

Instructions

Edition: 02.2011

Overfill Prevention Sensor 81 D-Ex ...

TÜV 03 ATEX 2034

I Range of application

The overfill prevention sensor 81 D-Ex ... is used as part of a filling and respectively overfill prevention device.

II Standards

See EC-type examination certificate.

III Instructions for safe ...

III.a ... use

The overfill prevention sensor is suitable for use in hazardous in a potentially explosive atmosphere. The connection is made via two contacts.

III.b ... mounting

The overfill prevention sensor type 81 D-Ex can completely be erected inside zone 0.

For the overfill prevention sensor type 81 D-Ex U, the probe tube and the sensor can be erected in zone 0, and the probe tube above the screw-in unit and the junction box can be erected in zone 1.

Overfill prevention sensor type 81 D-Ex is constructed as a flame-arresting valve IIB1 in accordance with EN 12874 and can therefore be erected in all tanks with petrol-ethanol mixes.

General remark (see also EN 60079-26, clause 4.6):

If equipment will be erected in wall between zone 0 and zone 1, care must be taken that after mounting IP67 will be reached.



III.c ... installation

All wiring operations must solely be carried out with the power disconnected. The specific EN directives respectively the local installation regulations including EN 60079-14 are to be observed. For a overfill prevention sensor with a tube valve, no wiring is necessary. When using a wall valve, two-core connecting pipes must be lain between the overfill prevention sensor and the valve. Attention does not be need to be paid to polarity.

III.d ... maintenance, overhaul and repair

In general, the overfill prevention sensor is maintenance-free. In case of a defect, please send it back to manufacturer, FAFNIR.

IV Equipment marking

1 Manufacturer:	FAFNIR GmbH
2 Type designation:	81 D-Ex ...
3 Serial number:	Ser. N°: ...
4 Certificate number:	TÜV 03 ATEX 2034
5 Ex marking:	 II 1 G Ex ia IIB T3 Ga II 1/2 G Ex ia IIB T3 Ga/Gb
6 CE marking:	 0044
7 Electrical Data:	$U_i \leq 30 \text{ V}$ $I_i \leq 200 \text{ mA}$ $P_i \leq 1.5 \text{ W}$

V Technical data

The overfill prevention sensor must only be connected to a certified, intrinsically safe circuit, the output value of which does not exceed the data detailed under point 7 of the equipment marking.

The effective internal capacitance and inductance of the overfill prevention sensor are negligibly small.

The overfill prevention sensor may be used in the following temperature ranges:

Ambient =	-25 °C ... +60 °C
Media =	-25 °C ... +50 °C

General remark (see also EN 60079-0, clause 1):

Zone 0 exist only under atmospheric conditions:

Temperature:	-20 °C ... +60 °C
Pressure:	0.8 bar ... 1.1 bar
Oxidant:	Air (oxygen content approx. 21 %)

VI Specific conditions of use

None.