



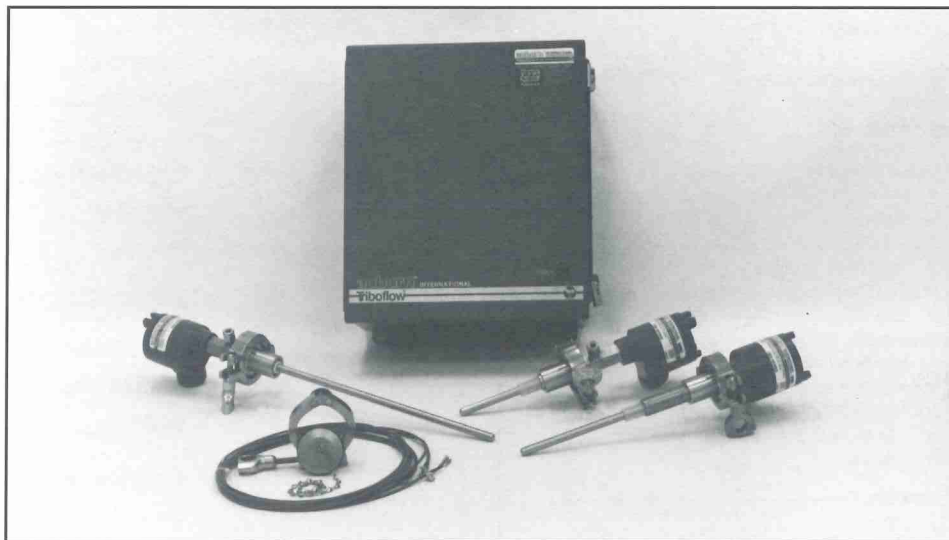
Multichannel Broken Bag Detection

Model 2100-2

The **Triboflow*** system from Auburn International brings maintenance-free and reliable detection to broken bag and filter failure monitoring. The **Triboflow** Model 2100-2 offers this advanced technology for all types of dust collector monitoring.

The Model 2100-2 is the multichannel version of the **Triboflow** Model 2240-2 Broken Bag Detector. The Multichannel Model 2100-2 permits the use of six, eight, or ten sensors to monitor various ducts or outlets from one set of electronics, thus substantially reducing per point costs.

The **Triboflow** Multichannel Model 2100-2 continuously monitors each sensor output by measuring an electrical charge transfer generated when dust or particulate emissions collide with **Triboflow**'s probe. This charge transfer - known as the triboelectric effect - occurs when particles strike the probe, and is continuously monitored against a preset and adjustable norm. Any signifi-



cant increase from the norm triggers a contact closure that activates an alarm.** This unique and highly reliable method allows prompt warning of baghouse and filter failure before trouble starts. The Model 2100-2 employs a separate channel to monitor each sensor, allowing the characteristics of each channel to be tailored to the needs of that particular sensor location.

**For analog output refer to Model 2500-2.

TRIBOFLOW ADVANTAGES

- ◆ No lenses to align or clean
- ◆ Sensitivity range of 1000 to 1
- ◆ Detects concentrations as low as .0005 g/DSCF (1 mg/m³)
- ◆ Detects micron size particles and larger
- ◆ Virtually maintenance-free

ELECTRONICS

Temperature Range:

- 10 to 140°F (-23 to 60°C) (Operating)
- 40 to 160°F (-40 to 71°C) (Storage)

Humidity Range:

- 0 to 95% Relative Non-Condensing

Relay Contacts:

- DPDT 5 A (for each point) @ 28 VDC or 250 VAC, 100 VA max.

Power:

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

Response Time: (Maximum Input Change)

- .5 to 30 Seconds, Customer Adjustable

Enclosure:

- NEMA 12 (Std)
- NEMA 4, 4x, 7/9 (Opt)

SENSOR

Number of Sensor Points: 6, 8, or 10

Temperature Range:

- 40 to 300°F (-40 to 149°C) - Teflon Ins. (Std)
- 40 to 450°F (-40 to 232°C) - Extended High Performance Insulation (Opt)
- 40 to 1000°F (-40 to 538°C) - Ceramic Insulation (Opt)

Pressure Range: 30 psi (2 bar) (Std)

- Up to 5,000 psi (345 bar) (Opt)

Probe: 316 Stainless Steel (Std)

- Tungsten Carbide or Inconel (Opt)

Other Parts: 303 Stainless Steel (Std)

Insertion Length: 1/2 inch (1.3 cm) (Std)

- 3, 6, 12, 18, 30, 36 inch (7.6, 15.2, 30.5, 45.7, 76.2, 91.4 cm) (Opt)
- Other (Special)

Hazardous Rating: Intrinsically Safe for Class I, II, III in Division 1 & 2, Groups A, B, C, D, E, F, G (FM Approved)

Enclosure: NEMA 4x (Std)

CONNECTIONS

Process/Sensor: 1/2 inch NPT Male Fitting or Quick Release Clamp (Std)

Sensor/Electronics: Special Triboelectric Coax Cable 300 Feet (91 m) max.

Cable Temperature Range:

- 60 to 400°F (-51 to 204°C) (Std)
- Cable above 400°F - Contact Factory

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.