

### General functions and range of applications, intended use

The drainage electric sump pumps "ID Derby Ex" series are electrical pumps single-impeller with vertical axis and can be used, among the others, for the following purposes:

- emptying rainwater wells collection and infiltration contaminated by hydrocarbons;
- draining of flooded areas contaminated by hydrocarbons;
- raising of water from deep wells, bathtubs and tanks of first collection contaminated by hydrocarbons;
- waterworks of raising for industrial uses;
- collecting of hydrocarbons in storage tanks;
- removal of condensed water in biogas plants (even contaminated by hydrocarbons);

The liquids handled can contain solid particles small and average dimension (maximum 10 mm) and/or filamentous particles.

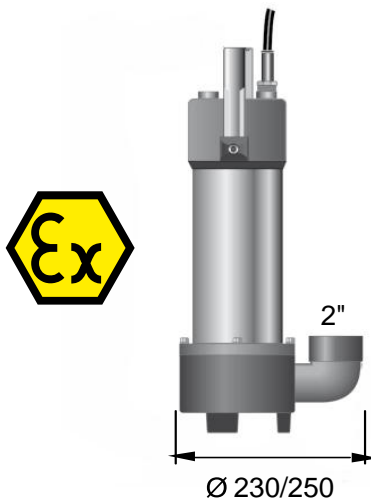
The "ID Derby Ex" pumps series can normally be used with liquids having from Ph 6 to Ph 14.

### Rated data and performances

- rated voltage: 400V<sub>3</sub>; 230V<sub>1~</sub>; ± 5%
- connection: star
- rated frequency: 50 Hz
- rated speed: 2850 rpm
- insulation class: F (Δt F)
- maximum altitude of duty: 1000 m a.s.l.
- liquid temperature : -20 ÷ +40°C
- liquid density: < 1200 kg/m<sup>3</sup>
- I<sub>A</sub>/I<sub>N</sub>: 3,8

In order to guarantee the correct operation of the hydraulic parts of the drainage electric submersible pumps "ID Derby Ex" series, assured that the minimum delivery capacity is at least 5 l/min.

### Construction materials



Pump type	Component	Material
ID Derby EX	Gaskets	HNBR
	Mechanical seal	HNBR/Silicon carbide/ Graphite/SS 316
	Cast iron	G25
	Cable	ID
	Motor case	Stainless steel AISI316
	Bearings support	Cast Iron G25
	External hydraulic part	Cast Iron G25
	Impellers/diffuser	Cast Iron G25

Sample of application

