Dust Detector

For broken bag detection & environmental measure

Triboelectric Dust Switch

PFM Series

Features
- DUST SWITCH is working environment protection sensor which is possible to mount general-purpose small size dust collector to monitor the filter condition.
- Light weight and compact (amplifier integrated)
- No difficult adjustment required
- NPN output possible to connect directly with PLC
### Application Example

- **Shot blasting system**
- **Dust collecting system**

### Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>PFM-DSW10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Sensor with integrated transducer</td>
</tr>
<tr>
<td>Power supply</td>
<td>24VDC ±10%</td>
</tr>
<tr>
<td>Power consumption</td>
<td>2W</td>
</tr>
</tbody>
</table>
| LED display  | Power lamp: Green (ON=lighting)  
Detected lamp: Red (ON=lighting) |
| Output signal | Open collector output: 1 output (NPN) |
| Output capacity | Load voltage: DC5-30V, Load current: 50mA Max |
| Enclosure    | Protection Rating: IP54 (Cover and lead outlet must be properly tightened) |
| Dimension    | Probe: 50mm (below insulation part)  
Insulator: 50mm |
| Material     | Probe: SUS304  
Insulator: Polyacetal  
Housing: Aluminum Casting |
| Allowable temperature | 0 to +55°C |
| Allowable humidity | 90%max. (Without condensation) |
| Sensor mounting | G1/2 screw |
| Approx. Mass  | 0.5kg |

### Dimension (mm)

![Dimension Diagram]

1. Do not touch the probe with bare hands.
2. Be sure to ground the ground terminal.
3. Make sure to close lead outlet so that outer air does not leak inside.
4. Insert wiring cable directly to terminal base without using crimp-type terminal.

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Specifications are subject to change without notice.

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