

Spark Detection

Single IR Spark Detector 16580

The Talentum® Single Infra-Red (IR) Spark Detector responds to low frequency (I to I5 Hz.) flickering IR radiation emitted from sparks and other hot objects during combustion.

IR flame flicker techniques enable the sensor to operate through a layer of oil, dust, water vapour, or ice.

Most IR spark sensors respond to $4.3\mu m$ light, emitted by hydrocarbons. By responding to 1.0 to $3.0\mu m$ light emitted by sparks, early stage fires can be rapidly detected.

The single IR photoelectric detector responds to IR wavelengths, emitted from glowing embers and sparks and is ideal for these applications.

The combination of filters and signal processing allows the sensor to be used without risk of false alarms on dark machinery and ductwork.

Bayonet Mount (PN:12290) is included with the Spark Detector.

Features

- Fast response time for enclosed and dark areas
- High Sensitivity to Embers
- Selectable Output Options; Conventional 2 wire, 4-20mA, Relay Contacts (Fire/Fault, Pre-alarm - Latching or Non-latching)
- Selectable Response Speed
- Remote Control Self Test
- Low Power Consumption

Applications

- Agriculture
- Bed Fillings
- Chipboard/MDF Manufacture
- Dryers

- Dust Collection/Filters
- Textiles
- Paper Production
- Woodworking



Accessories

12564

2 Hole Mounting Flange 0.66kg (1.45lbs)

12561

4 Hole Mounting Flange Kit 1" BSP/NPT 1.44kg (3.17lbs)

12554

4 Hole Air Purge Adapter 3kg (6.6lbs)

12543

2 Hole Air Purge Adapter 1.5kg (3.3lbs)

12217

Heavy Duty Mount with 1" BSP/NPT 1.44kg (3.17lbs)











Talentum® 16580

Mechanical Specification

| Housing Material | Die Cast Zinc Alloy (ZA12) |
|---------------------|---|
| Housing Colour | Blue |
| Dimensions | 142(H) x 108(W) x 143(D) mm |
| Weight | 2.3kg |
| Cable Gland Entries | 2 x 20mm |
| Wiring | 16AWG (1.5mm ²) to 12 AWG (4mm ²) |

Electrical Specification

| Supply Voltage | 14 to 30Vdc |
|---------------------|----------------------------------|
| Quiescent Current | 8mA, RL2 energised |
| | 4mA, current loop, RL2 off |
| | 3mA, RL2 off |
| Alarm Current | 28mA, RL1 & RL2 energised |
| | 20mA, current loop, RL1 & 2 off |
| | 9mA, RL1 energised |
| Power Up Time | 2 seconds max. |
| Test Signal Voltage | 14 to 28Vdc |
| Relay Outputs | |
| - Programmable | Normally Open or Normally Closed |
| | Latching or Non-latching |
| - Ratings: Current | 0.250A Max. |
| Voltage | 30Vdc Max. |
| Power | 3.0W Max. |
| | (Note: Resistive Loads Only) |
| | |

Environmental

| Operating Temperature | -10°C to +55°C |
|-----------------------|--------------------|
| Storage Temperature | -20°C to +65°C |
| Relative Humidity | 95% Non condensing |
| IP Rating I | IP66 |

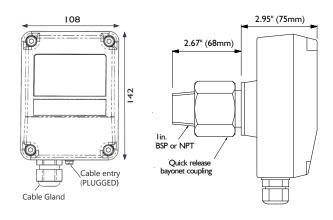
Performance

| Operating Wavelength | 1.0 to 3.0µm |
|----------------------|--------------|
| Response Time | I Second |

Approvals

Visit www.ffeuk.com for up to date approvals information.

Dimensions (inches)



Installation Recommendations

Please refer to our User Manual for mounting and wiring instructions. The installation of Talentum spark detectors should be undertaken in accordance with the recognised national or international standards and codes of practice.

Specifications and wiring information are provided for information only and are believed to be accurate. FFE Ltd assumes no responsibility for their use. Data and design are subject to change without notice. Installation and wiring instructions are shipped with the products and should always be used for actual installation. For more information, contact your Sales Representative.

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