



ENVEA DUST ALARM 40



The PCME DUST ALARM 40 is a reliable, cost-effective instrument for the continuous monitoring of broken bags in Fabric Filter Baghouses.

The instrument combines the benefits of ElectroDynamic™ Probe Electrification technology and separate control unit with a scaled 4-20mA output, dual local alarms and dual alarm relays, and a clear, simple icon-driven menu and display to deliver pragmatic and dependable broken bag monitoring.

The PCME DUST ALARM 40 electronics exclude short term signal increases associated with pulse cleaning of the bagfilter by appropriate setting of the alarm delay period.

As a 'Dust Gross Filter Failure Detector', the instrument detects significant increases in particulate loading which indicates a failure in the arrestment plant.

Using PCME's patented ElectroDynamic™ Probe Electrification technology, the instrument extracts a specific frequency band from the induced AC current signature and filters out the DC current caused by particle collisions.

The technology outperforms conventional DC triboelectric systems and alternative AC systems by extending the velocity range over which the instrument has no cross sensitivity to changing velocity, and is unaffected by contamination of the sensor rod eliminating concerns of signal drift.

"DUST ALARM 40 provides reliable, continuous monitoring of broken bags in Fabric Filter Baghouses."

KEY FEATURES

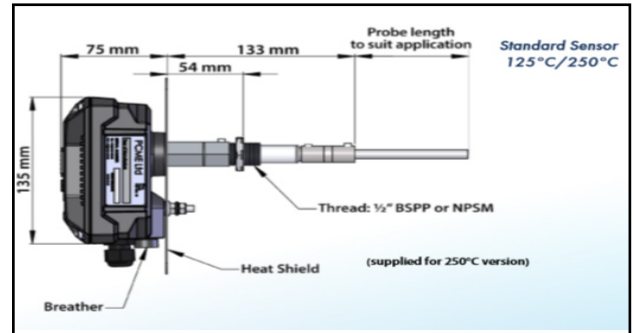
- Icon menu - Simple, easy setup and review of data, not language dependent
- Alarm Delay Feature - Ensures that there are no false alarms from bag-cleaning sequences
- Dust 'Overrange' Icon - Instant notification of 'overrange' to define broken and leaking bag failures
- DSP Signal Processing - High accuracy signal providing reliable results
- External keypad - Settings can be locked to prevent tampering by unauthorised personnel
- Field Upgradeable - Enhanced features can be added at any time without the need to return the instrument to factory

DUST ALARM 40

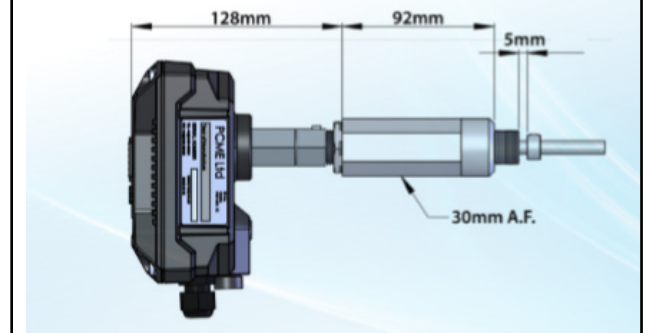
Stack diameter	Up to 4 m (13 ft.)
Flue Gas Velocity	>4 m/s
Dust Level Response	<1 to 500 mg/m ³ (application dependent)

40 Sensor Specification

Ambient Temperature	-20°C to +50°C (-4°F to 122°F)
Protection Rating	IP65
Weight	900 g (2 lb), excl. rod
Power Supply Voltage	24V DC (from the control unit)



Standard Sensor with Air Purge



40 Control Unit Specification

Type	DUST ALARM 40 Controller
No. of Sensors/Channels	1
Display	Full-colour, anti-glare 2.8" LCD (4:3 ratio)
Weight	1.2 kg (2.7 lb)
Outputs (standard)	2x Alarm Relays (0.5A DC @24V)
Outputs (optional)	1x 4-20 mA output (250 Ω, isolated)
Ambient Temperature	-20°C to +50°C (-4°F to +122°F)
Enclosure Protection Rating	IP66
Power Supply Voltage	80-230V AC (50/60Hz)
Cable entries	3x M16 cable glands 1x M20 cable gland (for mains power cable)

40 System Options

			Order Code
Flue Gas Temperature	-20 to +125°C (-4°F to +257°F)	standard	125C
	-20 to +250°C (-4°F to +482°F)	option	250C
Rod Length*	100, 300, 600, or 1000 mm (4, 12, 24 or 40 in., nom.)	specify	RODxxxx
Rod Material	Stainless Steel	standard	S
Sensor Connection	1/2" British Standard Pipe (BSP)	standard	BSPP
Air Purge	None	standard	0
	1/2" Air purge unit, BSP	option	AP-BS
	Air Filter + Regulator assembly for purge fitting	option	FFR
Outputs	No 4-20mA output	standard	0
	4-20mA output	option	420
Hazardous Zones**	Not required	standard	0
	ATEX Zone 2 (Gas) and 22 (Dust)	option	X

