

FLO-TEL AND FLO-TEL XD

Non-invasive, reusable burst sensors

Flo-Tel

Eliminate re-wiring costs with Flo-Tel, a non-invasive, practical and reusable solution for detecting when a rupture disc has functioned.



Flo-Tel XD

The FloTel XD consists of our non-invasive, reusable Flo-Tel burst detection system plus a certified junction box.



FLO-TEL

NON-INVASIVE, REUSABLE BURST DETECTION SENSOR

Eliminate re-wiring costs with Flo-Tel, a non-invasive, practical and reusable solution for detecting when a rupture disc has functioned.



Operating on a simple reed switch and magnet technology, the Flo-Tel sensor fits into a holder with a magnet on the rupture disc. When the disc bursts, the magnet arcs away from the sensor, giving an open circuit signal.

Flo-Tel is non-invasive to the process and is therefore unaffected by downstream pressure fluctuations or corrosion. Using Flo-Tel eliminates leak paths and the risk of false alarms associated with traditional membrane-type detection systems. After rupturing, the disc is the only element that needs replacing, which eliminates the need for expensive re-wiring costs and maintenance planning.

Temperature -100°C to 300°C

IP rating 66

Cable lengths available 2m, 5m, 10m

Connection Flo-Tel must be connected to an intrinsically safe supply

**Let us help you with all
your pressure relief questions.**

UK office | North Shields
+44 (0)191 293 1234 | uksales@osecoelfab.com

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+1 (918) 258 5626 | info@osecoelfab.com

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TECHNICAL SPECIFICATIONS



Temperature range	-100°C to 300°C (-148°F to 572°F)
IP rating	66
Product markings	II 1G Ex ia IIC Ga II 1D Ex ia IIIC Da
Cable lengths available	2m, 5m, 10m
Connection	Flo-Tel must be connected to an intrinsically safe supply
Design Standards	Complies with EN IEC 60079-0:2018 and EN IEC 60079-11:2012

Values for intrinsically safe connection

$U_i = 28\text{V}$
 $I_i = 84\text{mA}$
 $P_i = 0.55\text{W}$
 $L_i = 4.1\mu\text{H}$
 $C_i = 3.64\text{nF}$

T6 (T85°C) ($t_a = -100^\circ\text{C}$ to 50°C)
T5 (T100°C) ($t_a = -100^\circ\text{C}$ to 90°C)
T4 (T135°C) ($t_a = -100^\circ\text{C}$ to 125°C)
T3 (T200°C) ($t_a = -100^\circ\text{C}$ to 190°C)

Maximum process temperature = $+300^\circ\text{C}$

Certifications

ATEX (CE)
UKEx (UKCA)
IECEx

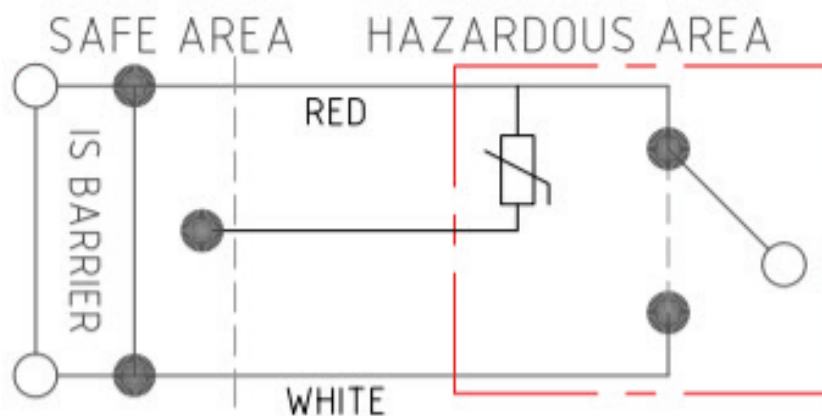
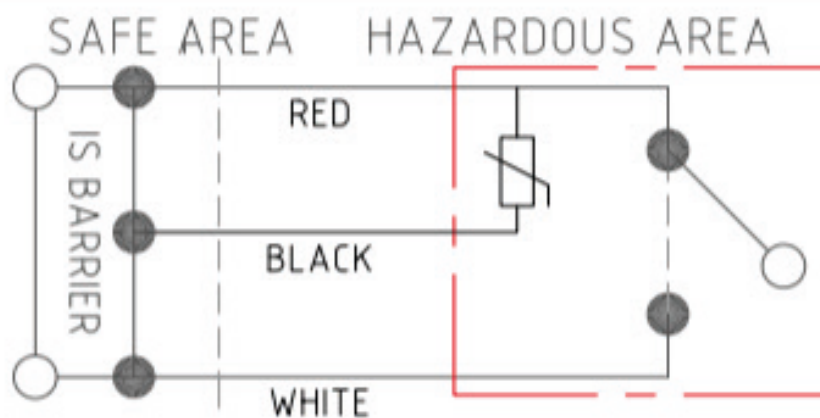
Related Products

