

General functions and range of applications, intended use

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

- emptying rainwater wells collection and infiltration, also contaminated by hydrocarbons;
- draining of flooded areas also contaminated by hydrocarbons;
- raising of water from deep wells, bathtubs and tanks of first collection;
- waterworks of raising for industrial uses;
- pumping/extraction of liquids contaminated by hydrocarbons;
- removal of condensed water also contaminated by hydrocarbons 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

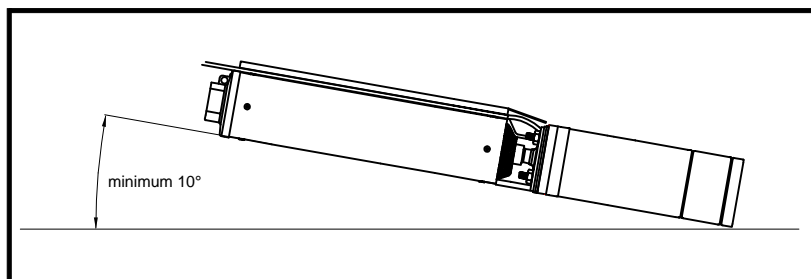
- rated voltage: 400V_{3-Y}; 230V_{3-Δ}; 230V₁₋
± 5%
- connection: star or delta
- rated frequency: 50 Hz
- rated speed: 2850 rpm
- insulation class: F (Δt F)

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



*with round cable: Ø 105

Pump type	Component	Material
ID Alpha EX ID Beta EX	Gaskets	NBR
	Mechanical seal	HNBR/Silicon carbide/ Graphite/SS 316
	Cable	ID
	Motor case	Stainless steel AISI316
	Upper bearings support	Stainless steel AISI316
	External hydraulic part	Stainless steel AISI316
	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 ID Alpha EX / ID Beta EX
with Maxifilter



ID (EX) electronic
level transmitter