



TECHNICAL DATASHEET

IRC Sanitary Rupture Indicators

The DonadonSDD IRC type rupture indicator is a simple and effective instrument for the detection of rupture disc fracture.

The detector is installed on the drain side, downstream from the spacer fitting. The alarm indicator cables are connected to the plant safety system by means of an intrinsic safety barrier in compliance with the electrical characteristics of the sensor (maximum voltage 24V CC and maximum current 50mA) and zone classification.

IRC rupture indicators essentially consist of a copper track encapsulated between two insulating layers of Kapton (flexible printed circuit board), connected electrically to a cable that allows remote connection to an electrical continuity indicator. The circuit is encased between two layers of PTFE and the safety device is provided complete with PTFE seals compatible for installation between hygienic connections.

Upon disc rupture, the copper circuit of the IRC indicator is opened and the flow of the current is interrupted as a result, allowing the connected equipment to signal the effective opening of the rupture disc.

The IRC 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	IRC
OPERATING TEMPERATURE	From -20°C to +260°C (depending on the seal used)
ENCAPSULATING MEMBRANE	Polyimide (Kapton®)
PRINTED CIRCUIT	Copper
MAX SUPPLY VOLTAGE	24 V DC
MAX SUPPLY CURRENT	50 mA
CABLE	Standard, 2 m
SANITARY DISC	DCD , SCD , SCR , Y90 , KRD