



### Triboguard – A Low Cost Broken Bag Detector

Model 2402

The Model 2402 is a simplified triboelectric device designed to detect failures of dust collector bags and filters. Offered at low cost, **Triboguard** now justifies monitoring even the smallest nuisance type collectors.

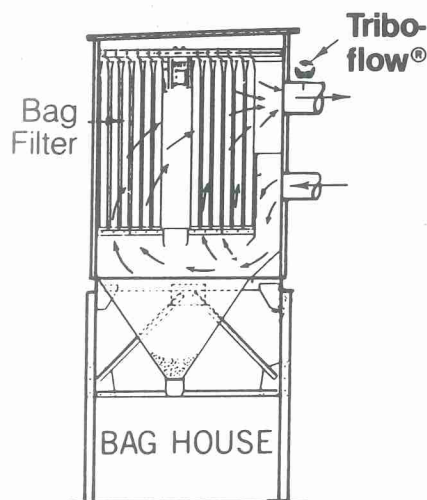
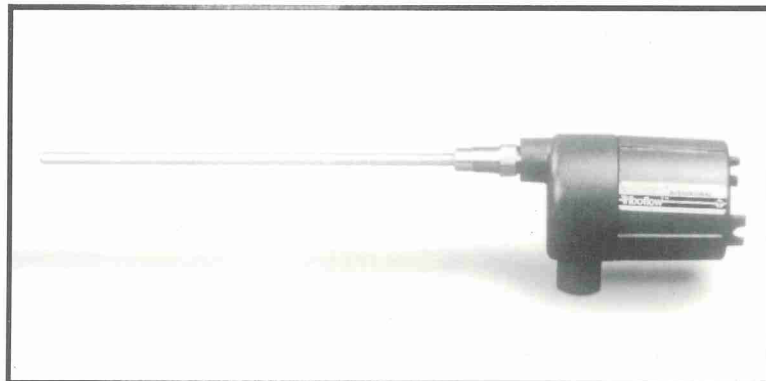
Although less sensitive than our original bag leak detectors and continuous dust emission monitors (see Models 2240 and 2602), **Triboguard** maintains the reliability and simplicity that these widely used devices have been known for since the early 1980's. The **Triboguard** Model 2402 uses the same unique technology of triboelectricity (frictional electrification), which was pioneered by Auburn International. As a filter failure occurs, dust particles will collide with the probe and due to the triboelectric effect, a signal is generated. The Model 2402 will detect the signal and activate a relay contact, initiating an alarm or operational function.

Unlike optical devices which rely on clean, aligned lenses and the "indirect" measurement of light transmission, **Triboguard** is a virtually maintenance-free, "direct" method of detection. Thus failures are detected promptly and reliably with **Triboguard**.

For reducing clean-up costs, protecting downstream equipment, saving product and keeping the environment clean - let **Triboguard** be your dust collector "Protector".

#### Triboguard Advantages

- ◆ No lenses to align or clean
- ◆ No moving parts
- ◆ Designed intrinsically safe
- ◆ Simple and reliable



#### ELECTRONICS

##### Temperature Range:

-10 to 145°F (-23 to 63°C) (Operating)  
-40 to 160°F (-40 to 71°C) (Storage)

##### Humidity Range:

0 to 95% Relative Non-Condensing

##### Relay Contacts:

SPDT 5 A @ 28 VDC or 250 VAC 100 VA

##### Power:

105 to 130 VAC 50/60 Hz (Std)  
210 to 260 VAC 50/60 Hz (Opt)  
10-32 VDC (Opt)  
15 Watts Maximum Load

##### Alarm Response Time:

1 to 20 Seconds, Customer Adjustable

##### Sensitivity Range:

100 to 1, Customer Adjustable

##### Enclosure: NEMA 9/4

**Hazardous Rating:** Suitable for Class II, III Div. 1, 2, Groups E, F, G  
(105 to 130 VAC power only)

#### SENSOR

##### Temperature Range:

-40 to 160°F (-40 to 71°C) - Teflon Ins. (Std)  
-40 to 350°F (-40 to 177°C) - w/Air Purge (Opt)  
(for temperatures above 350°F, see Model 2240)

**Pressure Range:** 30 psi (2 bar) (Std)  
(for pressures above 30 psi, see Model 2240)

**Probe:** 316 Stainless Steel (Std)

**Other Parts:** 303 Stainless Steel (Std)

##### Insertion Length:

3, 6, 12 inch (7.6, 15.2, 30.5 cm) (Std)  
Other (Special)

#### CONNECTIONS

##### Process/Sensor:

1/2 inch NPT Male Fitting (Std)  
Quick Release Clamp (Opt)

##### Electronics/Power:

3/4 inch NPT Female Conduit Fitting

#### INSTALLATION

Weld a half-coupling or the quick release ferrule over a hole in the side of the pipe or duct. Screw in or clamp the sensor in place. (Please refer to manual for details.)

\*Covered by one or more of the following patents: 4,063,153, 4,074,184, 4,291,273, 4,288,741, 4,631,482, 4,619,145, 4,714,890, 4,904,944, 4,774,453, 5,054,325, 5,095,275, 5,287,061. Product also covered by patents in countries other than the United States.