

# P136

## Duct Sampling Unit

### INFORMATION SHEET

#### DESCRIPTION

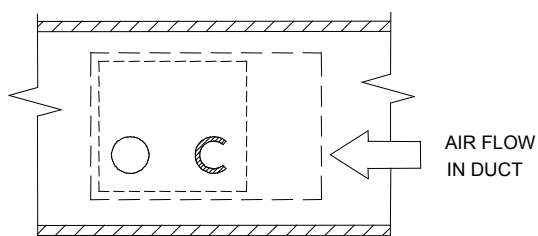
The P136 is an integrated housing and detector for detecting smoke in air-conditioning ducts. The detection system consists of a photoelectric smoke sensor and a separate PCB that combines non-latching trigger circuitry and field-wiring termination.

#### INSTALLATION

##### Mounting P136 on Duct

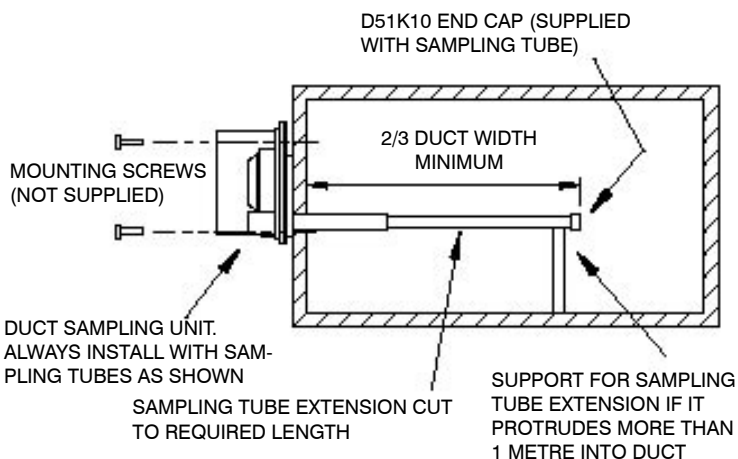
- Mark on duct – holes for sampling tubes, 122mm apart.
- Drill 2 holes 24mm in diameter.
- Mount P136 duct sampling unit oriented as shown.
- Mark on duct – mounting screw holes and fix housing firmly to duct.
- Insert sampling tube extension, tighten holding screw and refit filter.

##### Sampling Tube Extension (supplied separately)



SECTION THROUGH DUCT.

ONLY ONE SAMPLING TUBE EXTENSION IS REQUIRED.  
SLOT IN TUBE MUST FACE AIR FLOW AS SHOWN  
(HOLDING SCREWS SUPPLIED)



#### SPECIFICATIONS

Operating voltage	15 to 28VDC
Quiescent current (@ 24V)	150 to 500µA
Alarm state current	3 to 60mA
Alarm voltage	10.5 to 12.5V
Ambient temperature	-5°C to +45°C
Relative humidity	95% (non-condensing)
Maximum duct width	1.8m
Remote indicator	Use Tyco E500Mk2 series
Compatible Control and Indicating Equipment	Tyco F08, F3200, F4000, MX4428
Nominal sensitivity*	5% Obs/m at 4 to 64 Pa differential pressure afp-1211
SSL Listed	

\*Complies with AS1603.13 at 1 to 8m/s duct air velocity

#### Part Numbers

P136	Duct Sampling Unit includes sensor, filter and baffle
D51L	Baffle - box of 10
D51F	Filter - box of 10
D51T3	3m Sampling Tube
D51K100	Plug - bag of 10

## INSTALLATION *continued*

### Field Wiring

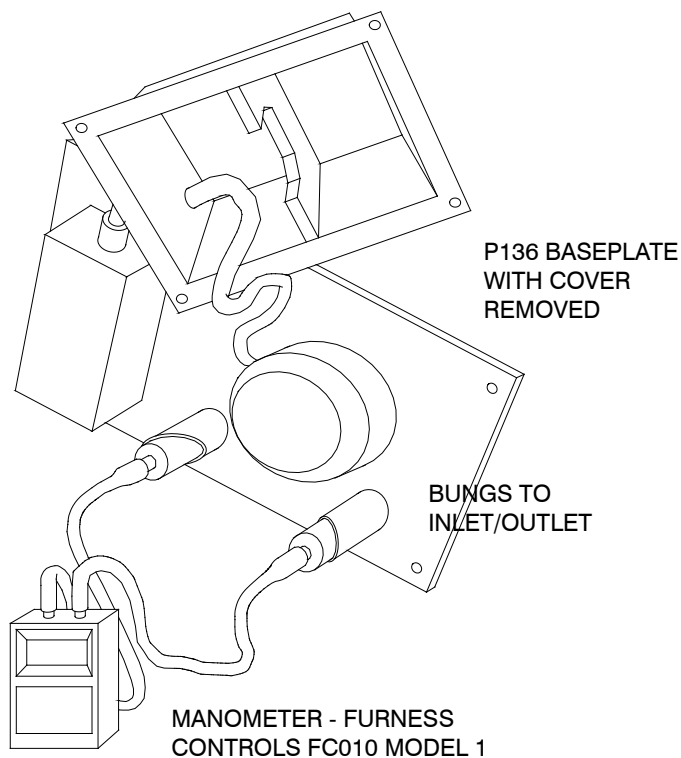
1. All field wiring terminates in the red termination box.
  2. All cables must enter the termination box through a cable gland. A gland is supplied but not fitted. To fit the gland, drill a 16mm hole in the box at the most convenient point. Take care to avoid damaging the termination board and components.
  3. Connect field wiring to the lever-actuated terminals as follows.
- |  |               |
|--|---------------|
| + Supply from CIE and to End of Line Device: | <b>+V i/o</b> |
| - Supply from CIE:                           | <b>-Vi</b>    |
| - Supply to next device or ELD:              | <b>-Vo</b>    |
| + Remote indicator:                          | <b>+R</b>     |
| - Remote indicator:                          | <b>-R</b>     |

## TESTING FOR DIFFERENTIAL PRESSURE

1. Remove the cover from the installed P136.
2. Remove the filters from the sampling tubes.
3. Fit suitable rubber bungs in the sampling tubes as shown.
4. Configure the P136 baseplate with a sampling tube extension & end cap, where used.
5. Refer to Furness Manometer Instructions and set instrument to record differential pressure between 1 and 64 Pa.
6. Ensure that the differential pressure is positive (with respect to the upstream pipe) and is in the range required for the desired P136 sensitivity.

### P136 Sensitivity

Diff. Press.	% Obs/m
4 Pa	8
4 to 64 Pa	5



## MAINTENANCE

Smoke detectors should be maintained in accordance with AS 1851.8-1987 (in Australia) or NZS 4512-1997 (in New Zealand). The basic requirements are:

- a. All detectors shall be visually inspected yearly for any condition that is likely to adversely affect their operation (e.g. excessive dust build-up).
- b. Operational checks should be carried out as required by the applicable standard.

Wormald Detector Clean & Calibration, Wollongong, provide a fast and efficient CLEAN, CALIBRATE and REPAIR service for all types of fire detectors.



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