Waste Water Pumps

made in stainless steel and grey cast

ZUWA

For water even with solids

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QUALITY SINCE 1946

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ZUWA-Zumpe GmbH

The family run enterprise ZUWA-Zumpe GmbH has been manufacturing high quality pumps and innovative pump systems for more than 65 years. The ample experience in designing and producing high end products enables us to offer a wide range of different devices.
The entire product range consisting of pumps, fuelling stations, plant protection systems as well as charging and flushing stations is in high demand all over the world.

ZUWA is working in accordance with the ISO 9001:2008 quality management system, regularly controlled by TÜV SÜD. Process safety and constant quality is guaranteed.
The close contact with our customers provides us with proposals and impulses to improve and further develop our products.

In house production and shop floor enable us to meet customer specific requirements, manufacture custom made products and complete repair jobs.
Competent contact persons and lean management make for quick and reliable service.

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Waste Water Pumps

VORTEX:
for waste water even with solids.
Page 4

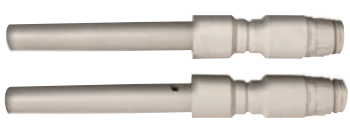
VORTEX NIRO:
for aggressive waste water even with solids.
Page 5

VORTEX EX:
for application in biogas sector with ATEX approval.
Page 6

SUPERSAND:
for waste water and water containing sand.
Page 6

VELO UP:
Pump for waste water. For murky waters without fibers.
Page 7

Pump control



Level Probe for Pump Controller
for level control of liquids
Art. No.: 169000

Float Switch:
Float switch suitable for nearly all pump types.
Art. No.: *131066*

Waste water even with solids

VORTEX

VORTEX Pumps by ZUWA are particularly suitable for waste water with solid particles. Depending on pump type they transport solids with a maximum diameter of 55 mm.

- max. density of fluid: 1100 kg/m³
- fluid temperature max. 50°C
- pH value: 6 - 11

Applications

- Draining of excavation pits and hoppers
- remove flood water
- dispose off domestic sewage

Features

- pump housing, impeller made of grey cast iron
- motor in oil bath (with thermal motor protection for 230 V to 1.5 kW)
- shaft made of stainless steel
- rotary seal made of silicium carbide
- float switch (for 230 V models only)
- cable length 10 m

Agricultural applications

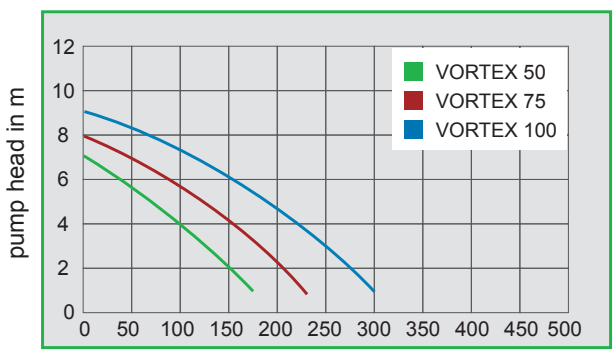
- pump down of milking parlours
- conveying of silage soakage and surface water
- irrigation in horticulture

VORTEX 100

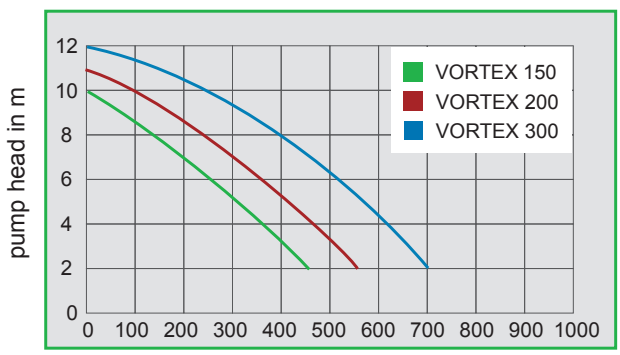
VORTEX 75 with fixed level regulator

VORTEX 75

Characteristic curves:



