



## APPLICATIONS

Pumping of liquids and extraction of leachate in landfill, drainage of contaminated fluids and groundwater.

The ATEX pumps in conformity with 2014/34/UE Directive can be installed in potentially explosive atmospheres according to the marking explained hereafter.

## FEATURES

- Multistage centrifugal electric submersible pumps for 4" wells characterized by a **floating impellers system** that allows the pumping of leachate and charged liquid with small solid bodies.
- External pump case, delivery port, suction port, shaft and other components in stainless steel.
- Impellers and diffusers in special technopolymer with ceramic inserts at wear point.
- The check valve made of stainless steel is installed in the delivery head.
- Temperature of pumped liquid: max +40 °C.
- **Available the version for permanent immersion in hydrocarbons (our ID EX series).**
- **Available in AISI 316 version.**

## MOTOR

- 2 poles asynchronous motor, 50 Hz, 2850 rpm.
- Class F insulation.
- IP68 protection.
- Working voltage: single-phase 230 V, three-phase 400 V.

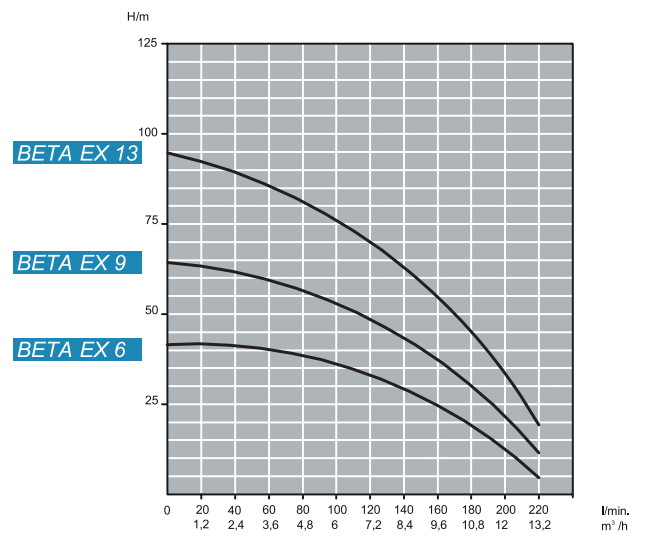
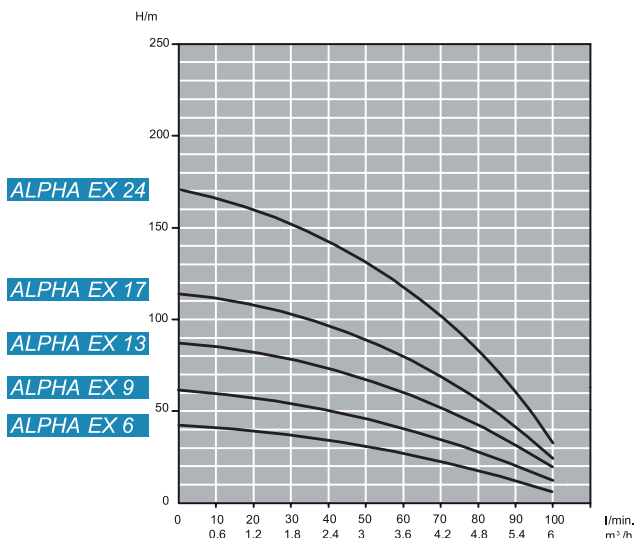
## ACCESSORIES

- Control panel.
- Intrinsically safe module with ATEX supply circuit.
- ATEX level regulator with 5, 10 or 20 m of electric cable.
- ATEX electronic level transmitter.
- Maxifilter 142.
- Maxifilter 170, available also with slope riser for oblique wells.
- Electric cable to combine according to the chosen version and the liquid to pump.

