

# ••••**XP**95 dual ir flame detector

#### **FUNCTION**

The XP95 Dual Infra-red (IR) Flame Detector is designed to protect areas where open flaming fires may be expected.

### **FEATURES**

The XP95 Dual IR Flame Detector is sensitive to low-frequency, flickering infra-red radiation emitted by flames during combustion. Since it responds to flickering radiation the XP95 Dual IR Flame Detector can operate even if the lens is contaminated by a layer of oil, dust, water-vapour or ice.

The XP95 Dual IR Flame Detector is set to respond to low-frequency radiation at 1 to 15Hz (1 to 2.7µm) in order to detect all flickering flames, including those invisible to the naked eye, eg, those emitted by hydrogen fires.

The XP95 Dual IR Flame Detector has two IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation. False alarms due to such factors as flickering sunlight are avoided by a combination of filters and signal processing techniques.

#### PROTOCOL COMPATIBILITY

The XP95 Dual IR Flame Detector operates only with control equipment using the Apollo XP95 or Discovery digital protocol (or any development of it).



Part no: 55000-280 Shown with Stainless Steel Bracket Part No. 29600-203

#### **ELECTRICAL CONSIDERATIONS**

The XP95 Dual IR Flame Detector is loop powered and needs no external supply. A remote LED alarm indicator may be connected to the flame detector.







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## Technical Data

Supply voltage 17–28V DC
Quiescent current 2.2mA
Maximum power-up time 4 seconds
Remote LED current Limited to 2mA
Range of view 0.1m2 n-heptane at 25m
(EN54-10) 0.2m2 n-heptane at 35m
0.4m2 n-heptane at 45m

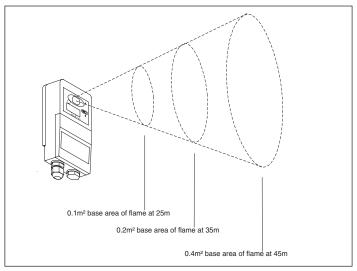
Field of view 90° cone Spectral response 1.0 to 2.7µm Sensitivity High—Class 1 Low—Class 3 Operating temperature –10° C to +55° C Storage temperature −20° C to +65° C Relative humidity 95%, non-condensing IP rating Housing material die-cast zinc alloy Housing colour blue Dimensions See Fig 3 Weight 1kg Cable gland entries 2x20mm



#### **ACCESSORIES**

A range of accessories and test equipment is available for the XP95 Dual IR Flame Detector:

Weathershield, part no 29600-206, (see Fig. 5). Flame Sensor Test Unit and case, part no 29600-226. Stainless steel 2 axis adjustable mounting bracket, part no 29600-203.



**Fig 1** *Flame detection as a function of flame size and distance* 

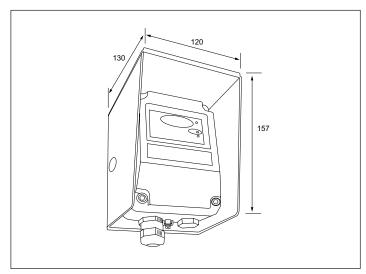


Fig 5 XP95 Dual IR Flame Detector with Weathershield (Part no 29600-206)

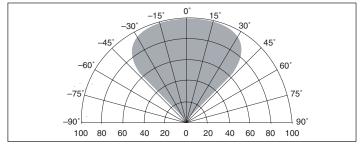


Fig 2 Range of view of XP95 Flame Detector

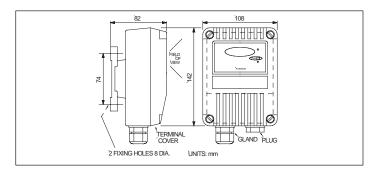


Fig 3 Front and side view to show dimensions of flame detector

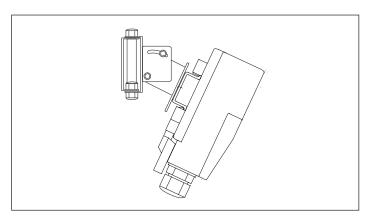


Fig 4 XP95 Dual IR Flame Detector on stainless steel 2 axis adjustable mounting bracket (Part no 29600-203)