Holders

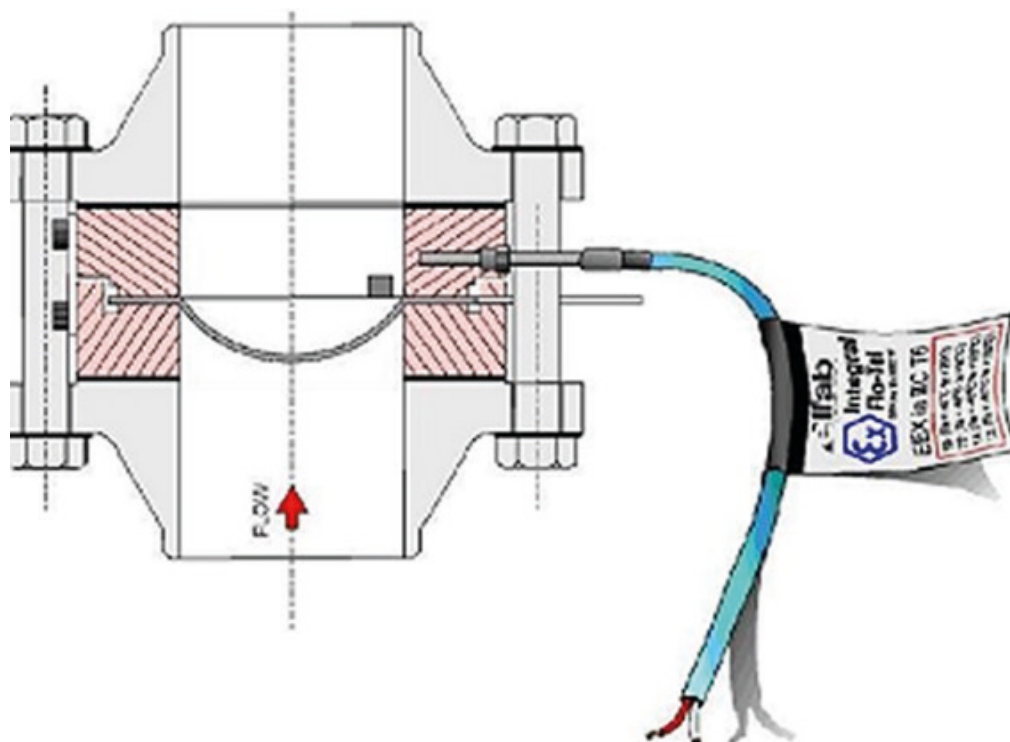
REVERSE DISC HOLDER
FORWARD DISC HOLDER
OPR/OPK HOLDER

Sensors and Installation Tools

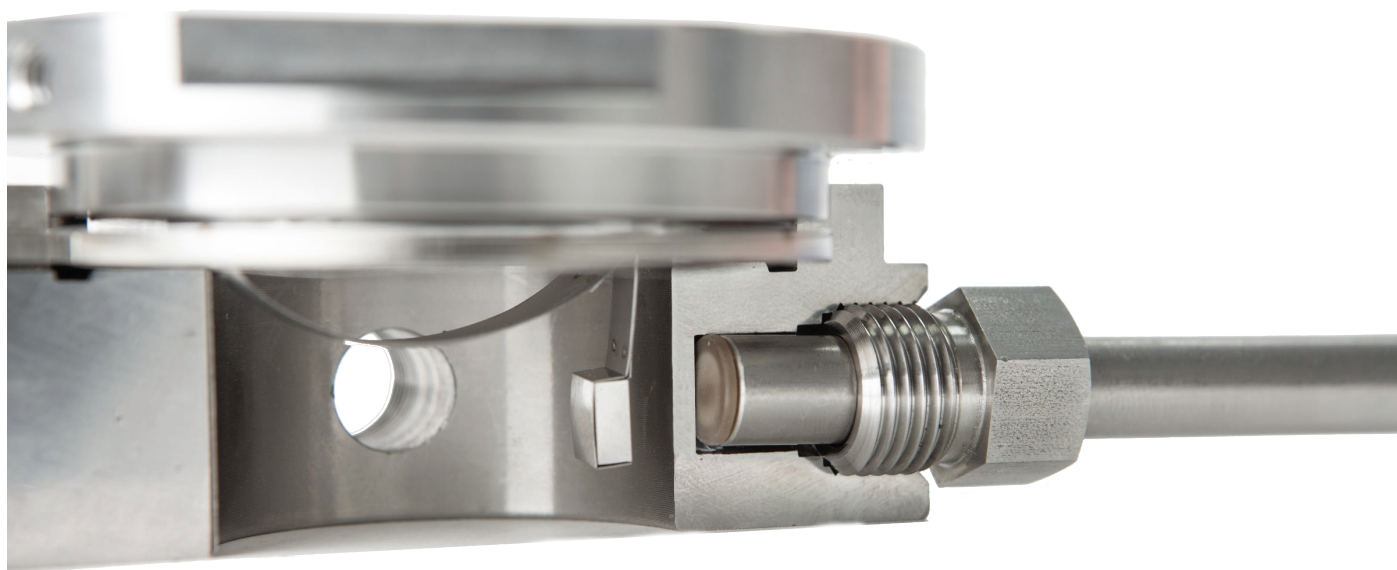
FLO-TEL XD
TEST-TEL

**INSTALL 1****IS BARRIER: INSTALL 1** $U_i \leq 28V$ $I_i \leq 84mA$ $P_i \leq 0.55 W$ $C_i = 0$ $L_i = 0$ **T****FT** $+ 300^{\circ}C$ $- 100^{\circ}C$ **INSTALL 2****IS BARRIER: INSTALL 2** $U_i \leq 3.9V \text{ dc}$ $C_i = 0$ $I_i \leq 2mA$ $L_i = 0$ $P_i \leq 7.8mW$ **T****FT** $+ 300^{\circ}C$ $- 100^{\circ}C$

Schematic Drawing



Cutaway image



FLO-TEL XD

NON-INVASIVE BURST DETECTION
FOR EXPLOSIVE DUST ENVIRONMENTS

*The FloTel XD consists of our **non-invasive, reusable Flo-Tel** burst detection system **plus a certified junction box**.*



Flo-Tel XD detects a burst rupture disc and transmits the break in continuity to a DCS. It is the first dual-certified Exd/EXia/b non-invasive system on the market to do this, and is suitable for use in Zones 0, 1 and 2.

Once installed and in service, the disc detection system requires no further electrical maintenance. Non-electrically trained operators may safely carry out checks using our unique and intrinsically safe Test-Tel unit.

Flo-Tel XD is reusable. Should a disc rupture, simply replace the disc and can then refit the Flo-Tel XD to the holder.

Temperature -40°C to 300°C

IP rating 66, 67

Cable lengths available Industry-standard

