



APPLICATIONS

Raising from wells or tanks of water free from solid sediments, pumping of **liquids contaminated and with traces of heavy metals**, sampling of fluids in contaminated sites, hydraulic barriers.

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 3" wells with suction from below**: the hydraulic part is located under the motor cooled externally by the pumped liquid.
- External pump case, motor case, motor support and other components in **AISI 316 stainless steel**.
- Impellers and diffusers in special technopolymer.
- The check valve installed inside the electric pumps.
- Electric pumps produced directly with the meters of SK 4G1,5 electric cable required without electrical junctions.
- The pumps can not operate in dry conditions.
- Electric pumps submerged for at least 15 cm provided that the pumps have been preloaded.
- Temperature of the pumped liquid: max +40 °C.
- Maximum immersion depth: 20 m.

MOTOR

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

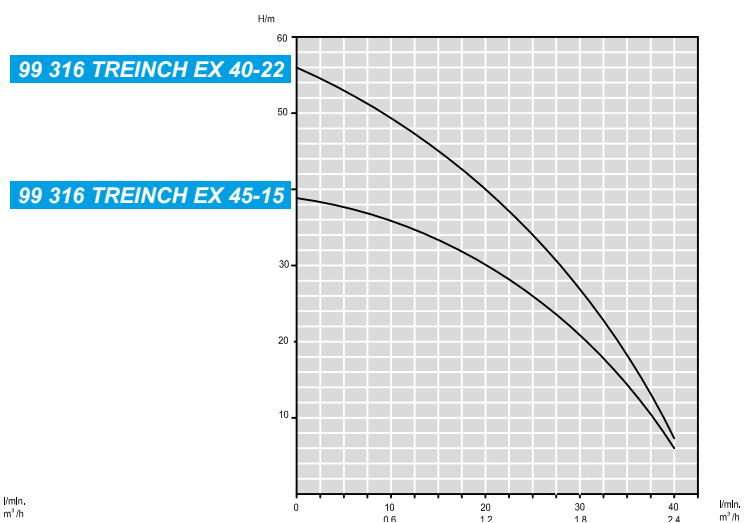
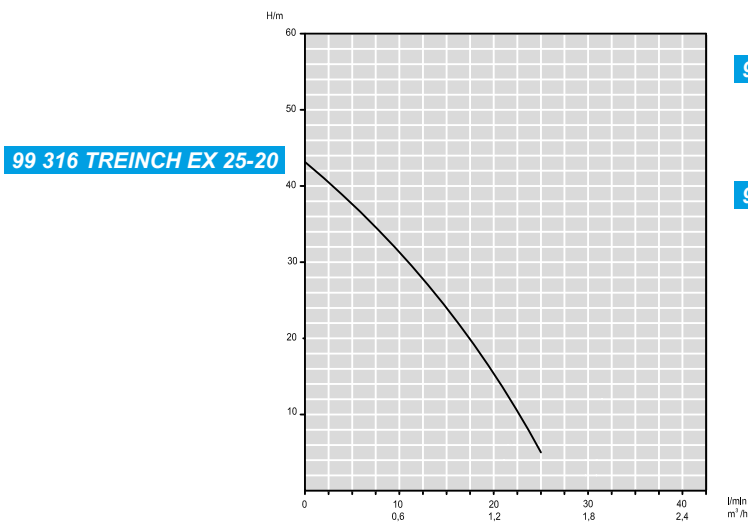
ACCESSORIES

- 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.
- SK 4G1,5 round cable or ID 4G1,5 round cable.

Technical specifications

Pump type	Motor		Cap. μ F VL 450	Max current		Outlet \emptyset	Delivery								
	HP	kW		230 V	400 V		l/min	0	10	15	20	25	30	35	40
				1~	3~										
99 316 TREINCH EX 25-20	0,5	0,37	16	3,8	2,4	1"	Manometric head (m)	0	0,6	0,9	1,2	1,5	1,8	2,1	2,4
99 316 TREINCH EX 40-15	0,5	0,37	16	3,8	2,4			43	32	24	16	5			
99 316 TREINCH EX 40-22	0,75	0,55	—	—	2,6			39	36	33	30	26	21	14	6
								56	51	45	40	34	28	18	7

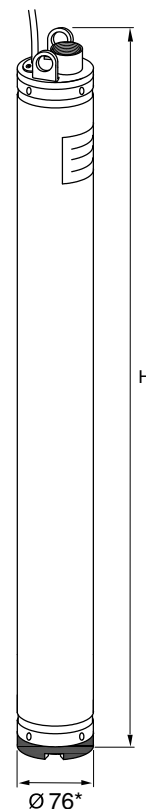
Performance curves



Dimensions and weights

Pump type	Dimensions		Weight	
	mm		kg	
	H		230 V	400 V
	230 V	400 V	1~	3~
99 316 TREINCH EX 25-20	1008	1008	11,6	11,6
99 316 TREINCH EX 40-15	890	890	10,7	10,7
99 316 TREINCH EX 40-22	—	1055	—	11,8

* On request diameter 74 mm.



ATEX marking

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|-----------|--|
| 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. |
| eb | Type of protection applied to electrical motor – increased safety “e”, level “b” – type of protection applied to electrical apparatus in which additional measures are applied so as to give increased safety against the possibility to excessive temperature and of the occurrence of ark and sparks in normal service or under specified abnormal conditions. |
| h | Type of protection applied to hydraulic part – constructional safety “c” – ignition protection where constructional measures are applied so as to protect against the possibility of ignition from hot surfaces, sparks and adiabatic compression generated by moving parts |
| mb | Type of protection applied to connection facility to external circuits – encapsulation “m”, level “b” – type of protection whereby parts that are capable of igniting an explosive atmosphere by either sparking or heating are fully enclosed in a compound or other non-metallic enclosure with adhesion in such a way as to avoid ignition of a dust layer or explosive atmosphere under operating or installation conditions. |
| ob | Type of protection applied to electrical motor – liquid immersion “o”, level “b” – type of protection in which the electrical equipment or parts of the electrical equipment are immersed in a protective liquid in such a way that an explosive gas atmosphere which may be above the liquid or outside the enclosure cannot be ignited. |
| IIC | Subgroup of gas: equipment compatible to be installed with all combustible gas. |
| T4 | Class temperature – maximum temperature of the equipment 135 °C. |
| Gb | Protection level of equipment compatible to be installed in potentially explosive atmospheres with combustible gas - level b. |