



Description

The EF-FT Pico detector is an air-sampling system with an alarm sensitivity range from 0.001% to 20% obscuration/m. This detector is classified as a Very Early Warning Smoke Detector and can reliably detect fire at an early stage at low to high concentrations of smoke over an area of up to 2,000m².

The detector is configurable for a variety of environments, providing an ideal fire detection solution for power stations, telecommunications and IT facilities, and heavy industrial environments such as chemical plants, factories, warehouses and mining facilities.

How it Works

The Pico detector draws air through sample holes in a pipe network, then filters and analyses the sample in a laser detection chamber. Individually programmable alarm states (Alert, Action, Fire 1 and Fire 2) are shown on the display, which contains four alarm LEDs and an OK/Fault LED. Dedicated output relays also provide interfaces for each alarm state and device faults.

Product Features

Programming and Configuration

RS484, RS232 and TCP/IP interfaces are available to connect to remote display and controls panels, system configuration tools (VSC or Configtracer) and email messaging.

Inputs and Outputs

The Pico detector supports a maximum of three optional modules, which provide the detector with additional programming output relay interfaces and/or 4 to 20mA analogue outputs.

Aspiration and Flow Sensing

The aspirator is a 2000 Pa, high pressure and high volume fan, which provides superior detection times over long pipe lengths and reliable detection in high air-flow environments. Airflow in each pipe is monitored by a dual element thermal sensing system, with airflow faults indicated on the display and to monitoring equipment.

Features

- EN54-20 approved
- Dual pipe air-sampling
- Single zone
- Area coverage up to 2000m²
- 0.001% to 20% obscuration/m
- 4 alarms – Alert, Action, Fire 1, Fire 2
- 2 x 100m (max) sampling pipes
- 5 relay outputs as standard

Listings/Approvals

- EN54-20
 - Class A (12 holes / 0.04% obs/m)
 - Class B (36 holes / 0.04% obs/m)
 - Class C (36 holes / 0.10% obs/m)
- CE – EMC, LVD, CPD
- VdS
- FM
- UL
- CFE

Mechanical	
Sampling Pipe Inlets	2
Detectors	Intergrated mass particle detection nephelometer
Sampling Pipe	1 or 2, 25mm or 3/4" nominal bore
Sampling Pipe Length	100m (max) per pipe. Verify using Aspire 2
Exhaust Air Pipe	1 (25mm or 3/4")
Electrical	
Supply Voltage	Nominal 24Vdc (18 to 30Vdc)
Operating Current	500mA to 1.2A max (fan speed dependant)
Display	5 Status LEDs
Control	Local via PC and/or remote
Configuration	Remote membrane (option) and/or RS232 PC connection
Relay Outputs	5 common as standard
Flow Monitoring	Differential pressure sensor. Twin thermal element
Cable Terminals	Removable, rising clamp, 2.0mm ² wire maximum
Environmental	
Operating Temperature	-10 to +60°C
Recommended Det. Amb.	0 to 39°C
Operating Humidity	10 to 95% (non condensing)
IP Rating	IP65
General	
Sensitivity	0.001 to 20% obscuration per metre
Aspirator	2000 Pa centrifugal air pump
Alarm Levels	4 – Programmable (Alert, Action, Fire 1, Fire 2)
Alarm Delay	1 – 60 seconds
Communications	RS484, RS232, MODbus, Ethernet TCP/IP
Filtration	Field exchangeable dual stage
Housing Material	Galvanised steel back chassis with ABS housing
Mounting	Upright or horizontal
Weight	6kg
Dimensions (W x H x D)	254 x 180 x 208mm
Ordering Information	
EF-FTP-T	Pico dual pipe, 24Vdc with TCP/IP
02-FL53	Replaceable internal filter - coarse
02-FL56	Replaceable internal filter – fine

