



TECHNICAL DATASHEET

IRA Rupture Indicators

Precision Burst Detection for Enhanced Safety

DonadonSDD IRA rupture sensors are simple and efficient instruments for recording the bursting of a rupture disc.

The IRA detector can be installed directly over the rupture disc or inside the disc holder.

The alarm indicator cables are connected to the plant safety system with an intrinsically safe barrier that conforms to the electrical characteristics of the sensor (max voltage 24V DC and max current 50 mA) and the hazardous area classification.

The detector is composed of an electric sensor simply mounted on a target made up of: a stainless steel ring

When the disc bursts, the copper circuit of the IRA alarm system opens and as a result of this the flow of current is cut off, allowing the connected equipment to signal that the disc has opened.

The IRA sensor fully complies with the European Directive 2014/34/EU (ATEX) and CU TR 012 (EAC), showcasing its dedication to maintaining the highest standards of reliability and safety. This compliance ensures that the sensor is well-suited for application in hazardous environments, affirming its capability to operate effectively and safely under challenging conditions.

The IRA sensor is classified as "basic electrical material" and is certified according to European Directive 94/9/EC (ATEX). Zone installation depends on barrier type:

- Ex ia barrier --> zone 0; 20; 1; 21; 2; 22
- Ex ib barrier --> zone 1; 21; 2; 22

Installation must be according to standard EN 60079-14.

TECHNICAL DATA

MODEL	IRA
OPERATING TEMPERATURE	From -20°C up to +300°C
ENCAPSULATING MEMBRANE	Polyimide (Kapton®)
PRINTED CIRCUIT	Copper
MAX SUPPLY VOLTAGE	24 V DC
MAX SUPPLY CURRENT	50 mA
CABLE	Standard, 2 m
COMPATIBILITY WITH RUPTURE DISCS	DCD , DIF , SCD , SCR , Y90 , KRD