



## PSD3-D INFRARED SPARK DETECTOR

### Application

In many industrial manufacturing processes, early detection of ignition sources is an important safety measure that will prevent a fire or even an explosion. PSD3-D infrared detectors are the ideal tool to detect sources of heat, such as sparks, glowing particles and flames in ductwork or conveying systems. The PSD3-D infrared detector detects hot particles emitting radiation at wavelengths ranging between 780 and 1100 nm. PSD3-D infrared detectors should be installed so that the front end of the detector is looking into total or partial darkness. The PSD3-D infrared detectors are typically used to prevent fires or explosions in pneumatic conveyors, dryers, mills, filters, cyclones, etc.

### PSD3-D features

- ◆ Detector front end approved for use in zone 20
- ◆ Compact and robust
- ◆ Free contact for process interlock
- ◆ Easy to install
- ◆ Status LEDs for health, fault and activation
- ◆ Virtually maintenance free

### PSD3-D technical features

- ◆ Acquisition and response time ca. 1 ms
- ◆ Field of view > 95°
- ◆ Operating temperature range -20°C to + 70°C
- ◆ Process pressure range -600 to 6000 mbarg with welding flanges
- ◆ Sensitivity default 780 to 1100 nm
- ◆ Electrical connection pre-mounted 3m multicore shielded cable
- ◆ Power supply 12 to 30 V DC, min. 150 mA
- ◆ Power consumption max. 100 mA at 24 V DC
- ◆ Materials Detector front end SS304. Detector body painted aluminum RAL 1016
- ◆ Dimensions Head Ø 16 × 60 mm body H92 W92 D45 mm
- ◆ ATEX marking II 1/2D Ex ta/tb IIIC T85°C Da/Db -20°≤Ta≤+70°C
- ◆ Ingress protection level IP 65
- ◆ Mass ca. 1 kg

### PSD3-D configurations

PSD3-D spark detectors can be configured to work as a stand-alone detection only unit, as a component of a protective explosion protection system or carbon dioxide fire extinguishing system.

- ◆ PSD3-D/F Stand-alone detector
- ◆ PSD3-D/RP For use in combination with a Stuvex control unit and explosion protection system
- ◆ PSD3-D/P For use in combination with a Stuvex carbon dioxide fire extinguishing system



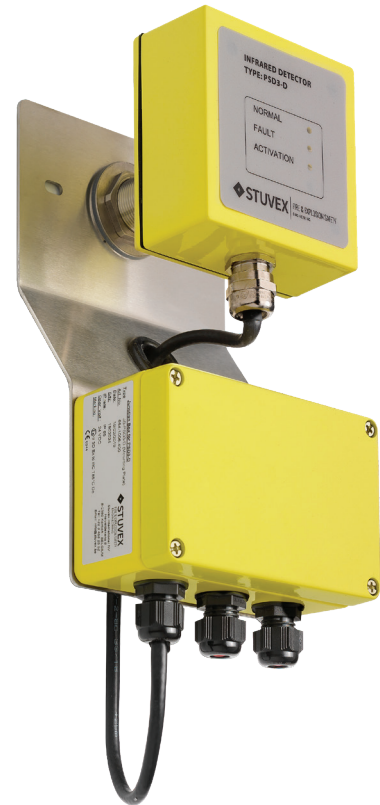
Spark and flame detection in confined environment



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## PSD3-D article numbers and accessories

664-1006-360	PSD3-D/F INFRARED DETECTOR CONFIG. F STAND ALONE WITH 3 M CABLE
664-1006-300	PSD3-D/RP INFRARED DETECTOR CONFIG. RP WITH 3 M CABLE
664-1006-330	PSD3-D/P INFRARED DETECTOR CONFIG. P WITH 3 M CABLE
664-1006-400	JUNCTION BOX PSD3-D MOUNTED ON SUPPORT PLATE TO CONNECT UP TO 2 PSD3-D DETECTORS
664-1541-100	WELDING MOUNTING FLANGE
664-1541-200	THREADED MOUNTING FLANGE
664-1541-300	GN ADAPTOR FLANGE



PSD3-D infrared detector with junction box mounted on support plate