

CIM-SAFE SPARK DETECTOR, TYPE SDN

Function

The SDN Detector is to be used in the CIM-Safe™ Spark Detection System. The highly sensitive Detector senses infrared light and is able to detect even through dense phase material and is fitted in areas where no daylight or other light occurs. Up to 4 sensors can be connected per control unit, if more sensors are necessary will additional control units be required.

Adapters

Installation of the detector is easy and fast as Cimbria supplies also the mounting adapter where the sensor is fitted.

Adapter specifications:

Stainless steel

Abrasion resistant sapphire glass at process side.

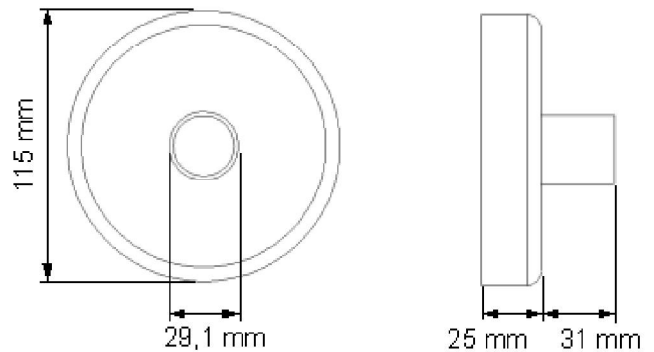
Adapter with air purge self cleaning design is supplied when the sensor is placed in humid environment as e.g. in a continuous flow dryer.



Figure 1: SDN detector with adapter



Figure 2: SDN detector with adapter and air cleaning nozzle



Range of spectral band with	800 - 1100 nm
Supply voltage	+ 20 VDC ±10%
Current	10 mA ± 10%
Return signal when detecting sparks	Squarewave signal with mean value of + 16 VDC ± 10%
Angle of sight	120°
Range of surrounding temperature	-40 °C to +70 °C
Protection class	IP67
Casing material	Aluminium
Wiring connections	Red: Supply, Black: Test Black with writing: PE
Weight	0,45 kg