

# EX Electro-Optic Level Switch

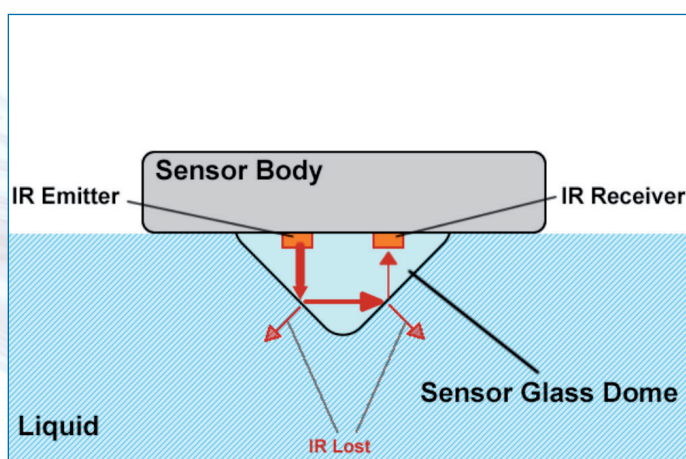
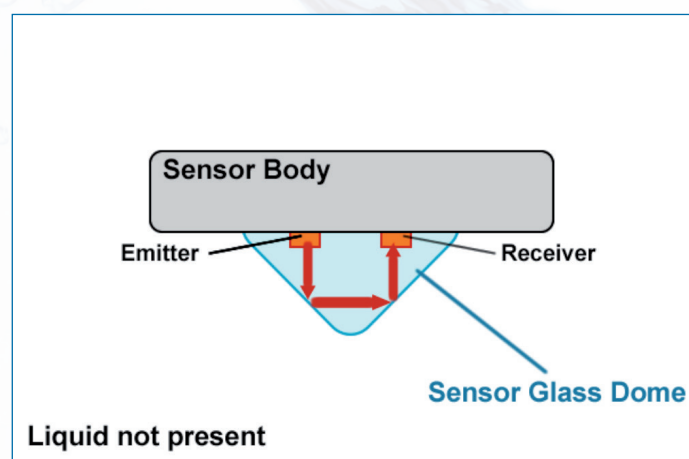
CE 0948 II 1 G Ex ia IIC T6..T4 Ga



## Safety notes

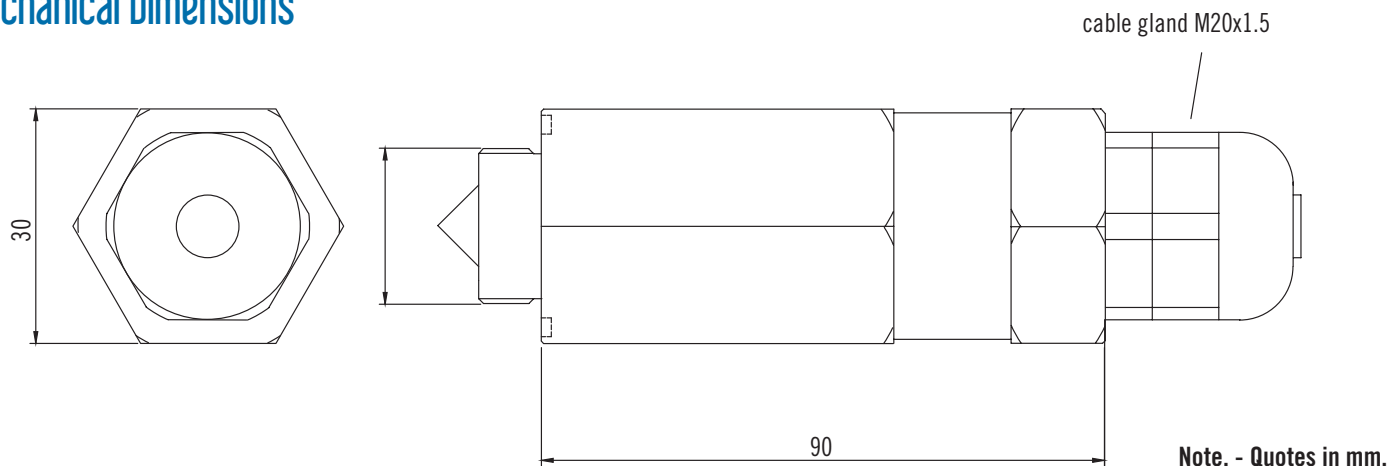
The sensor has been designed and manufactured to achieve the **ia** intrinsically safety, and to work in potential explosive environment – **IIC Group**. Regarding the temperature class of the instrument, please look at the table on next page of this document for more details.

## Operating Principle



The sensor contains an infrared-ray emitter and an optical receiver. In air (liquid not present), all the light emitted is reflected – internally – by the dome and then redirected to the receiver. When the liquid reaches the sensor dome, a big amount of the light emitted is lost in the liquid and the sensor senses its presence.

## Mechanical Dimensions



## Case features

Body materials:

Dome materials:

Available Body threads:

Stainless Steel AISI 303, 304, 316L

Glass

from 3/8" up to 3/4" GAS cylindrical;

from 3/8" up to 3/4" GAS conic;

from 3/8" up to 3/4" NPT;

from 5/8"-24 up to 1" 1/8-18 UNEF;

from M18 up to M30 ISO metric.

POWER SUPPLY	9 ÷ 28 Vdc
STORAGE TEMPERATURE	-20°C ÷ 60°C
OUTPUT TYPE	Open collector
MAX. OUTPUT NPN O.C. SINK CURRENT	40 mA
CABLE CAPACITANCE	140 pF/m
CABLE INDUCTANCE	1,25 µH/m
CABLE RESISTANCE	39 mΩ/m

## Safety Parameters

U<sub>i</sub> = 30VDC

I<sub>i</sub> = 160mA

P<sub>i</sub> = 1,2W

Ingress Protection Code:

In front IP68, 20 bar 30min

TEMPERATURE CLASS MAX SURFACE TEMPERATURE (TX)	MAX WORKING TEMPERATURE RANGE AT LIQUID DETECTING POINT (°C)	AMBIENT TEMPERATURE RANGE (°C)
T6	-20 ÷ +60	-20 ÷ +60
T5	-20 ÷ +80	-20 ÷ +60
T4	-20 ÷ +100	-20 ÷ +60

## Ordering Codes (T6 code examples with Stainless steel AISI 304 housing)

MOUNTING THREAD	TEMP. CLASS	OUTPUT MODE	CODE NUMBER
3/4" NPT	T6	Normally Open in air	51244001001400
1/2" NPT	T6	Normally Open in air	51249001001400
1" 1/8 -18 UNEF	T6	Normally Open in air	5124B001001400
3/4" NPT	T6	Normally Closed in air	51254001001400
1/2" NPT	T6	Normally Closed in air	51259001001400
1" 1/8 -18 UNEF	T6	Normally Closed in air	5125B001001400

NOTE. An appropriate intrinsically safe interface must be used and installed in strict accordance with sensor's technical documentation.