

DonadonSDD IRC rupture indicators



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
Rupture disk	DCD , SCD , SCR , Y90 , KRD

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 a "simple electrical construction" and complies with European Directive 2014/34/UE (ATEX). The zone in which it can be installed depends on the type of barrier:

- barrier Ex ia > zones 0, 20, 1, 21, 2, 22
- barrier Ex ib > zones 1, 21, 2, 22

Installation must comply with standard EN 60079-14.