

Model 1000

## DESCRIPTION

The Model 1000 Detector is a heat sensitive electrical switch. It is a fixed temperature device with a factory pre-set temperature in the range 60 deg C to 240 deg C. The detector comprises a pair of normally open electrical contacts mounted within a stainless steel probe. A rise in temperature will cause the contacts to close at the set point temperature. With a drop in temperature the procedure reverses and the contacts re-open below the set point temperature.

The detector body is a seamless one-piece unit, precision machined from AISI 316 stainless steel with high corrosion resistance.

Electrical contacts are gold/silver plated and lead cables are nickel plated copper with PTFE/glass insulation. Cables are to aircraft engine specification.

The operating parts are factory calibrated and sealed against severe environmental conditions, further adjustment or calibration is not required.

There are mounting thread variants available on request to suit most applications, ie. electrical conduit, NPT and BSPT.

## FEATURES

- \* APPROVED FOR HAZARDOUS LOCATIONS
- \* CORROSION & SHOCK RESISTANT.
- \* DUAL MOUNTING THREADS.
- \* GOLD PLATED ELECTRICAL CONTACTS
- \* RATE COMPENSATION & FAST RESPONSE
- \* WIDE TEMPERATURE RANGE.

## SPECIFICATION

Contacts: .....	Normally open, close on temperature rise.
Applied Voltage AC @ 0.5A .....	240 V max. 50Hz
Applied Voltage DC @ 0.5A .....	24 V max.
Operating Current:.....	0.5A max.
Operating or Set Temperature Range:.....	+60 deg. C to +240 deg. C
Ambient Temperature Range: (continuous exposure).....	-40 deg. C to +180 deg. C
Relative Humidity:.....	100%
IP Rating:.....	IP67
Weight: .....	140g.
Sensitivity & Accuracy:.....	5% or 5 degrees
Mounting Screw Threads:.....	10 Kgm torque max.

- Notes: 1. All electrical ratings apply to noninductive loads. Ensure circuit inrush currents do not exceed ratings.
2. Where a detector has been subjected to a fire or overheat, the unit should be returned to Fire Buys for condition check and calibration.
3. For Intrinsically Safe and Flameproof applications, refer to specific limitations of use on reverse side hereof.



### INSTALLATION OF MODEL 1000 :

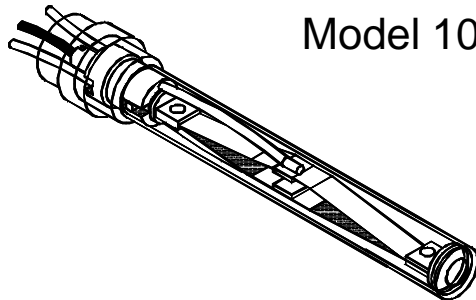
- \* NORMAL LOCATIONS - The unit is mounted using the 20mm electrical conduit screw thread to a standard junction box or equivalent.
- \* SPECIAL THROUGH WALL LOCATIONS -  
The unit is screwed into a 1/2"-14 NPT hole in the plant or vessel wall to a maximum torque 10 Kgm. Ensure the entire length of the sensing shell (72 mm) is exposed to the heat source.
- \* HAZARDOUS LOCATIONS -  
The unit is mounted to an approved flameproof junction box.

### TO ORDER:

Please specify Set Temperature (degrees C) and whether flameproof or Intrinsic Safety compliance is required.

eg. TYPE E HEAT DETECTOR, MODEL 1000 @120°C, FLAMEPROOF.

Available on request are other temperature settings, lead lengths, threads, fittings and temperature adjustable models.



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### LIMITATIONS OF USE FOR HAZARDOUS AREAS:

	Ex ia Intrinsic Safety	Ex d Flameproof
* Hazardous Area:	CLASS 1, ZONE O	CLASS 1, ZONE 1
* Equipment Group:	GROUPS I & IIC	GROUPS I & IIC
* Temperature Class:	T6 (max ambient 80°C)	T6 (max. ambient 80°C)
* Mechanical Risk:	NORMAL	NORMAL
* Installation:	per AS2381.1-1991 & AS2381.7-1989	per AS2381.1-1991 & AS2381.2-1993
* Conditions:	per Certificate of Conformance No. SIM Ex97C011U	

### TEMPERATURE SETTINGS Degrees Celsius

Suggested temperature setting 50°C above maximum ambient.

60 66 72 80 85 95 100 110 120 132 145 160 180 200 220 240

Available from Fire Buys

Telephone 1300 761 747