flow rate in l/min



flow rate in l/min

Technical details

Typ	Flow rate max.	Pumping head max.	Engine power V / kW / A			Pressure port	Dimen-sions	Pump inlet	Wei-ght	Art. No.
VORTEX 50	180 l/min	7 m	230	0,37	3,0	1¼“	14 x 33 cm	25 mm	11 kg	*165130*
VORTEX 75	225 l/min	8 m	230	0,55	4,2	1¼“	22 x 28 cm	30 mm	17 kg	*1650130*
VORTEX 75*	225 l/min	8 m	230	0,55	4,2	1¼“	24 x 28 cm	30 mm	17 kg	*165051*
VORTEX 100	300 l/min	9 m	230	0,75	7	2“	20 x 42 cm	45 mm	23 kg	*165017*
VORTEX 150	450 l/min	10 m	230	1,1	8,9	2“	23 x 52 cm	50 mm	33 kg	*165020*
	450 l/min	10 m	400	1,1	3,5	2“	23 x 52 cm	50 mm	33 kg	*165033*
VORTEX 200	550 l/min	11 m	230	1,5	10	2“	23 x 52 cm	50 mm	34 kg	*165018*
	550 l/min	11 m	400	1,5	5,0	2“	23 x 52 cm	50 mm	34 kg	*165057*
VORTEX 300	700 l/min	12 m	400	2,2	5,5	3“	27 x 53 cm	55 mm	38 kg	*165019*

** with fixed level regulator / only for clean water*

For aggressive waste water even with solids

VORTEX NIRO

VORTEX NIRO Pumps are perfectly suitable for aggressive waste water in chemistry, pharmacy, metal finishing and sea water.

- max. density of fluid: 1100 kg/m³
- fluid temperature max. 50°C
- pH value: 3 - 14

VORTEX NIRO 100

Applications

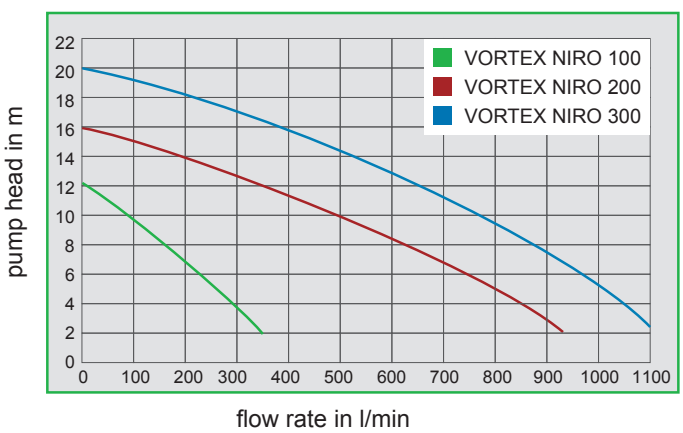
- biogas sector
- electrocoating processes
- chemical industry
- pharmacy
- seawater

Features

- pump housing and all parts in contact with fluid made of stainless steel (AISI 316)
- cable length 10 m

VORTEX NIRO 300

Characteristic curves:



Technical details

Typ	Flow rate max.	Pumping head max.	Engine power V / kW / A			Pressure port	Dimen-sions	Pump inlet	Wei-ght	Art. No.
VORTEX NIRO 100	350 l/min	12 m	230	0,75	5,3	2“	23 x 41 cm	35 mm	16 kg	*165024*
VORTEX NIRO 200	600 l/min	16 m	400	1,5	3,2	3“	44 x 53 cm	37 mm	36 kg	*165025*
VORTEX NIRO 300	1120 l/min	20 m	400	2,2	5,0	3“	44 x 57 cm	40 mm	38 kg	*165026*

ATEX approved

VORTEX EX

VORTEX Pumps now also ATEX approved for application in biogas sector and other areas with potentially explosive atmosphere – intended for use in zone 1 and 2.

- max. density of fluid: 1100 kg/m³
- fluid temperature max. 40°C
- pH value: 6 - 11

ON OPTION:
ATEX approved
float switch

VORTEX EX

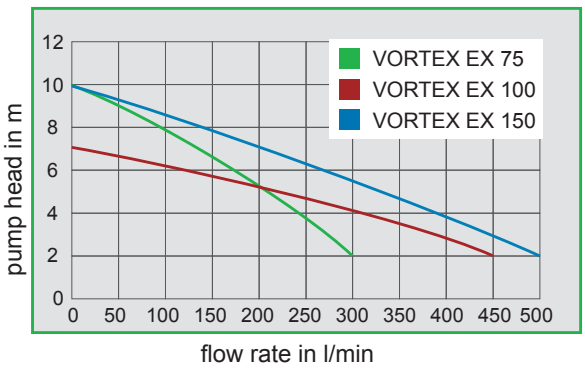
Application

Submersible waste water pumps are frequently used in biogas plants to remove condensed water from the dead well and return it to the fermenter. Biogas plants are classified as areas with potentially explosive atmosphere. This is why VORTEX pumps are now launched meeting the health and safety requirements of the ATEX directive.

