



TECHNICAL DATASHEET

IR2A Rupture Indicator

Sanitary Electrical Burst Disc Indicator for Clamp Discs

The DonadonSDD IR2A – Clamp Rupture Indicator is a reliable and compact device designed for the detection of rupture events on sanitary rupture discs installed with clamp connections.

The indicator is mounted directly on the rupture disc, ensuring immediate and accurate detection of disc activation in hygienic process applications.

The IR2A – Clamp is specifically developed for pharma, food, biotech and other sanitary industries, where clean design, reliability and compliance with hazardous area requirements are essential.

The IR2A – Clamp indicator incorporates an active element consisting of a flexible copper track, securely encapsulated between two insulating layers of polyimide (Kapton®).

The active element is mechanically integrated into the clamp-mounted rupture disc assembly through a metal actuator ring, typically manufactured in AISI 316L stainless steel.

The alarm signal is transmitted through an interface cable, available in standard configuration with dual ferrules or alternatively equipped with a connector. Connection to the plant control or safety system must be performed through an intrinsic safety barrier, in accordance with the electrical parameters of the sensor:

- Maximum voltage: 24 V DC
- Maximum current: 50 mA

Barrier selection determines the permissible hazardous area classification.

The IR2A – Clamp rupture indicator is designed for use in hazardous environments and is fully compliant with:

- Directive 2014/34/EU (ATEX)
- CU TR 012 (EAC)
- IECEx Certification Scheme

Permitted Installation Zones

- With Ex ia barrier: Zones 0, 20, 1, 21, 2, 22
- With Ex ib barrier: Zones 1, 21, 2, 22

Installation must be carried out in accordance with EN 60079-14 and the applicable national electrical standards.

TECHNICAL DATA

MODEL	IR2A CLAMP
OPERATING TEMPERATURE	Active part: from -196 °C to 260 °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: 10.2 µH
PROCESS FLUID	Gas, liquid, powder

DonadonSDD is now part of **Baker Hughes** 

IP DEGREE	67
COMPATIBILITY WITH RUPTURE DISCS	Sanitary DCD , Sanitary SCD , Sanitary SCR , Sanitary Y90 , Sanitary KRD

Minimum operating pressure depending on diameter:

DN (MM)	25	40	50	65	80	100	150	200
NPS (INCHES)	1	1 1/2	2	2 1/2	3	4	6	8
MINIMUM PRESSURE (BAR G)	0,8	0,5	0,45	0,4	0,12	0,1	0,07	0,05