

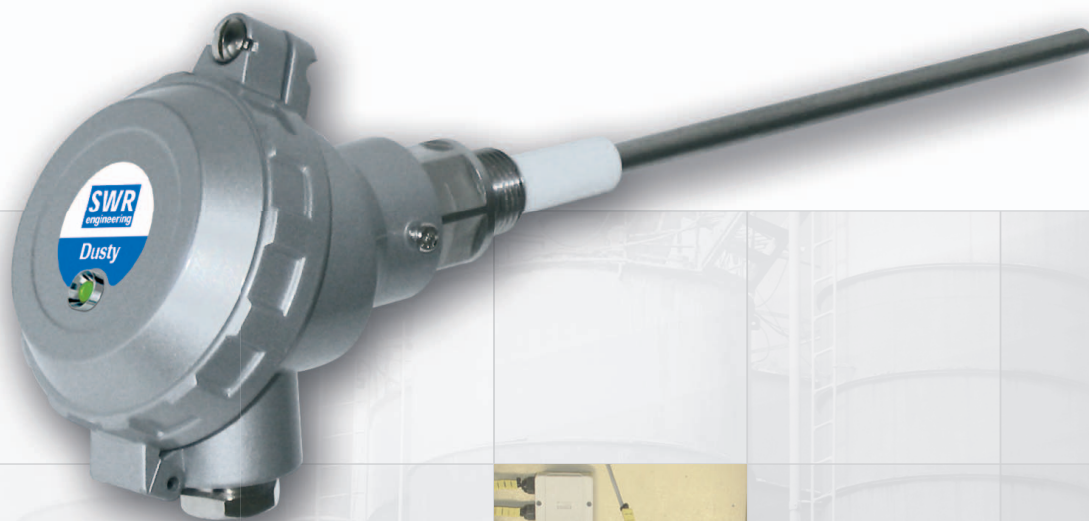


Introduces a new line of products by



Dusty

Low-Cost
Broken Bag Detection



Using / Function

The Dusty has been designed for reliable broken bag detection without delay. It is usable in all metallic channels in which dust particles should be detected. The operative range starts from 6.2 lbs/ft³ (0.1 mg/m³). The Dusty can be used in explosive areas (dust zone 22/ gas zone 2). Furthermore, due to its swiftness and reliability the Dusty can be used as alternative backup and/or to complement “police filters”, or “differential pressure measurement” systems.

The Dusty works on the basis of the triboelectric technology.

As soon as the particles either are passing by or striking the measuring probe, a charge transfer takes place. From this transfer a measuring signal is produced, which during overstepping of the reference values will release the relay contacts.

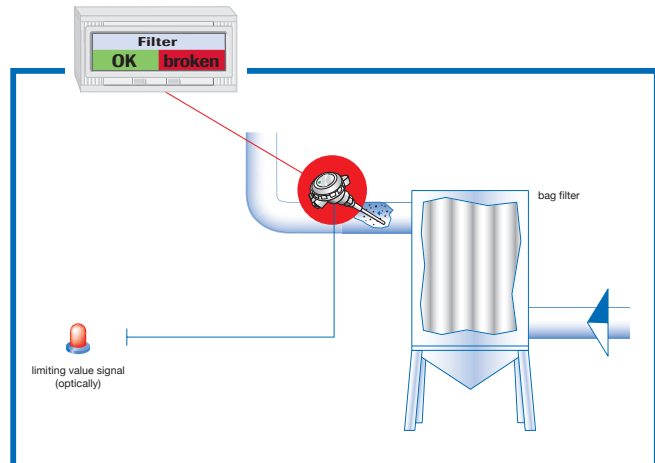
System

The complete measuring system consists of a probe and integral electronics with 24 VDC power supply. Dusty is available with an automatic setup function to adjust to normal dust flow conditions in your application. The first alarm releases if there is a 5-fold increase and the second if there is a 20-fold increase to the reference values. Simultaneously a LED gives optical information about the filter condition:

- Green = OK
- Yellow = 5x
- Red = 20x

Benefits

- Applicable in all clean gas and dust conduits
- Detection of all kinds of dust
- Uncomplicated commissioning (Plug & Play)
- Immediate broken bag detection
- Avoidance of process-induced dust Ex-zones
- Optical and electronic alarm-signals
- Excellent price-performance ratio
- Fast and easy retrofitting



Technical Data

Sensor	
Measurement objects	Solid particles in a gas flow
Particle size	0,3 µm or larger
Measurement range	From 0.1 mg/m ³ (6.2 lbs/cubic ft)
Process temperature	Max. 284° F (140 °C)
Ambient temperature	-4...+140° F (-20...+60° C)
Pressure	Max. 29 psi (2 bar)
Gas velocity	Min. 4 m/sec
Humidity	95% RH (non-condensing)
Measurement principle	Triboelectric
Damping time constant	10 sec
Output signals	• 2 solid switching contact states (max. current feed of 170 mA) • 3-color LED in the front cover
Sensor rod	Stainless Steel, 8.7 inches (220 mm)
Enclosure/casing	Aluminium
Protection category	IP 65; ATEX: cat. 3 GD
Power supply	12–24 VDC
Power consumption	3 W
Electronic connections	2 m cable; M12 connector (optional)
Installation	½" thread
Weight	Approx. 1.5 lbs (0.7 kg)