Technical specifications

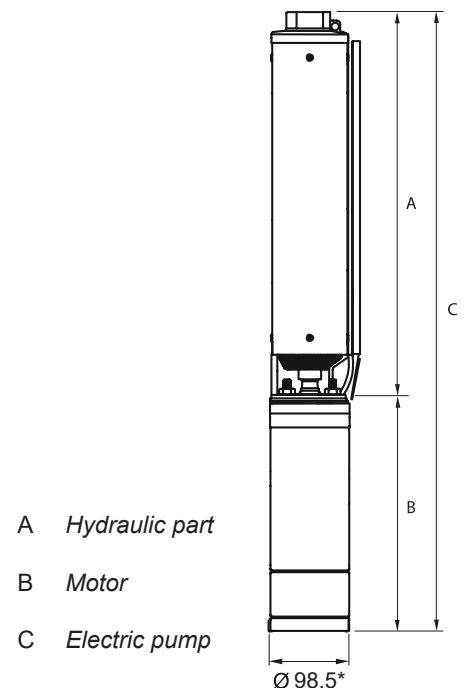
Pump type	Motor		Cap. $\mu\text{F}$ VL 450	Max current		Outlet $\varnothing$	Delivery										
	HP	kW		230 V	400 V		l/min	0	40	60	80	100	120	140	180	200	220
				1~	3~			$\text{m}^3/\text{h}$	0	2,4	3,6	4,8	6	7,2	8,4	10,8	12
ALPHA EX 6	0,75	0,55	20	5,6	1,9	1" 1/4	Manometric head (m)	43	37	31	19	7					
ALPHA EX 9	1	0,75	30	6,6	2,3			65	55	46	28	11					
ALPHA EX 13	1,5	1,1	40	9,5	3,3			95	80	67	45	18					
ALPHA EX 17	2	1,5	50	12	4,2			122	106	88	60	21					
ALPHA EX 24	3	2,2	—	—	5,9			185	153	130	89	30					
BETA EX 6	1,5	1,1	40	9,5	3,4	2"		35			31	29	27	24	17	11	4
BETA EX 9	2	1,5	50	12	4,2			53			44	42	40	36	25	17	9
BETA EX 13	3	2,2	—	—	5,9			78			65	61	57	52	38	28	16

Performance curves



Dimensions and weights

Pump type	Dimensions					Weight				
	mm									
	A	B		C		A	B		C	
		230 V 1~	400 V 3~	230 V 1~	400 V 3~		230 V 1~	400 V 3~	230 V 1~	400 V 3~
ALPHA EX 6	358	340	340	698	698	2,8	9	9	11,8	11,8
ALPHA EX 9	443	340	340	783	783	3,4	9	9	12,4	12,4
ALPHA EX 13	557	380	380	937	937	4,2	10,9	10,9	15,1	15,1
ALPHA EX 17	671	460	420	1131	1091	4,8	14,7	12,8	19,5	17,6
ALPHA EX 24	894	—	460	—	1354	6,5	—	14,7	—	21,2
BETA EX 6	493	380	380	873	873	4,2	10,9	10,9	15,1	15,1
BETA EX 9	646	460	420	1106	1066	4,6	14,7	12,8	19,3	17,4
BETA EX 13	850	—	460	—	1310	6	—	14,7	—	20,7



\* The max diameter refers to the solution with ME4DK flat cable. With different cables the diameter can change.

## ATEX marking

**II** Group of apparatus - equipment for surface plants.

**2G** Category - equipment compatible to be installed in potentially explosive atmospheres with gas, steams and vapors (area 1); this equipment is suitable for area 1 and area 2.

## Protection

**Ex** Protection against explosions.

**mb** Level b “encapsulation” protection for external connection box.

**c** “Safety construction” protection for hydraulic part.

**IIC** Subgroup of gas: equipment compatible to be installed with all combustible gas.

**T5 (T6)** Class temperature – maximum temperature of the equipment 100 °C. When the mark is T6 the maximum temperature of the machine is 85 °C.

**Gb** Protection level of equipment compatible to be installed in potentially explosive atmospheres with combustible gas - level b.