Features

- pump housing and impeller made of grey cast iron
- motor in oil bath (with thermal motor protection for 230 V to 1.5 kW)
- ATEX certification number: Eexd-IIB-T3-II-2-G
- rotary seal made of silicium carbide
- shaft made of stainless steel
- cable length 10 m

Characteristic curves:



for waste water and water containing sand

SUPERSAND

For waste water and water containing sand. The clearance between motor and pump casing ensures motor cooling at low water level.

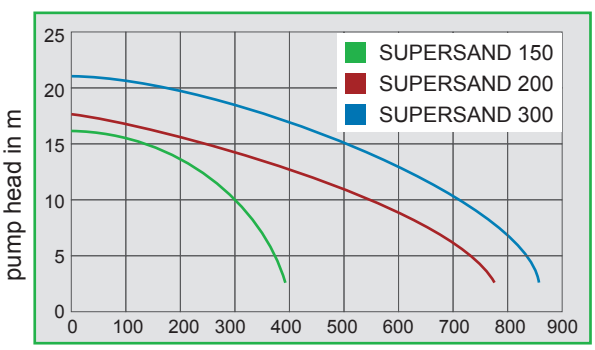
SUPERSAND

Application

Designed especially for construction sites to drain foundation ditches, tunnels, galleries etc.

- maximum immersion depth: 10 m
- max. density of fluid: 1100 kg/m³
- fluid temperature max. 40°C
- pH value: 6 - 13

Characteristic curves:



Features

- pumps and motor casing made of stainless steel (AISI 304)
- impeller constructed of abrasion resistant cast iron with chrome, hardness 60 RC
- Oil cooled dual rotary seal made of silicium carbide
- shaft made of stainless steel (AISI 410)
- cable length 10 m

for domestic use

VELO UP

Electronic pump drainage with vertical adjustable (automatic or manual) with removable filter for suction up to 2/3 mm. The adjustment slider of the probes, allows you to vary the level of on-off of the pump, this feature increases the versatility of installation.

The vertical delivery and the electronic float make it a pump suitable for use in wells of small dimensions. Thermal-amperometersc protection incorporated and condenser permanently connected.

VELO UP

Application

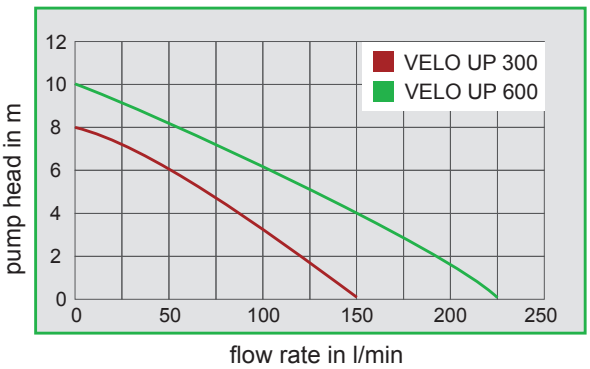
from 1 to 15 m3/h-with prevalence up to 10 meters.

- from 0° C to +35° C for domestic use
- maximum immersion depth: 7 m
- minimum depth of draft: 60 mm
- maximum containing solids: 10 mm

Features

- motor, rotor shaft and screws in stainless steel
- triple O-ring seal with interposed oil chamber
- stator in a sealed stainless steel enclosure
- asynchronous submersible motor for continuous operation

Characteristic curves:



Technical details

Typ	Flow rate max.	Pumping head max.	Engine power			Pressure port	Dimensions	Pump inlet	Weight	Art. No.
			V	kW	A					
VORTEX 75 EX	300 l/min	10 m	230	0,55	4,7	1½“	37 x 18 cm	30 mm	17 kg	*165013 ATEXOS*
VORTEX 100 EX	450 l/min	7 m	230	0,75	7,0	2“	46 x 30 cm	45 mm	31 kg	*165017 ATEXOS*
VORTEX 150 EX	502 l/min	10 m	230	1,1	8,0	2“	46 x 30 cm	50 mm	32 kg	*165020 ATEXOS*
SUPER-SAND 150	380 l/min	16 m	230	1,1	8,2	2“	50 x 21 cm	8 mm	29 kg	*165029*
SUPER-SAND 200	723 l/min	17 m	230	1,5	10	3“	55 x 24 cm	10 mm	38 kg	*165032*
	723 l/min	17 m	400	1,5	3,5	3“	55 x 24 cm	10 mm	38 kg	*165030*
SUPER-SAND 300	870 l/min	21 m	400	2,2	5,1	3“	55 x 24 cm	10 mm	39 kg	*165031*
VELO UP 300	150 l/min	8 m	220 -240	0,38	1,5	1¼“	30 x 16 cm	-	5,6 kg	*165300*
VELO UP 600	225 l/min	10 m	220 -240	0,77	3,5	1¼“	33 x 16 cm	-	7,3 kg	*165600*