Connection See junction box and fittings specifications on next page

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TECHNICAL SPECIFICATIONS



Temperature range	-40°C to 300°C (-40°F to 572°F)
IP rating	67
Product markings	II 2 G Ex d IIC 120°C Gb -40°C ≤ Ta ≤ 100°C IP66/IP67 II 1 D Ex ta IIIC T120°C Da -40°C ≤ Ta ≤ 100°C IP66/IP67 II 1 G Ex ia IIC 120°C Ga -40°C ≤ Ta ≤ 100°C IP66/IP67 II 1 D Ex ia IIIC T120°C Da -40°C ≤ Ta ≤ 100°C IP66/IP67
Cable lengths available	Compatible with most industry-standard cables
Standard materials	Stainless Steel, marine grade available
Junction box	Weidmuller 2.5mm ² AKZ terminals, mounted on an internal DIN-Rail. One additional spare terminal is fitted for user convenience. Two earthing clamps, one internal and one external.
Junction box fittings	3x M20 tapings 2x M20 EXd stopping-plugs Optional: Vacant tapings to fit with M20 cable glands. Please let us know if you would like this option.
Cycling or static service	Non invasive design is not affected by downstream pressure fluctuations or corrosion.
Leak tightness	Sensor is not in contact with the process therefore there are no potential leak paths.
Design Standards	Complies with EN IEC 60079-0:2018, EN IEC 60079-1:2014, EN IEC 60079-11:2012 and EN IEC 60079-31:2014

Certifications

ATEX (CE)
UKEx (UKCA)
IECEX

Related Products

Holders

REVERSE DISC HOLDER
FORWARD DISC HOLDER

Sensors and Installation Tools

FLO-TEL
TEST-TEL

