## Spark Detection



## Talentum® 16580

## Single IR Spark Detector

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.

#### **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

I 2290 Bayonet Mount I" BSP/NPT male in plated steel 0.82lbs (0.37kg)



12564 2 Hole Mounting Flange 1.45lbs (0.66kg)



12561 4 Hole Mounting Flange Kit 1" BSP/NPT 3.17lbs (1.44kg)



12217 Heavy Duty Mount with 1" BSP/NPT 3.17lbs (1.44kg)



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### **Mechanical Specification**

Housing Material	Die Cast Zinc Alloy (ZA I 2)
Housing Colour	Blue
Dimensions	5.59"H x 4.25"W x 5.63"D
	142(H) × 108(W) × 143(D) mm
Weight	5.29 lbs (2.4 kg)
Cable Gland Entries	2 x 0.79" (2 x 20mm)
Wiring	1.0 to 4.0mm <sup>2</sup>

## **Electrical Specification**

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Supply Voltage	14 to 28Vdc
Quiescent Current	8mA, RL2 energised
	4mA, current loop, RL2 off
	3mA, RL2 off
Alarm Current	28mA, RLI & RL2 energised
	20mA, current loop, RLI & 2 off
	9mA, RLI 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**

O- anti Tananantum	I4°F to I3I°F
Operating Temperature	-10°C to +55°C
	-4°F to 149°F
Storage Temperature	-20°C to +65°C
Relative Humidity	95% Non condensing
IP Rating I	IP65

#### **Performance**

Operating Wavelength	
Band - IR	1.0 to 3.0µm

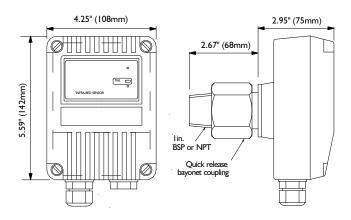


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### **Dimensions (inches)**



### **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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