

# 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	Pharmaceuticals
Building materials industry	Pigment production
Production of ceramics	Power plants
Chemical industry	Production of rubber goods
Detergent industry	Recycling industry
Food industry	Synthetic materials
Glass production	Production of textiles
Metal production	Etc.

#### LevelCheck 350C

Capacitive  
Level monitoring

#### 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 or others

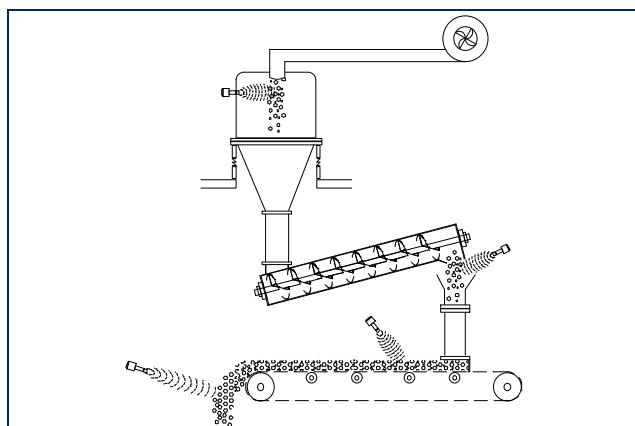
## Function

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.

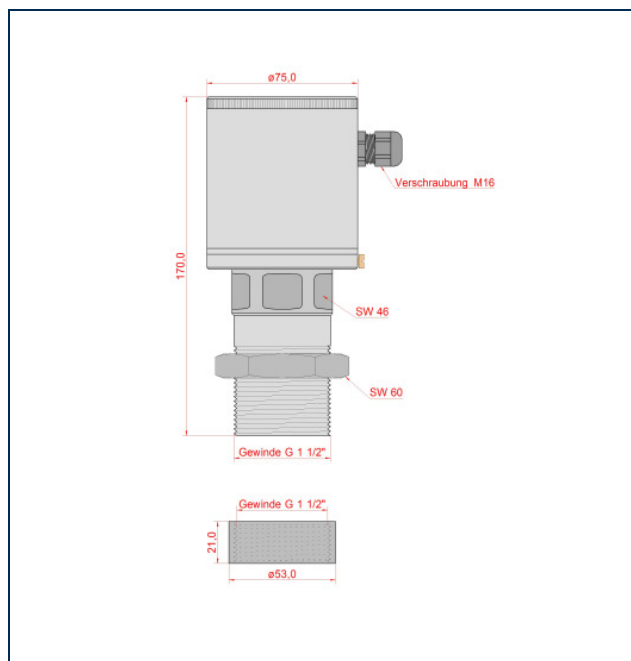
The installation can be carried out within pipes, on conveying belts, on fall plates or at similar transport facilities.

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 V DC
Current consumption	About 80 mA at 24 V DC
Transmitting power	<20 dBm
Output (switching)	Relay output (change-over contact, pot.-free)
Switching voltage	110 V DC / 125 V AC
Switching current	1 A, 30 V DC; 0,5 A, 125 V AC
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)



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