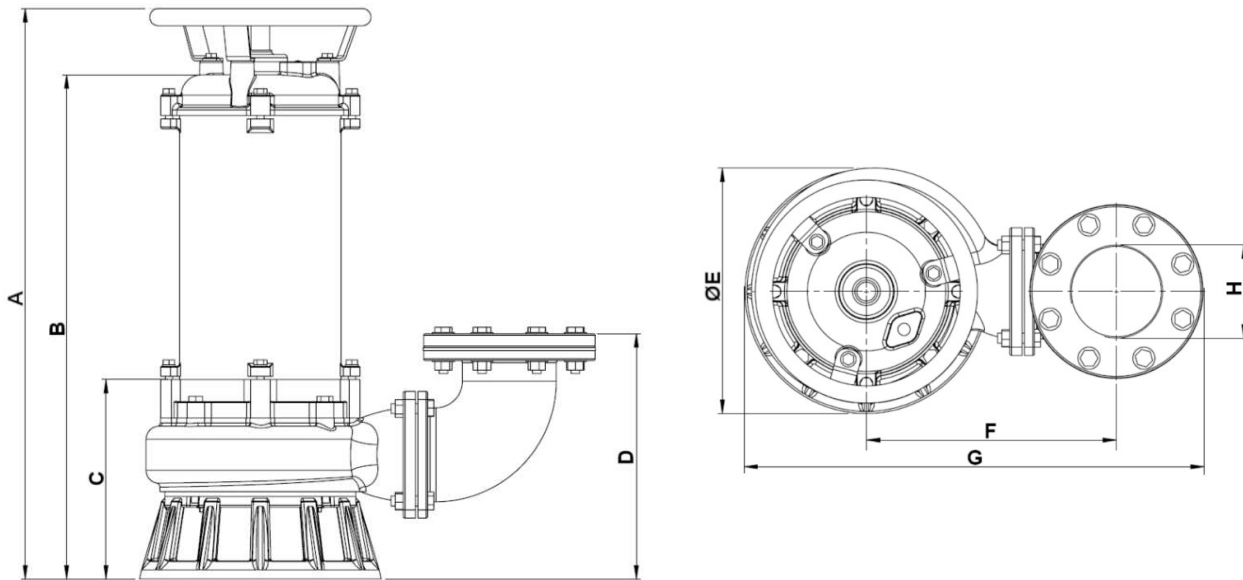
<i>Cable</i>	Neoprene H07RN8F, length 10 meters, 4G4 with free ends Resined cable gland for watertight sealing of the cable
<i>Impeller</i>	Stainless steel AISI 316L 1.4435 (A4)
<i>Pump support</i>	Stainless steel AISI 316L 1.4435 (A4)
<i>Discharge body</i>	Stainless steel AISI 316L 1.4435 (A4)
<i>Motor case</i>	Stainless steel AISI 316L 1.4435 (A4)
<i>Pump cover</i>	Stainless steel AISI 316L 1.4435 (A4)
<i>Motor shaft</i>	Stainless steel AISI 316L 1.4435 (A4)
<i>Screws</i>	Stainless steel AISI 316L 1.4435 (A4)
<i>Mechanical seal</i>	Lower: Silicon carbide / Silicon carbide / Viton / AISI 316 Upper: Alumina / Graphite / NBR / AISI 304
<i>Oil seal</i>	Viton
<i>Kit o-ring</i>	Viton
<i>Ball bearings</i>	Lower: 6308 LU C3, upper: 6305 LU C3
<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 DN100 in stainless steel AISI 304 (connection DN100)
Hose connection	Quick-coupling "storz" connection with DN100 hose connection in aluminum
Electric board	F6-0.5/10-3
No return valve	- Professional no-return ball check valve DN100 cast-iron, NBR ball - Professional no-return ball check valve DN100 AISI 316, FPM 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

**Dimensions & weight**


Model	Dimensions (mm)									Weight kg	Pumps per layer on EPAL
	A	B	C	D	E	F	G	H	Carton box		
VORTEX 1000 SS 316/23	698	617	244	300	298	305	556	4"	400x400xH710	91	6