## Particulate (Dust or Broken Bag) Sensors

### Particulate Sensor

**Reliable Operation, Minimal Maintenance**

The PMS Particulate Sensor employs a field-proven combination of passive-induction and protected-probe technologies. As particles flow near and around the probe, minute currents are dynamically induced into the probe by flowing particulate. A DSP processes the signal into an absolute output that is reasonably linear to mass. Protective layers over the probe work in combination with induction-sensing to ensure reliable operation with all types of particulate including moist powders and highly conductive dusts. Maintenance is minimal and there is no need for an air purge. For durability, the sensors are passive and free of electronics. The PMS Particulate Sensor is designed to be used with the DPM Particle Monitor in order to be intrinsically safe.

### PMS Particulate Sensor

- More effective control than "broken bag detectors".
- Protect downstream blowers, oxidizers, HEPAs, etc.
- For baghouses, cartridge filters, bin vents, and cyclones.
- Repeatable in all applications (conductive and moist dusts).

### Specifications

**Service:** Air and compatible gases, any type particulate.

**Wetted Materials:**
- T1 and T2: 316SS and PFA; T3 and T4: 316SS and ceramic.

**Temperature Limits:**
- Ambient: Maximum -40 to 392°F (-40 to 200°C) (max must be calculated for each application);
- Process: See model chart.

**Pressure Limits:**
- Standard: Full vacuum to 10 psi (0.69 bar);
- Optional: 100 psi (6.89 bar).

**Output Signal:**
- pA.

**Electrical Connection:**
- Low noise coaxial.

**Process Connection:**
- See model chart.

**Enclosure:**
- Standard: Painted cast aluminum, weatherproof, NEMA 4X (IP66);
- Optional: Intrinsically safe, CSA (must use with proper DPM model).

**Weight:**
- Varies depending on length of probe and type of mount.

**Agency Approvals:**
- CE, CSA

### Nipple Insertion Length

**Example**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-10</td>
<td>10 foot sensor cable</td>
<td>CAB-30</td>
<td>30 foot sensor cable</td>
</tr>
<tr>
<td>CAB-20</td>
<td>20 foot sensor cable</td>
<td>CAB-40</td>
<td>40 foot sensor cable</td>
</tr>
</tbody>
</table>

Consult factory for custom cable lengths up to 300 feet.

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How To Order:
Determine model number from model chart using example as a guide.
Select desired length of Particulate Sensor cable from cable model chart.