

# K25 Level Switch for High Pressure environments with 4:20 mA analog temperature output up to 150 bar



## Application Description

The optical level switch has been designed for use in level monitoring applications for the control of oil or liquid CO<sub>2</sub> for transcritical or subcritical applications.

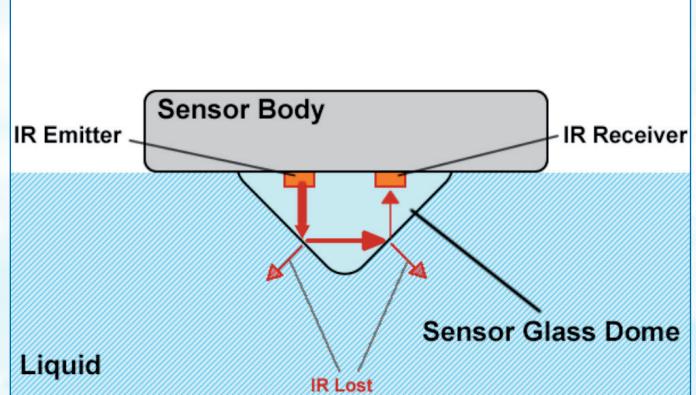
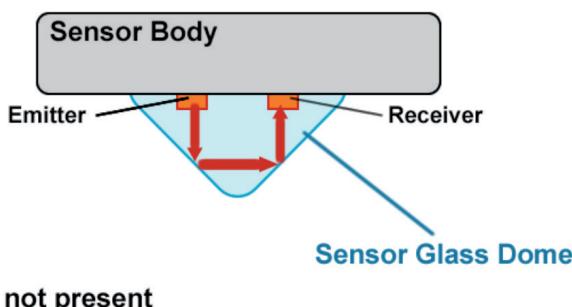
The switch has no moving parts, thus it is particularly suited for monitoring critical media where high reliability is needed.

The sensor provides two outputs:

- the first one – digital – indicates if the liquid is present or absent,
- the second one – analogical – is proportional to the temperature read.

It combines the Level Detection and the Temperature Management with the high pressure resistance up to 150 Bar.

## Operating Principle

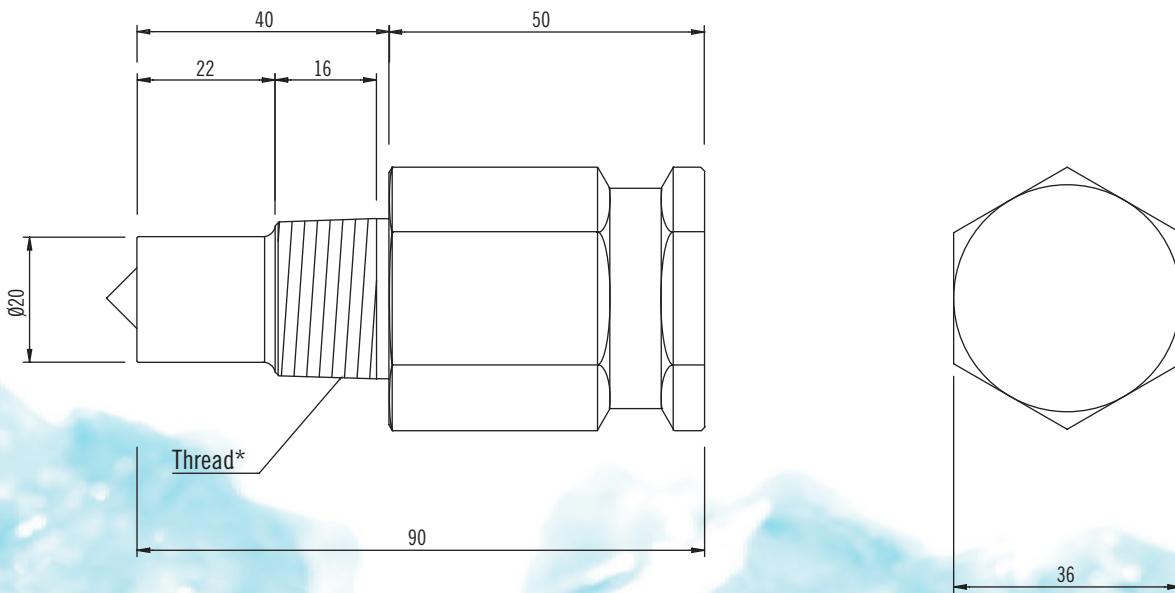


The sensor contains an infrared-ray emitter and an optical receiver. In air (liquid not present), all the light emitted is reflected – internally – by the dome and then redirected to the receiver. When the liquid reaches the sensor dome, a big amount of the light emitted is lost in the liquid and the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

## Technical Data

<b>OPERATION MODE</b>	Detect liquid presence with contact
<b>REPEATABILITY</b>	$\pm 2$ mm.
<b>BODY MATERIALS</b>	Nickel plated steel
<b>SENSIBLE DOME</b>	Glass
<b>ELECTRONIC PROTECTIONS</b>	Transient over voltage, reverse polarity
<b>MAX. TEMPERATURE RANGE</b>	From $-40^{\circ}\text{C}$ up to $+125^{\circ}\text{C}$
<b>STORAGE TEMPERATURE</b>	From $-40^{\circ}\text{C}$ up to $+125^{\circ}\text{C}$
<b>SUPPLY VOLTAGE</b>	24 VDC $\pm 10\%$
<b>SUPPLY CURRENT (LEVEL SECTION)</b>	20mA max.
<b>OUTPUT TYPE</b>	NPN
<b>DC OUTPUT LOAD CURRENT</b>	up to 50 mA max
<b>OUTPUT MODE</b>	Output Normally Open or Closed in air
<b>TEMPERATURE OUTPUT</b>	Analogical from 4 to 20 mA
<b>DELAY TIMES</b>	Customizables depending on application needings
<b>MAX PRESSURE</b>	up to 150 bar

## Mechanical Dimensions



Note. - Quotes in mm.

## Ordering Codes

SENSOR	CODE
3/4" NPT - Normally open in air	32517308304002003150
3/4" NPT - Normally Closed in air	32517308305002003150