









#### **APPLICATIONS**

Pumps in conformity with 94/9/CE Directive may be used in potentially explosive atmospheres according to the ATEX marking:

ATEX marking									
II .	Group of apparatus - equipment for surface plants.								
2G	Category - equipment compatible to be installed in potentially explosive atmosphere with gas, steams and vapors (area 1); this equipment is suitable for area 1 and area 2.								
ATEX marking – protection									
Ex	Protection against explosions.								
mb	Level b "encapsulation" protection for external connection box.								
С	"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.								

### **FEATURES**

- Multistage centrifugal electric submersible pumps for 4" wells.
- External pump case, delivery port, suction port, shaft, impellers and diffusers in stainless steel.
- The check valve made of stainless steel is installed inside the delivery head.
- Motor coupling meets NEMA standards.
- Temperature of pumped liquid: max +40°C.
- Available for permanent immersion in hydrocarbons version.
- · Available in AISI 316 version.

#### **MOTOR**

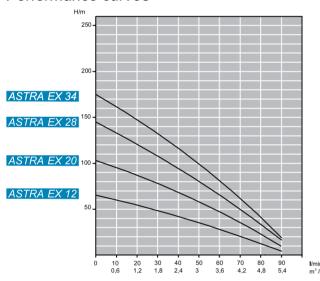
- 2 poles asynchronous motor, 50 Hz, 2850 rpm.
- Class F insulation.
- IP68 protection.
- Working voltage: single-phase 230 V, three-phase 400 V.

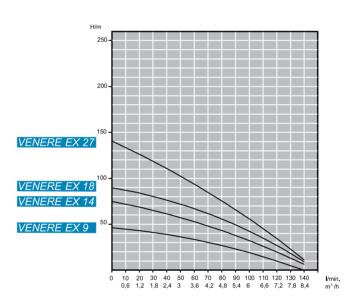


# Technical specifications

Pump type	Motor		= VL 450	Max current		Outlet	Delivery									
	НР	Ī	Сар. МЕ	230V 1~	400V 3~		l/min	0	20	40	60	80	90	100	120	140
		kW		Α	A	Ø	m³/h	0	1,2	2,4	3,6	4,8	5,4	6	7,2	8,4
ASTRA EX 12	1	0,75	30	5,3	1,8	       1" 1/4   	Manometric head (m)	66	53	41	29	15	6			
ASTRA EX 20	1,5	1,1	40	9	3,3			103	88	68	48	25	10			
ASTRA EX 28	2	1,5	50	11,4	4,7			144	123	95	67	35	14			
ASTRA EX 34	3	2,2	-	-	5,3			175	150	116	82	42	17			
VENERE EX 9	1	0,75	30	6,3	1,9			45	41	37	32	26	21	16	9	3
<b>VENERE EX 14</b>	1,5	1,1	40	9,3	3,5			74	67	60	52	44	39	34	18	6
<b>VENERE EX 18</b>	2	1,5	50	11,5	4,7			90	81	72	64	54	50	45	24	8
<b>VENERE EX 27</b>	3	2,2	-	-	5,5			140	124	108	94	74	65	56	29	10

## Performance curves





# Dimensions and weights

		Е	Dimensio mm	ns		Weight kg					
Pump type	Α	E	3	(		A		3	С		
		230V 1~	400V 3~	230V 1~	400V 3~		230V 1~	400V 3~	230V 1~	400V 3~	
ASTRA EX 12	405	328	328	733	733	5,2	9	9	14,2	14,2	
ASTRA EX 20	550	368	368	918	918	7,3	10,9	10,9	18,2	18,2	
ASTRA EX 28	715	448	408	1163	1123	9,3	14,7	12,8	24	22,1	
ASTRA EX 34	822	-	448	-	1270	10,6	-	14,7	-	25,3	
VENERE EX 9	391	328	328	719	719	4,9	9	9	13,9	13,9	
<b>VENERE EX 14</b>	495	368	368	863	863	6,3	10,9	10,9	17,2	17,2	
<b>VENERE EX 18</b>	585	448	408	1033	993	7,4	14,7	12,8	22,1	20,2	
<b>VENERE EX 27</b>	806	-	448	-	1254	10,2	-	14,7	-	24,9	

A Hydraulic Part

B Motor

C Electric Pump

