

**Models** VORTEX 550 – 750 / 23

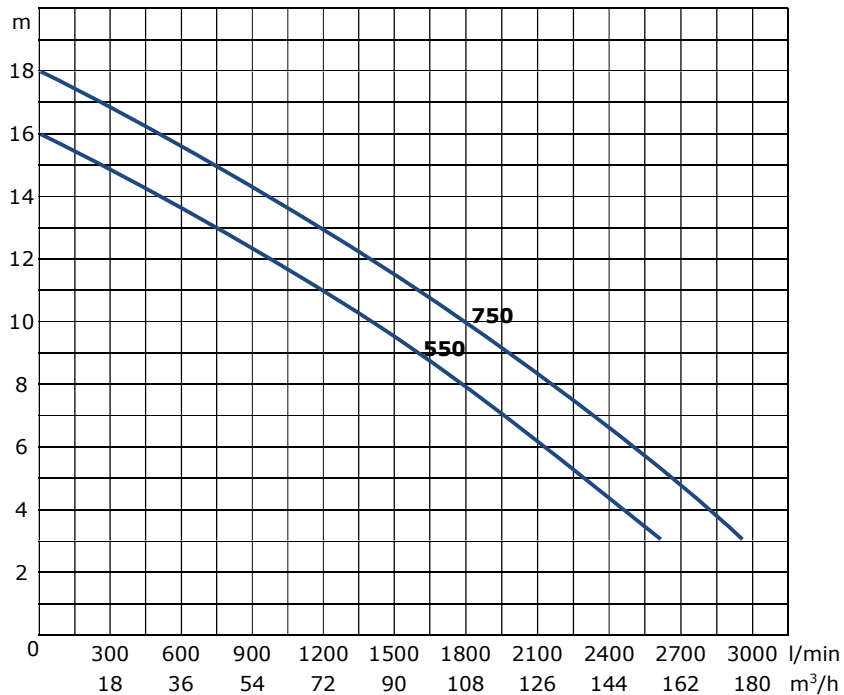
**Description** Top-quality heavy-duty construction pumps suitable to pump heavy sewage water. They are generally installed in waste water treatment plants, in industrial plants and in pumping stations for civil applications.

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



**Performance**

Models		Head (m)						
		4	6	8	10	12	14	16
		<b>Capacity</b>						
VORTEX 550 / 23	l/min	2440	2120	1800	1410	1000	540	
	m <sup>3</sup> /h	146,4	127,2	108,0	84,6	60,0	32,4	
	l/s	40,67	35,33	30,00	23,50	16,67	9,00	
VORTEX 750 / 23	l/min	2820	2500	2170	1800	1410	1000	550
	m <sup>3</sup> /h	169,2	150,0	130,2	180,0	84,6	60,0	33,0
	l/s	47,00	41,67	36,17	30,00	23,50	16,67	9,17



**Hydraulic**

<i>Impeller type</i>	Single-channel impeller
<i>Outlet</i>	DN 100 – horizontal, PN 16
<i>Free passage</i>	90 mm
<i>Max head</i>	VORTEX 550 / 23: 16m (1.6 bar) VORTEX 750 / 23: 18m (1.8 bar)
<i>Min head</i>	3 m
<i>Max capacity</i>	VORTEX 550 / 23: 2.600 l/min VORTEX 750 / 23: 3.000 l/min
<i>Min suction level</i>	295 mm

**Electric characteristics**

<b>Models</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 550 / 23	5.5	4.0	1450	400	3~	9,4	NO
VORTEX 750 / 23	7.5	5.5	1450	400	3~	11,8	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, 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

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**Motor characteristics**

<i>Type of motor</i>	Hard-duty squirrel cage motor in oil bath
<i>Start type</i>	DOL (Direct On Line). See section "Special features on request"
<i>Protection</i>	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.
<i>Insulation class</i>	Class F
<i>Nos. of poles</i>	4
<i>Service type</i>	S1 (with pump completely immersed into pumped fluid)
<i>Cooling</i>	Ensured by the immersion of the pump into the fluid

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**Optional available**

<i>Coupling foot</i>	Coupling foot model DN100 for VORTEX 400-550-750 / 23 (connection DN100)
<i>Hose connection</i>	90° elbow flanged DN 100 hose connection
<i>Electric board</i>	Model F6-0.5/10-3
<i>No return valve</i>	Professional flanged no-return ball check valve DN100 in cast-iron with NBR ball
<i>Separated float switch</i>	10 meters cable or 20 meters cable float-switch to be connected to an electric board F6-0.5/10-3
<i>Anodes</i>	To avoid corrosion by galvanic currents

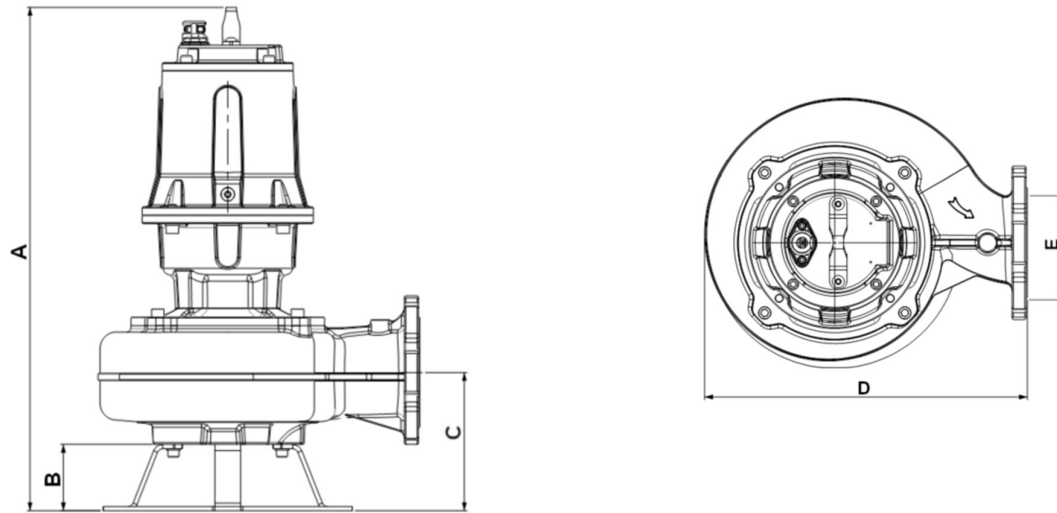
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**Special features on request**

<i>Metallized impeller</i>	Metallic coating of the impeller in molybdenum carbide for very abrasive applications
<i>Star/Delta motor</i>	The pump model VORTEX 750 / 23 (not the model VORTEX 550 / 23) is available as an optional also with star / delta starting motor

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**Dimensions & weight**



Models	Dimensions (mm)					Carton box	Weight kg	Pumps per layer on EPAL
	A	B	C	D	E			
VORTEX 550 / 23	722	95	198	462	DN 100	490X400XH860	96	4
VORTEX 750 / 23	722	95	198	462	DN 100	490X400XH860	103	4