





APPLICATIONS

Pumps in conformity with 94/9/CE Directives can 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. |
| 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. |

FEATURES

- Multistage centrifugal electric submersible pumps for 4” wells. The pumps are characterized by a floating impellers system that ensures high resistance to sand abrasion.
- External pump case, delivery port suction port, shaft and other components in stainless steel.
- Impellers in acetal resin.
- Polycarbonate diffusers with ceramic insert at wear points.
- The check valve made of stainless steel is installed in 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.

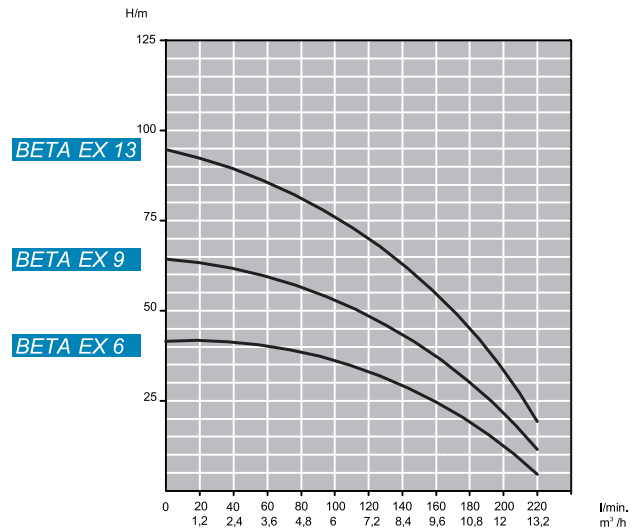
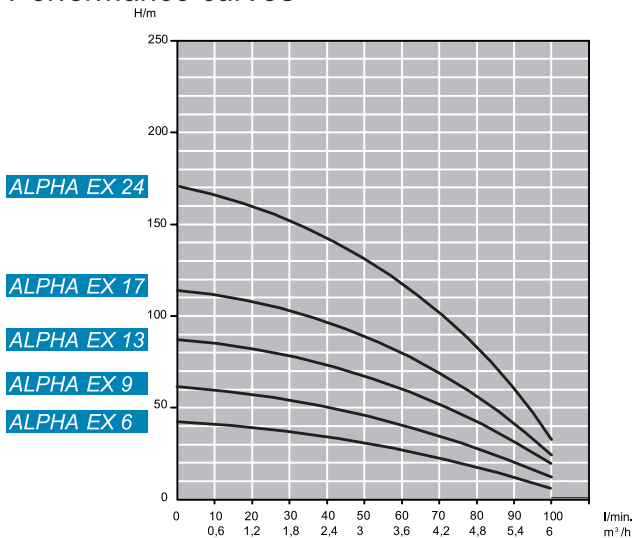
MOTOR

- 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 | | Cap. MF VL 450 | Max current | | Outlet Ø | Delivery | | | | | | | | | | | | |
|-------------|-------|------|----------------|-------------|---------|-------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|------|--|
| | HP | kW | | 230V 1~ | 400V 3~ | | l/min | 0 | 40 | 60 | 80 | 100 | 120 | 140 | 180 | 200 | 220 | | |
| | | | | A | A | | | m³/h | 0 | 2,4 | 3,6 | 4,8 | 6 | 7,2 | 8,4 | 10,8 | 12 | 13,2 | |
| ALPHA EX 6 | 0,75 | 0,55 | 20 | 1,9 | 5,6 | 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 mm | | | | | Weight kg | | | | |
|-------------|---------------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|
| | A | B | | C | | A | B | | C | |
| | | 230V 1~ | 400V 3~ | 230V 1~ | 400V 3~ | | 230V 1~ | 400V 3~ | 230V 1~ | 400V 3~ |
| ALPHA EX 6 | 358 | 328 | 328 | 686 | 686 | 2,8 | 9 | 9 | 11,8 | 11,8 |
| ALPHA EX 9 | 443 | 328 | 328 | 771 | 771 | 3,4 | 9 | 9 | 12,4 | 12,4 |
| ALPHA EX 13 | 557 | 368 | 368 | 925 | 925 | 4,2 | 10,9 | 10,9 | 15,1 | 15,1 |
| ALPHA EX 17 | 671 | 448 | 408 | 1119 | 1079 | 4,8 | 14,7 | 12,8 | 19,5 | 17,6 |
| ALPHA EX 24 | 894 | - | 448 | - | 1342 | 6,5 | - | 14,7 | - | 21,2 |
| BETA EX 6 | 493 | 368 | 368 | 861 | 861 | 4,2 | 10,9 | 10,9 | 15,1 | 15,1 |
| BETA EX 9 | 646 | 448 | 408 | 1094 | 1054 | 4,6 | 14,7 | 12,8 | 19,3 | 17,4 |
| BETA EX 13 | 850 | - | 448 | - | 1298 | 6 | - | 14,7 | - | 20,7 |

