SD300-EX/SDF300-EX

SPARK DETECTOR

IEP TECHNOLOGIES
HOERBIGER Safety Solutions

PRODUCT INFORMATION SHEET

Description

The Atexon® SD300-EX (standard) and SDF300-EX (daylight insensitive) Spark Detectors by IEP Technologies are designed to detect ignition sources such as sparks, hot particles, and embers, in a conveying path such as a duct, chute, or mechanical conveyor, and signal an Atexon Spark Detection and Extinguishing System to initiate a water spray, helping prevent the ignition source from starting a fire or explosion.

The SD300-EX and SDF300-EX Spark Detectors feature a best-in-class 180-degree field of view (FOV) perpendicular to the direction of material flow, which ensures reliable detection of ignition sources within high-speed material flows without blind spots. The SD300-EX and SDF300-EX Spark Detectors are an excellent choice for facilities across various industries that wish to protect their process lines from potential ignition sources.

When it comes to detecting ignition sources with optimum efficiency, it is crucial to consider all electromagnetic radiation emitted within the target detection area. The Atexon® SD300-EX Spark Detector takes this into account with its extraordinary broad detection spectrum. It can measure visible sparks through material layers and hot particles with the same single detector. A broad detection spectrum coupled with a wide 180-degree viewing angle provides the best available technology for detecting ignition sources in process lines.

These features make the Atexon® SD300-EX Spark Detector a superior choice for companies seeking robust protection for their process lines. With their advanced capabilities, these detectors help ensure the early detection and swift response to ignition sources, reducing the risk of explosions and enhancing overall safety within industrial facilities.

Features

- 180° field of view
- Detects sparks that emit visible light
- Detects hot black body particles down to 300°C
- Flush mounted
- Abrasion resistant Crystal lens
- Stainless steel housing (AISI 316L)
- Three mounting options:
  - Non-welded Thread-on
  - Welded
  - Welded with Air-purge
- FM, IECEx and ATEX approved

Spark Detector



SD300-EX



SD300-EX with wiring



SD300-EX with protection tube
(See Hazloc ratings)

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Application

The IEP Technologies SD300-EX Spark Detector is designed to detect radiant energy emitted from sparks or burning material in conveyed process lines. Typical applications include protection of dust collectors, cyclones, conveyor systems and bucket elevators.

Specifications

Parameter	Value
Model	SD300-EX / SDF300-EX
Detection spectrum	SD300-EX: VIS/NIR/IR SDF300-EX: IR
Detects	Spark, flames, burning embers and black body particles (>300°C)
Field of view perpendicular to flow (degrees)	180° x 45°
Operational temperature range °C (°F)	-40° to +70° (-40° to 158°)
Enclosure protection class	IP65
HazLoc rating (lens side)	Zone 20, 21, 22 Ex II 1D Ex ta IIIC T100°C Da
HazLoc rating (connector side)	Standard: Not Rated Optional Protection Tube: Zone 21, 22 Ex II 2 D Ex tb IIIC T100°C Db



Thread-On Mounting Adapter



Weldable Mounting Adapter



Weldable Mounting Adapter with Air Purge

Contact Information

IEP Technologies - Austria
(HOERBIGER Safety Solutions)
Tel: +43 1 2244 0

IEP Technologies - Belgium
(HOERBIGER Safety Solutions)
Tel: +49 2102 5889 0

IEP Technologies - Finland
Tel: +358 10 325 358 0

IEP Technologies – France
Tel: +33 1 5803 3980

IEP Technologies – Germany
Tel: +49 2102 5889 0

IEP Technologies - Italy
(HOERBIGER Safety Solutions)
Tel: +39 045 2370762

IEP Technologies - Sweden
(HOERBIGER Safety Solutions)
Tel: +46 70 564 3306

IEP Technologies – Switzerland
Tel: +41 62 207 10 10

IEP Technologies – Turkey
Tel: +90 232 484 4412

IEP Technologies – UK
Tel: +44 1242 283 060

IEP Technologies – USA
Tel: +1-855-793-8407

IEP Technologies – Latin America
(HOERBIGER Safety Solutions)
Tel: +55 (11) 4446 7400

IEP Technologies – China
(HOERBIGER Safety Solutions)
Tel: +86 21 6485 0855 Ext 8211

IEP Technologies – South East Asia
(HOERBIGER Safety Solutions)
Tel: +65 6890 0770

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