

Models SUPERSAND N 300 / 23
SUPERSAND N 500 / 23

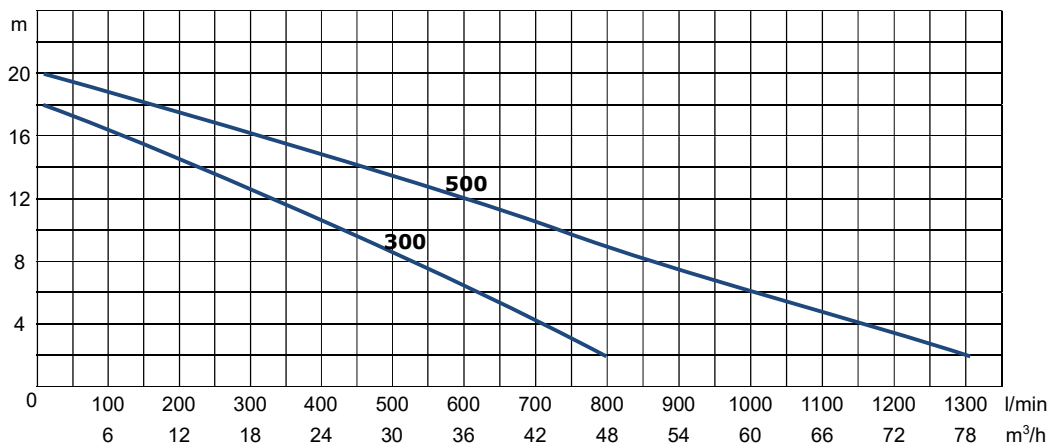
Description Heavy-duty construction pump suitable to pump sandy and muddy water. Its most frequent applications are in the drainage of contractor sites and in general in dewatering. The impeller is made of a very abrasion-resistant material and the pump can be also installed in marble or glass processing plants. The pump is equipped also with an agitator at the bottom to help pumping when solid parts concentration is very high. The pumped fluid that flows between the motor case and the external case allows the pump to be used even with a very low liquid level.



Pumped fluid
Application Sandy and muddy water
Max Density 1100 kg/m³
Temperature range 0-40 °C 32-104 °F
pH range 6-10 pH

Performance

Models		Head (m)							
		2	6	8	10	12	14	16	18
SUPERSAND N 300 / 23	l/min	800	630	535	425	328	220	108	
	m ³ /h	48,0	37,8	32,1	25,5	19,7	13,2	6,5	
	l/s	13,33	10,50	8,92	7,08	5,47	3,67	1,80	
SUPERSAND N 500 / 23	l/min	1300	1005	855	745	600	450	310	158
	m ³ /h	78,0	60,3	51,3	44,7	36,0	27,0	18,6	9,5
	l/s	21,67	16,75	14,25	12,42	10,00	7,50	5,17	2,63



Hydraulic

<i>Impeller type</i>	Multi-channel open impeller type
<i>Outlet</i>	DN 80 – vertical (at pump top), PN 16, round counterflange threaded 3" BSP female
<i>Free passage</i>	10 mm
<i>Max head</i>	SUPERSAND N 300 / 23: 18m (1.8 bar) SUPERSAND N 500 / 23: 20m (2.0 bar)
<i>Min head</i>	2 m
<i>Max capacity</i>	SUPERSAND N 300 / 23: 800 l/min SUPERSAND N 500 / 23: 1300 l/min
<i>Min suction level</i>	130 mm

Electric characteristics

Models	Power (P₂)		rpm	Voltage	ph	I_N	Built-in float-switch
	HP	kW					
SUPERSAND N 300 / 23	3.0	2.2	2850	400	3~	5,1	NO
SUPERSAND N 500 / 23	5.0	3.7	2850	400	3~	7,6	NO

Technical characteristics

<i>IP</i>	68
<i>Sealing</i>	Double mechanical seal in oil bath + oil seal
<i>Max. immersion</i>	15 meters (with 20 meters cable)
<i>Protective coating</i>	Two-component epoxy paint anti-corrosion on cast-iron parts
<i>Sound pressure level</i>	< 70dB

