

FlowSwitch 500M

Flow monitoring for bulk materials



Application

The indicator FlowSWITCH 500M **monitors** the mass flow of **solids**.

Flow problems with transports or the feeding of **powders, dust, pellets, or granules** can be detected early with this device. This helps prevent serious difficulties that can occur due to clogged piping, material loss, or other technical problems with the system.

Scope of use

Animal feed industry
 Building materials industry
 Production of ceramics
 Chemical industry
 Detergent industry
 Food industry
 Glass production
 Metal production

Pharmaceuticals
 Pigment production
 Power plants
 Production of rubber goods
 Recycling industry
 Synthetic materials
 Production of textiles
 Etc.

FlowSwitch 350C
 Capacitive
 Mass flow monitoring

FlowSwitch 500M
 Microwave
 Mass flow monitoring

FlowSwitch 600E
 Electrostatic
 Mass flow monitoring

FlowSwitch 700E
 Triboelectric
 Dust monitoring

Main Benefits

- ◆ Reliable microwave measuring principle
- ◆ For all bulk materials
- ◆ Adjustable sensitivity, damping and hysteresis
- ◆ Monitors the mass flow in solid material handling
- ◆ Easy installation by compact form
- ◆ Process connection with flange, thread, etc.

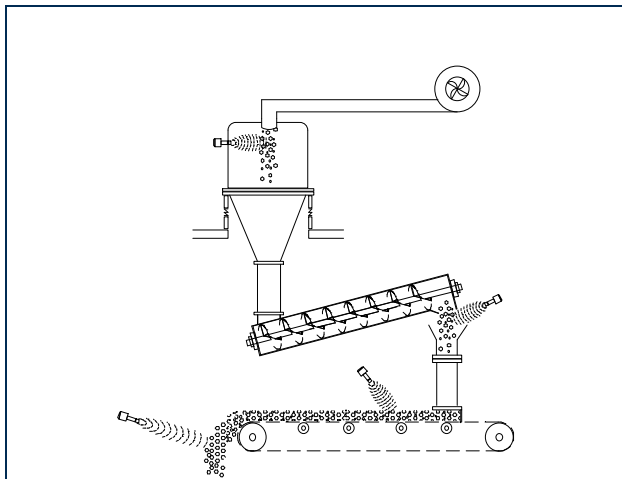
Function

The measurement procedure of the FlowSwitch 500M is based on the physical principle of the Doppler effect. Therefore the sensor sends out a microwave field. If solids move through this field, the microwaves are reflected and received by the sensor again. This is converted into a switching process.

The sensitiveness of the sensor can be adjusted continuously and enables a variable determination of the switching point resp. a switching process for different mass flows.

The installation can be carried out within pipes, on conveying belts, on fall plates or at similar transport facilities.

The assembly is simply, economical and easy also afterwards possible.



Technical Data

Housing material	Stainl. steel
Sensor surface	teflon (optional ceramic)
Protection class	IP65
Ambient temperature	-20°C to +70°C
Process temperature	-20°C to +90°C
Process pressure	2 bar (optional 25 bar)
Power supply	18-36 VDC
Current consumption	About 80 mA at 24 VDC
Transmitting power	<20 dBm
Output (switching)	Relay output (change-over contact, potential free);
Switching voltage	110 VDC / 125 VAC
Switching current	1 A, 30 VDC; 0,5 A, 125 VAC
Switching power	30W / 62,5 VA
Electr. connection	Screw terminals (behind a screw cap with cable gland)
Adjustable parameters	Sensitivity, signal damping, hysteresis
Parametrization	Via potentiometer and switch
Indicators	LED green (working) LED red (switch) LED yellow (flow indicator)

