

Burst Indicator Type RI & RI2

Description

The Ri/Ri2 burst/rupture indicator consist of an insulated electrical conductive strip, installed onto an explosion vent panel or rupture disc during the manufacturing process. When the vent/disc opens, the Ri/Ri2 circuit breaks and an alarm signal is initiated to shutdown the process or to generate a trouble condition. Compared to the standard Ri, the Ri2 includes additional series and end of line resistors to provide a full wiring supervision. The Ri2 burst indicator offers a high Safety Integrity Level: SIL 2 according to IEC61508.



Features and Benefits

- Outstanding chemical corrosion resistance
- High mechanical rigidity
- Simple “plug & play” –design
- Integral self-resetting electrical fuse
- Complete wiring supervision (Ri2 only)
- IEC61508-SIL2 approved (Ri2 only)

Specifications

Model	Ri / Ri2
Materials	Indicator: Copper (Cu) Substrate: Kapton (sealed envelope) Enclosure: Zamak 5
Process Temperature(1)	-40°C up to +260 °C
Ambient Temperature	-15°C up to +80°C
Available on Explosion Vent & Bursting Disc Models	(HI)-CV / (HI)-CV-S / (HI)-CV-CF / CV-(S)-I / CV-(S)-I-HT / Sani-V(-S) / EleGuard / Flex-V / RI / AD-V-RI
Electrical connection	Cable type Belden 9463NH , length 3 m Conductor: 2 x 20AWG / 2 x 0.5mm ² tinned Cu Drain wire 20 AWG tinned Cu Braid : Tinned Cu, 55% coverage Shield : Aluminum-Polyester, 100% coverage Overall diameter 6.35 mm (Pg9) Jacket material : FRNC / Blue (RAL 5012) Flame resistance : IEC 332-3-C
ATEX approval Ri ISSEP02ATEX047X II 1 G/D EEx ia IIC T6	Supply and signal circuit Voltage Ui = 28.4V Current Ii = 93mA Power Pi = 0.67W Inductance Li = 5.6µH Capacitance Ci = 1.8nF
ATEX approval Ri2 INERIS 07ATEX0014 II 1 G - Ex ia IIB T4 II 1 D - Ex iaD 20 T135°C	Supply and signal circuit Voltage Ui = 18V Current Ii = 93mA Power Pi = 0.67W Inductance Li = 5.6µH Capacitance Ci = 1.8nF
CE Approval Ingress Protection	IP65

(1) Maximum process temperature 600°C for use on type CV-I & CV-S-I.

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All above data are subject to change without notice. They must not be used unless confirmed in writing.

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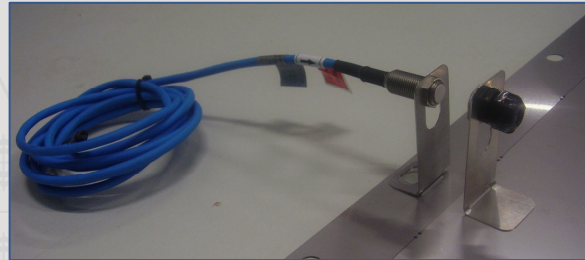
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MRI Magnetic Rupture Indicator

Description

The Fike magnetic rupture indicator (MRI) is available for use on Fike rectangular-shape explosion vents and on circular vents with light angular frames.

The MRI consists of a permanent magnet, sealed in a corrosion resistant and waterproof holder, which can be conveniently attached to the explosion vent's atmospheric side. A reed switch is positioned against the explosion vent mounting frame, facing the magnet on the opening side of the vent opposite the hinged side. When the vent opens, the magnet element will move away from the reed switch and an alarm signal is initiated to shutdown the process or to generate a trouble condition.



Features and Benefits

- Rigid construction
- Corrosion resistant/weatherproof concept
- Easy installation and replacement
- Provided with normally closed contact (NC) rated for 24 VAC/DC, 50 mA (resistive load only). Normally open contacts available on request
- Ambient temperature may be as high as 80°C
- Supplied with 3 meters of connecting cable allowing highest flexibility with regards to on-site electrical connection

Specifications

Model	MRI
ATEX approval MRI ISSEP02ATEX047X EEx ia IIB T6	Supply and signal circuit Voltage U_i = 28.4V Current I_i = 93mA Power P_i = 0.67W Inductance L_i = 5.6µH Capacitance C_i = 1.8nF

RI/RI2/MRI selection

RI:

For general purpose without wiring supervision to initiate an alarm signal OR to generate a trouble condition.

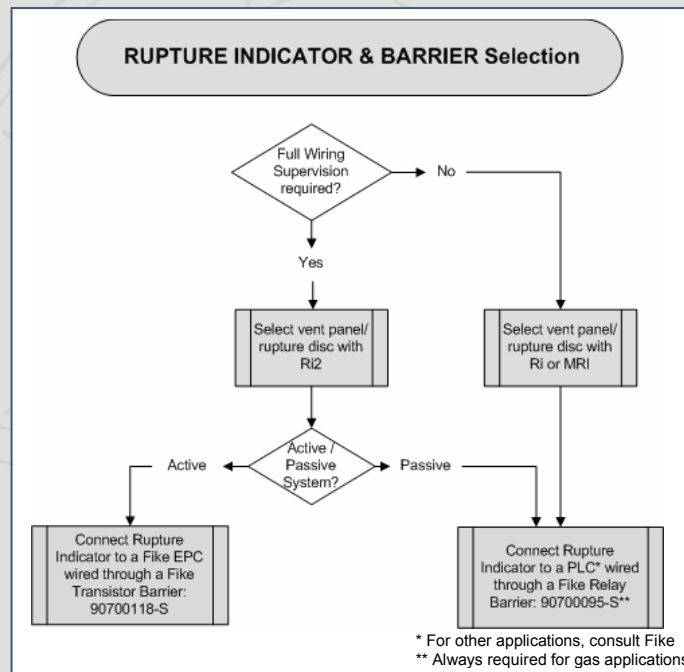
RI2:

For general purpose with full wiring supervision to initiate an alarm signal AND to generate a trouble condition.

For explosion detection with full wiring supervision to initiate an alarm signal AND to generate a trouble condition (only with explosion vent panels).

MRI:

For implementing a rupture indicator (without wiring supervision) on an installed vent panel (without RI) to initiate an alarm signal OR to generate a trouble condition.



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