

# Intrinsically Safe Industrial IR<sup>3</sup> Infra-Red Flame Detector *IFD-E(IS)*



## Features

- ▶ Unaffected by convection currents, draughts or wind and solar-blind
- ▶ Tolerant of fumes, vapours, dust and mist
- ▶ ATEX certification to: EEx ia IIC T4 (135 °C) (zones 0, 1 and 2)
- ▶ Responsive to a flame more than 25 m away
- ▶ Selectable response speed
- ▶ Class 1 performance as defined in BS EN54-10:2002 (on the high sensitivity setting)
- ▶ Optical self-test
- ▶ SIL Capable

## Description

Model IFD-E(IS) is an Intrinsically Safe IR<sup>3</sup> flame detector designed for use where open flaming fires may be expected and responds to the light emitted from flames during combustion. The detector discriminates between flames and other light sources by responding only to particular optical wavelengths and flame flicker frequencies. This enables the detector to avoid false alarms due to such factors as flickering sunlight. Ideal for the detection of flames from the burning of Aviation Fuels (kerosene), Butane, Grain & Feeds, Hydrogen, Paper, Natural Gas, Petrol (gasoline) etc.

Specification		
Ordering codes	IFD-E(IS) IFD-MB (Stainless Steel Mounting Bracket)	
Operating voltage	14 – 30 V dc	
Alarm Current (selected via by DIL switches)	3 ~ 28 mA	
Test Signal Voltage	14 to 30 V dc	
Relay Contact Ratings	Current	0.25 A (max)
	Voltage	30 V dc (max)
	Power	3.0 W (max) (resistive loads only)
Power Up Time	2 seconds (max)	
Field of View	90° min. Cone	
Range	Class 1 – 0.1 m <sup>2</sup> n-heptane at 25 m Class 3 – 0.1 m <sup>2</sup> n-heptane at 12 m	
Operating Wavelength Band	IR (0.75 ~ 2.7 μm)	
Operating temperature range	-10 °C to + 55 °C (sensor limit -10 °C to +40 °C (T4))	
Storage temperature range	-20°C to + 65°C	
Maximum humidity	95% RH - Non condensing (at 40°C)	
Ingress Protection Rating	IP65	
Colour / Case Material	Blue / Die-Cast Zinc Alloy (ZA12)	
Weight (Kg)/Height/Width/Depth (mm)	2 / 142 / 108 / 82	
Approved Barriers	Pepperl & Fuchs Ltd	Z728, Z779, Z828, KFD0-CS-Ex1.51, KFD0-CS-Ex2.51
	MTL	MTL7028+, MTL7728+, MTL7779+, MTL7706+