



TECHNICAL DATASHEET

IR2P Rupture Indicator

Advanced Detection for Venting Panel Integrity

The DonadonSDD IR2P Rupture Indicator is designed as a straightforward and effective tool for detecting fractures in rupture discs. It is uniquely installed directly onto the venting panel during the panel's construction, ensuring a seamless integration for optimal detection capabilities.

Keyfeatures & technical benefits

Direct Installation:

The IR2P detector is engineered for direct mounting onto the venting panel, facilitating a straightforward installation process.

Advanced Detection Mechanism:

It features a flexible copper track, encapsulated between two insulating layers of Kapton, and is paired with an interface cable. This cable can be configured either with standard dual ferrules or equipped with a connector, offering flexibility in connection options.

Intrinsic

Safety Compliance:

The alarm indicator cable connects to the plant safety system through an intrinsic safety barrier, ensuring compliance with the sensor's electrical requirements (maximum voltage of 24V DC and maximum current of 50mA) and appropriate zone classification.

Operational Efficiency:

Upon the occurrence of a panel rupture, the IR2P indicator's copper circuit is disrupted, which in turn interrupts the flow of current. This interruption is a signal for the connected equipment to indicate the rupture disc's effective opening, enhancing safety protocols within the facility.

The IR2P sensor is fully compliant with the European Directive 2014/34/EU (ATEX), the UK's Statutory Instrument 2016 No. 1107 (UKCA), CU TR 012 (EAC), and is certified under the IECEx scheme. This adherence underscores its reliability and safety for use in hazardous environments.

The installation zone for the sensor is determined by the type of barrier used:

- For an Ex ia barrier, installation is permitted in zones 0, 20, 1, 21, 2, 22.
- For an Ex ib barrier, installation is permitted in zones 1, 21, 2, 22.

Installation procedures must be in accordance with EN 60079-14 and the latest national electrical standards to ensure safety and compliance.

TECHNICAL DATA

MODEL	IR2P
OPERATING TEMPERATURE	Active part: from -196 °C to 280 °C Interface cable: from -40 °C to +70 °C
MEMBRANE ENCAPSULATION	Polyimide (Kapton®)
PRINTED CIRCUIT BOARD	Copper
CABLE	Standard, 2 m - available with two ferrules or with connector Max length 15 m
ELECTRICAL PARAMETERS OF POWER SUPPLY (MAX)	Voltage: 24 V CC Current: 50 mA Power: 0.3 W Capacity: 780 pF Inductance: 7.2 µH
PROCESS FLUID	Gas, liquid, powder
IP DEGREE	67

DonadonSDD is now part of **Baker Hughes** >

COMPATIBILITY WITH VENTING PANELS

[PSC](#), [PSR](#)

Interface Cable Configuration Options

Cable Terminated with Dual Ferrules
Cable Equipped with Connector