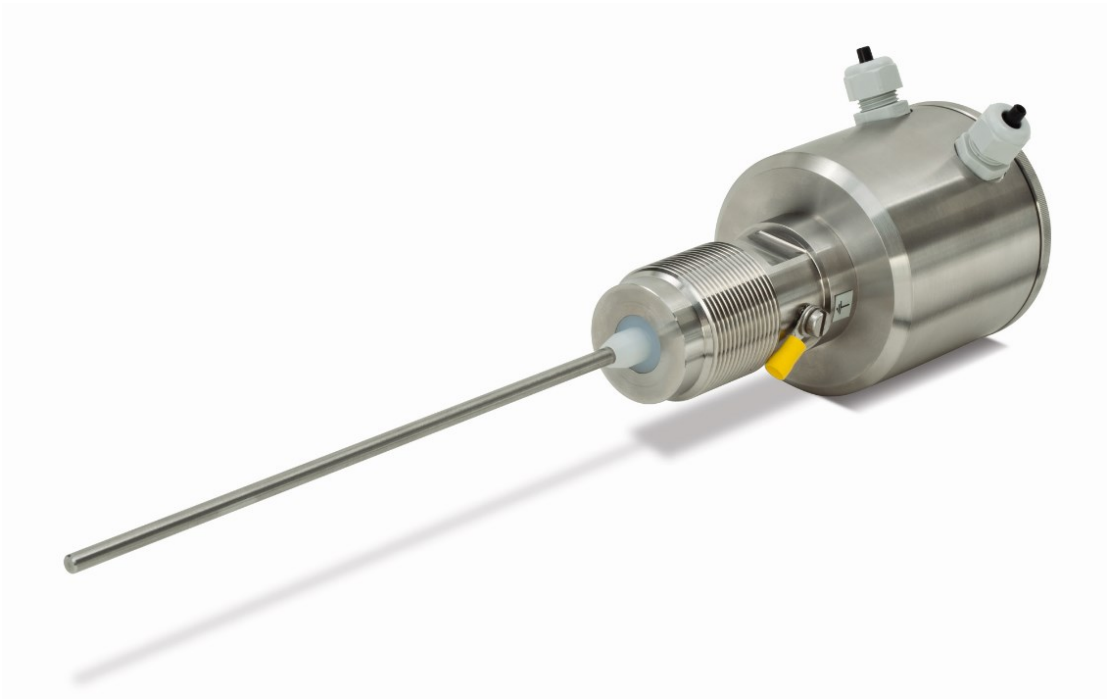
FlowSwitch 700E

Dust monitoring for filter break



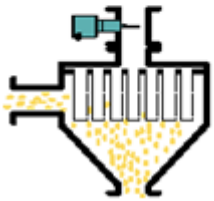
Application

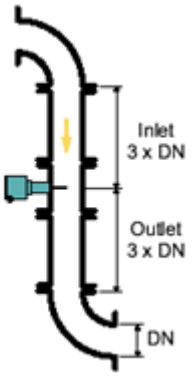
The dust monitor FlowSwitch 700E is used for the detection of filter failure functions e.g. crack or defect in assembling.

By the triboelectric measuring principle a dust breakthrough can be recognized reliable.

Scope of Use

FlowSwitch 700E can be put in metallic pipes and channels which shall be monitored on dust.





Main Benefits

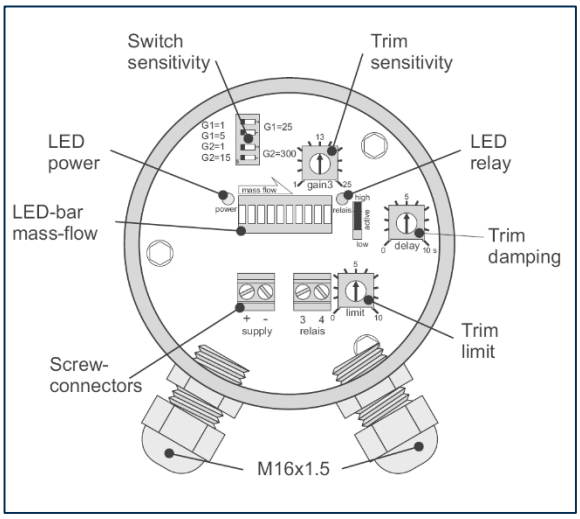
- Maintenance free
- Adjustable sensitivity
- Adjustable switch
- Condition indication with LED
- Stainless steel housing
- Compact form
- Easy installation

Function

The technology is based on a modified triboelectric principle detecting particles interacting with the sensing rod and such particles just passing the rod. Build up on the rod surface will not be detected, only moving particles generate a flow rate proportional signal which is monitored by the electronic.

Installation is done on the clean gas side downstream the filter at a metal duct by welding on of a thread bush boring through the duct wall and screwing in dust watch. On and off distance should this 3-fold of the pipe diameter area, the sensor length 1/3 to 2/3 of the pipe diameter.

The device isn't usable at products, which build an electric conductive coating between sensing rod and pipe wall, caused of abrasion.



Technical Data

Material	Housing Sensor rod (standard) Isolation (standard) Sealing (standard)	Stainl. Steel 1.4571 Stainl. Steel 1.4571 Polyamide (PA) NBR
Ambient cond	temperature Protection class EMC	-20°C to +70°C IP 67 (EN 60529) According to EN 61326-1
Process	Temperature Pressure	Max. 90°C Max. 2 bar
Output	FlowSwitch_01 FlowSwitch_02 FlowSwitch_20	Max. 48 V AC/DC, 1A Logic high/low switchable Transistor: galvanic isolated Max. 31 V DC, 15 mA Logic high/low Switchable 4-20 mA, galvanic isolated, load < 500
Power supply	FlowSwitch_01/02 FlowSwitch_20	17...31 V DC, max. 60mA., 24 V DC ± 10 %, max. 80 mA
Adjustment	Sensitivity Damping Switchpoint Zero set	1...180.000 0...10 s 1...10 FlowSWITCH_01/02 4 mA, FlowSWITCH_GM20