

General functions and range of applications, intended use

The multistage centrifugal submersible electric pumps series "4" Ex" are electrical pumps multi-impeller and can be used for the following purposes:

- emptying rainwater wells collection and infiltration;
- draining of flooded areas;
- raising of water from deep wells, bathtubs and tanks of first collection;
- waterworks of raising for industrial uses.
- pumping/extraction of leachate in landfill wells;
- removal of condensed water in biogas plants;

The liquids handled can contain 250 g/m³ of sand maximum.

The Alpha/Beta EX borehole pumps are provided with a stainless steel check valve inside the head.

Rated data and performances

Electric

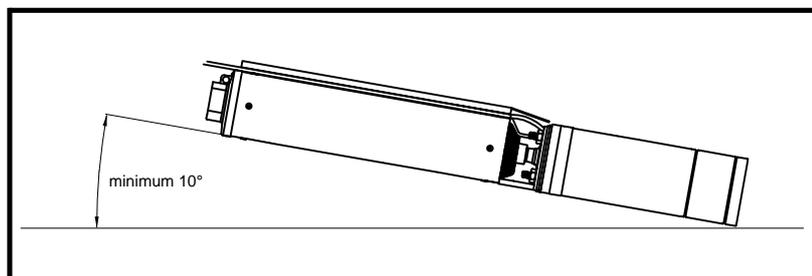
- rated voltage: 400V_{3-Y}; 230V_{3-Δ}; 230V₁₋
± 5%
- connection: star or delta
- rated frequency: 50 Hz
- rated speed: 2850 rpm
- insulation class: F (Δ F)

Hydraulic

- liquid temperature : -20 ÷ +40°C
- liquid density: < 1200 kg/m³

In order to guarantee the correct operation of the hydraulic parts of the Alpha/Beta EX electric submersible pumps, assured that the minimum delivery capacity is at least 5 l/min.

The electric pump cannot be tilted more than +/- 80° (to right or left).



Construction materials



Pump type	Component	Material
Alpha/Beta EX	Gaskets	NBR
	Mechanical seal	NBR/Aluminum oxide/ Graphite/SS304
	Cable	SK or H07RN-F
	Motor case	Stainless steel AISI304
	Upper bearings support	Brass OT58
	External hydraulic part	Stainless steel AISI304
	Impellers/diffuser	POM/PPOM

Sample of application

Intrinsically safe active barrier
for Atex level transmitter



Red Line Control Panel

Indicator for electronic
level transmitter



Safe zone

Fiberglass utility cabinet



ATEX zone



Flow switch



El. pump Alpha EX / Beta EX
with Maxifilter



ID (EX) electronic
level transmitter