



## Particulate Detectors

Model EM 30A and EM 10A



### Features & Benefits

- Detect Filter Failures
- Plan Filter Maintenance
- Monitor Particulate Flow/No Flow
- Low Cost Configuration



Made in USA

### Overview

Featuring FilterSense's reputation for quality and ease of use, the model EM 30A and EM 10A are reliable particulate flow detectors designed for basic baghouse and cartridge filter failure detection. The 24VDC powered devices with relay contact output are ideal for connection to PLCs and alarm panels.

The Model EM 30A features heavy duty construction and is available in a wide range of mounting types and probe lengths allowing for installation in larger process ducts such as multi-compartment baghouses. It also offers FilterSense's field proven protected-probe technology for reliable performance in process applications with conductive particulate, moist powders and corrosive gases.

The Model EM 10A is for less demanding conditions and smaller industrial ventilation dust collectors. This efficiently crafted device provides dependable performance and low cost.

Both models are cost-effective solutions for filter failure indication. Refer to FilterSense's market leading model EM 70DGX for EPA compliance, process monitoring/analysis, Ethernet communications and automatic self checks and the model EM 30LGX for standard leak detection and early warning detection with dual high amp relays and 4-20mA output. Both of these models are 2-piece systems that provide safe, easy access to a multifunction control unit with local display. The model EM 30T is a one piece, high quality, loop powered analog transmitter for basic leak detection.

### Principle of Operation

The model EM 30A and EM 10A employ simplified versions of FilterSense's field proven particulate flow monitoring technology. As particles flow over the probe a minute current is created. The electronics detect a change in this current which is relative to the amount of particulate flow and a relay is activated.

## Specifications EM 30A

### Electronics

Power Supply:	12-28VDC @ 3 watts
Output:	(2) Solid state relay @ 170mA, fixed set points For adjustable 5A relays refer to Model EM 30LGX
Temperature:	-15F (-25C) to +160F (+70C)
General:	Circuit board conformal coated for long life in harsh environments

### Probe

Lengths:	Heavy duty 3, 5 or 10" Std; 15, 20, 30, 36" Opt
Mount:	NPT Std, Tri-Clamp or Flange Opt
Wetted Materials:	316SS and Teflon Std, Hastelloy Opt
Housing:	Heavy duty NEMA 4X aluminum
Temperature:	250F Std (120C), 450F (232C) Opt
Pressure:	10PSI (0.69bar) Std, 50PSI (3.45bar) Opt
Area Classification:	Ordinary/general purpose, for hazardous areas refer to other models

### Application Range

Particulate:	Any type >10 micron, Conductive, non-conductive, moist, corrosive
Minimum Detection Level:	10pA - Greater than 10mg/m <sup>3</sup> (basic leak detection)

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## Specifications EM 10A

### Electronics

Power Supply:	12-24VDC @ 3 watts
Output:	(2) Solid state relay @ 170mA, fixed set points For adjustable 5A relays refer to Model EM 30LGX
Temperature:	-4F (-20C) to +140F (+60C)

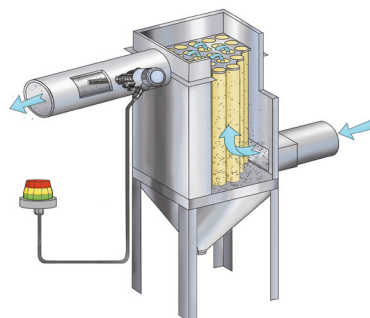
### Probe

Length:	10" Light duty (shorten by customer if needed) For longer probes refer to the EM 30A and other models
Mount:	1/2" NPT
Wetted Materials:	304SS
Housing:	Light duty NEMA 4X aluminum
Temperature:	180F (82C)
Pressure:	3PSI (0.2bar)
Area Classification:	Ordinary/general purpose, for hazardous areas refer to other models

### Application Range

Particulate:	Dry Non conductive >10 micron
Minimum Detection Level:	10pA - Greater than 10mg/m <sup>3</sup> (basic leak detection)

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