

# FEUV2000



The FEUV2000 is particularly suited in applications where flame can be expected to develop initially rather than smoke, due to the nature of the combustible materials such as camera films, video/audio/computer tapes, and petrochemical products (such as asoil or petrol).

The detector should be installed indoors, either on a ceiling or a wall. For maximum sensitivity the detector should see the side of the flame, but this is not always possible. Also avoid obstructions (including glass), as the detector is a line of sight device. Calculate the area of coverage of each device based on the height (or distance from risk area if wall mounted) and the cone of vision (120°).

This detector works best when fed from a clean supply with minimal ripple.

## ELECTRICAL SPECIFICATION

MODEL	FEUV 2000
Supply Voltage	12-28 Vdc
Average quiescent current at 24V	320uA
Operating Temperature	0°C-45°C
Max Wind Speed	Not affected
Storage Temperature	-25°C – 80 °C
Alarm current	45 mA-50mA
Detection Angle	120°
UV Sensitivity Range	185 – 260nm
Response time	10sec for 30mm flame @ 4 metres
Detector size	98mm diameter x 36mm deep
Weight	85g (145g)

Maintenance consists of ensuring the UVtron sensor tube is kept clean and free from silicon, oil and grease. The detector should be functionally tested at regular intervals.

Please note that this detector can give false alarms if exposed to spurious sources of UV, such as sparks, uncovered quartz halogen lights, or lightning.

- Low profile shape for UV detector
- The detector is solar blind and incorporates an electronic filter to eliminate unwanted alarms from naturally occurring phenomena.
- High immunity to Electrical noise & RF Interference.
- Fast response time.
- Supplied with its own base.
- Typically detects 30mm gas flame at 4 metres within 10 seconds.

### Limitations of Use of Flame Detectors

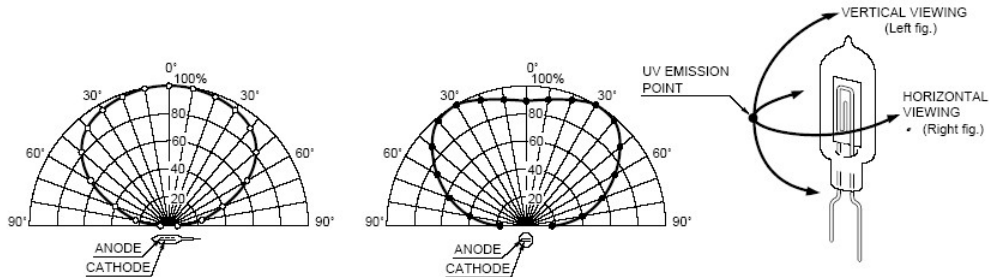
1. Because the flame detector is a very fast reacting device, if several of these detectors are connected on the same zone, covering the same area, it is possible that they could all go into alarm at the same time, which the FACP could see as a short circuit (High current drawn). Check with the

FACP manufacturers. If in doubt, use only one detector per zone.

2. Due to its nature of operation, the flame detector takes a high quiescent current. On some panels (with Resistor end of line), connecting more than 2 of these may prevent open circuit monitoring. Again, if in doubt, use only one detector per zone.

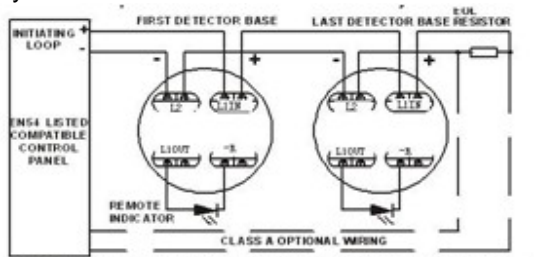
The Response time depends on the flame size (as seen by the detector) and the distance from the flame. The UV flame detector is a line of sight device, and cannot see past obstructions, such as storage racks.

### HORIZONTAL AND VERTICAL DETECTOR FIELD OF VIEW



#### TYPICAL WIRING DIAGRAM

Figure 1 shows the typical wiring diagram of the 2-wire multiple-station flame detector system.



NOTE: IF REMOTE INDICATOR IS NOT USED, POLARITY TO DETECTOR MAY BE REVERSED.  
 Figure 1 Installing the 2-wire multiple station flame detector base

DO NOT PLACE LINKS BETWEEN THE WIRING POSITIONS OF TERMINALS L2 AND L1IN TO PROVIDE POWER SUPERVISION

**WARNING**

**TO PREVENT DETECTOR CONTAMINATION AND SUBSEQUENT WARRANTY CANCELLATION, THE FLAME DETECTOR MUST REMAIN COVERED UNTIL THE AREA IS CLEAN AND DUST FREE.**

### INSTALLING THE BASE

1. To insure proper installation of the detector head to the base, all the wires should be properly addressed at installation:
  - (A) Position all the wires flat against terminals.
  - (B) Fasten the wires away from connector terminals.
2. If you use a jumper wire to connect the poles of terminal L2 and L1IN when testing the detector loop continuity, be sure to remove the jumper wire prior to the installation of the detector head.
3. The end-of-line device shown in fig. above should be compatible with the control unit. The end-of-line supervisory relay used should be rated for the DC power voltage

used.

4. Open area flame detectors are intended for mounting on a ceiling or a wall in accordance with the fire standard in your country.
5. The base of the flame detector can be mounted directly onto an electrical junction box such as an octagonal (75mm, 90mm or 100mm), a round (75mm), or a square (100mm) box without using any type of mechanical adapter.