Components & Materials

<i>Cable</i>	Neoprene H07RN8F, length 20 meters, 4G1,5 with free ends Resined cable gland for watertight sealing of the cable
<i>Impeller</i>	High chrome steel
<i>Agitator</i>	High chrome steel
<i>Footing</i>	Cast-iron EN-GJL-200
<i>Bottom grid</i>	Stainless steel AISI 304 1.4301 (A2)
<i>Casing cover</i>	Cast-iron EN-GJL-200
<i>Casing</i>	Cast-iron EN-GJL-200
<i>Mech. seals chamber</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>External case</i>	Stainless steel AISI 304 1.4301 (A2)
<i>Motor shaft</i>	Stainless steel AISI 304 1.4301 (A2)
<i>Screws</i>	Stainless steel AISI 304 1.4301 (A2)
<i>Mechanical seal</i>	Lower: Silicon carbide / Silicon carbide / NBR / AISI 304 Upper: Alumina / Graphite / NBR / AISI 304
<i>Oil seal</i>	NBR
<i>Kit o-ring</i>	NBR
<i>Ball bearings</i>	Lower: 6306 LU, upper: 6304 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 pumped fluid that flows between the motor case and the external pump case

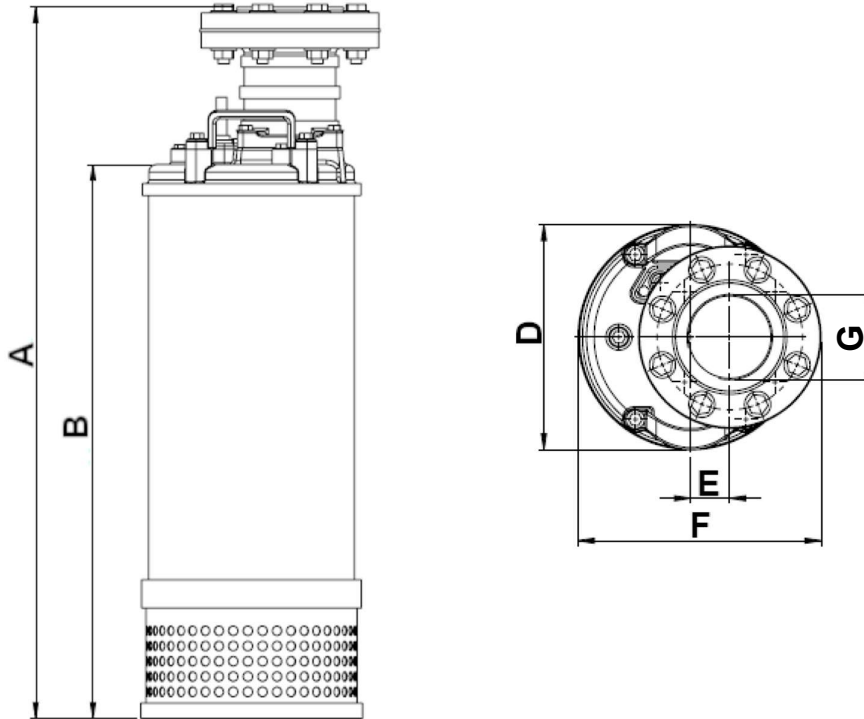
Optional available

Hose connection	Quick-coupling "storz" connection with DN80 hose connection in aluminum
Flat PVC hose	Three-layers flat roll-up hose D80mm made of PVC and high tensile synthetic textile. Suitable to pump abrasive fluids.
Electric board	F6-0.5/10-3
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
Special epoxy coating	Special painting with two different bi-component epoxy coatings on each pump component before pump assembly. It grants a very good protection against corrosion. With this treatment the pump can be used also to pump sea water.

Dimensions & weight



Models	Dimensions (mm)							Weight kg	Pumps per layer on EPAL
	A	B	D	E	F	G	Carton box		
SUPERSAND N 300 / 23	685	520	232	40	250	3"	295x255Xh770	56	12
SUPERSAND N 500 / 23	746	581	232	40	250	3"	295x255Xh770	65	12