

## Searchflame 16 UV Optical Flame Detector



### UV plus Optical Flame Detector

The Searchflame 16 is an optical flame detector certified for use in designated hazardous areas. Using ultraviolet radiation this well established technique is solar blind and offers the fastest speed of response. With the widest field of view offered by any detector, integral self test and storage of fire event data, all as standard, this makes the SF16 the ultimate in UV flame detection.

#### Features

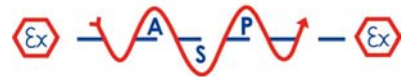
- UV Radiation detection principle
- Widest field of view (120 degrees)
- Integral optical self test as standard
- Integral 'Fire Pic' software as standard

#### Applications

#### Benefits

- Fast speed of response & solar blind. Detects hydrocarbon and non hydrocarbon fires including hydrogen.
- Greater area of coverage, requiring less detectors.
- Generates operating confidence, permits maintenance on demand.
- Stores fire event spectral data for post event analysis. Helps positioning during commissioning. Hazardous area certified Suitable for zoned or Class I, II & III designated areas.
- Petrochemical facilities, Aircraft hangers, silane gas storage areas, Gas turbines, Engine test cells, Tanker loading bays, Aerosol filling plants.





## GENERAL SPECIFICATION

### General:

|                      |  |
|----------------------|--|
| Spectral sensitivity | UV (185-260 nanometres)  |
| Field of view        | 120 degrees horizontal and vertical  |
| Response time        | Dependant upon fire size and fuel type Typically: <5 seconds   |
| Fuel types           | Gasoline, Kerosene, Isopropyl Alcohol, Methane, Propane, Jet fuels, Methanol, Ethanol, Hydrogen, others. |
| Range Settings       | 15, 30, 45, 60 Feet (4.5 to 18.3 Metres)   |

### Environmental:

|                       |                             |
|-----------------------|-----------------------------|
| Operating temperature | -40 to +80C (-40 to +176F)  |
| Storage temperature   | -55 to +105C (-55 to +221F) |
| Operating pressure    | 90 to 110kPa                |
| Humidity              | 10-90% (RH) non condensing  |

### Electrical:

|                   |   |
|-------------------|---|
| Supply voltage    | 24V dc nominal (20.5 to 32.0V dc)   |
| Power             | Typically 40mA quiesant   |
| Typically         | 50mA in alarm   |
| EMC compatability | EN 51034-4 1996 & EN50081-2:1993  |
| Relays            | All selectable NO/NC contacts<br>Fire-lacthing/non latching<br>Verify fire-adjustable (0-30 seconds)<br>Fault |
| Relay ratings     | 1.0A at 24V dc  |
| Analogue output   | 4-20 mA (optional)  |

### Mechanical:

|           |   |
|-----------|---|
| Size      | Approx 122mm (4.81") diameter<br>Approx 118mm (4.66") high  |
| Weight    | Aluminium (copper free <0.4%), powder coated 1.7kg (3.8lbs)<br>316 Stainless steel 4.0kg (8.9lbs) |
| Entries   | 2 x 3/4 NPT   |
| IP / NEMA | IP 66 (NEMA 3,4) weatherproof & tamper proof  |
| Mounting  | 316 Stainless steel swivel mount  |

### Certification:

|                |  |
|----------------|--|
| FM             | Class I, Div 1&2, Groups B,C & D<br>Class II, Div 1&2 Groups E,F & G<br>Class III, |
| CSA            | Class I, Div 1&2, Groups B,C & D<br>Class II, Div 1&2 Groups E,F & G               |
| CENELEC        | EEx d IIB + H2 T4 (Tamb -40C to +80C)<br>SCS EX96D1010                             |
| ATEX (pending) | EEx d IIB + H2 T4 (Tamb -40C to +80C)<br>Ex II 2 G                                 |

## Supplied by:

**A.S.P. Electro-Technology Ltd**  
Specialist Suppliers of Hazardous Area Certified  
Electrical Products & Instrumentation

39 London Road, Hinckley, LE10 1HQ. U.K.  
Tel: +44 (0)1455 635796 Fax: +44 (0)1455 251110  
Email: [sales@asp-electro-tech.com](mailto:sales@asp-electro-tech.com) Web: [asp-electro-tech.com](http://asp-electro-tech.com)



This publication is not intended to form the basis of a contract. All the above specifications, dimensions, weights, tolerances etc are typical and may be varied or changed by the manufacturer without prior notice. A.S.P. Electro-Technology accept no liability for consequence of use.