Accessories: Pump control

Pump control eco Pump

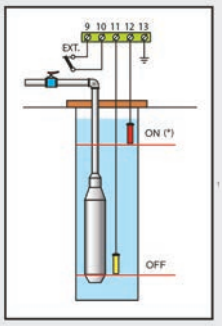
Low cost controller for pumps up to 12A. Convenient handling via pressurestat.
Art. no. 169020

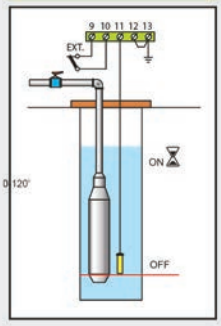
Functions:

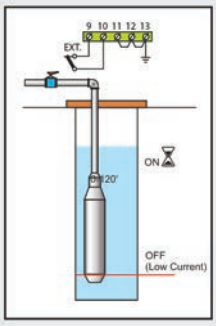
- integrated level control
- over-/underload protection
- phase failure
- protection from abnormal operation (f.e. dripping water tap)

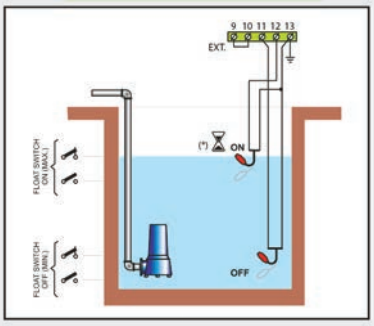
Features:

- 4 digit LED display
- LED display for various statuses
- IP 65 protection
- Output for external alarm









Pump control V 10 Plus:

Reliable control unit for 230 and 400 Volt pumps up to 16 A.
Article no. 169013

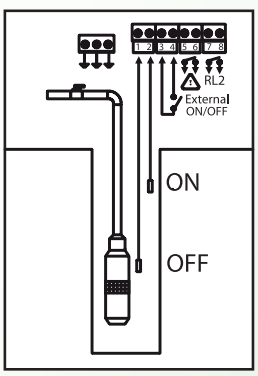
Functions:

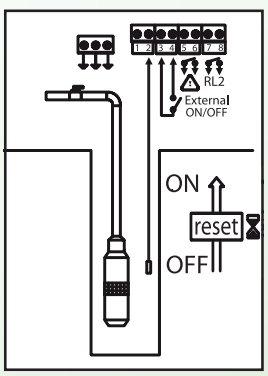
- integrated level control
- programmable dry run protection
- electronic over-/underload protection
- records starts and operation time
- excess voltage, phase failure and lightning protection
- automatic restart after interruption

Features:

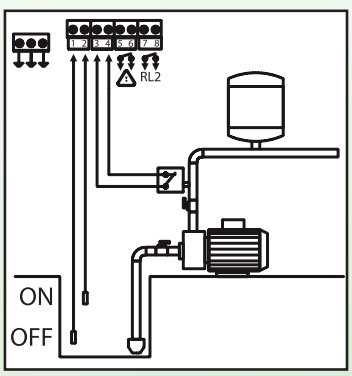
- easy installation, simple handling
- key pad, signal lights and amperagedisplay
- on front side
- signal output to activate an alarm
- protection rating IP 54

Water supply

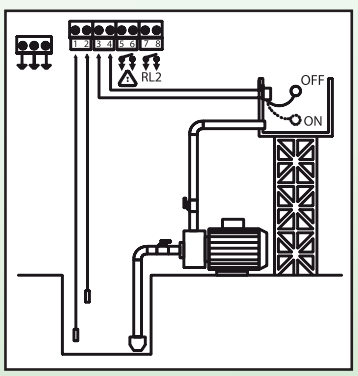




Pressure boosting



Irrigation



further applications: sewage disposal, rain water harvesting, dry run protection for impeller pumps

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