

FlowSwitch FS 550

Contactless flow switch
for bulk solids with trend measurement



Application

The FlowSwitch FS 550 monitors the flow of solids.

It is a robust microwave-built flow monitor that detects disturbances in the transport of powders, dusts, pellets or granules at an early stage. This helps to avoid difficulties that may occur due to clogged pipelines, loss of material or other problems with the conveying system. The compact device can be used wherever monitoring of bulk material movement is required.

Industries

Feed industry
Construction materials
Coating processes
Chemical industry
Energy production
Foundries Glass
production Rubber
industry
Wood & pellets Lime
works Ceramics
production Plastics
production

Food industry Metal
production Minerals
Pharmaceuticals
Pigment production
Recycling
Synthetic materials Textiles
Detergent industry Cement
industry
etc.

Advantages

- Reliable, non-contact microwave measurement
- Works within several meters distance
- No impairment of the bulk material
- Very sensitive and responsive
- Flexible due to adjustable gain, filter,
- Easy to install and retrofit
- Wear and maintenance free
- Rugged stainless steel construction
- 100 % safe operation due to active self-monitoring

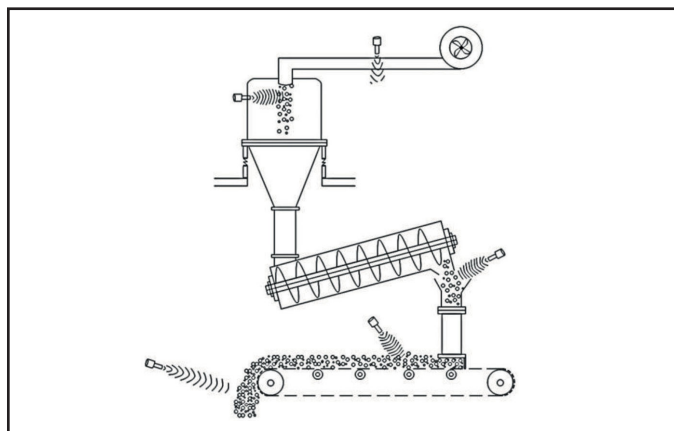
Function

The FlowSwitch FS 550 is based on the latest microwave technology. When a material passes the sensor, the emitted microwaves are reflected. This is converted into a flow-proportional output signal for trend measurement.

The sensor can be installed in pipelines, on conveyor belts, on drop plates, on chutes, behind screws or in similar conveying equipment. It enables reliable detection of the material flow and detects insufficient or missing material, clogging or standstill - from a distance of several meters. It does not come into contact with the bulk material and is wear- and maintenance-free.

Numerous parameters, such as sensitivity and filter time, are adjustable, and the sensor can be easily adapted to any application.

The FS 550 is known as the most robust flow switch in its class. It is constructed of high quality stainless steel and is optimized for long life. High pressure adapter allows use in the most challenging environments.



Technical data

Housing material	stainless steel (1.4307)
Surface of the sensor	Teflon (optionally ceramic)
Ambient-Temperature	-20°C to +60°C
Process temperature	-20°C to +85°C
Process pressure	6 bar (optional 30-60 bar)
Protection class	IP65
Power supply	24 VDC (18 - 30 VDC)
Power consumption	Approx. 80 mA at 24 VDC
Transmitting power	10 dBm
Analog output	4-20mA
Electrical connection	Pluggable screw terminals
Adjustable parameters	Amplification, filters,
Parameterization	Directly on the device via keys
Indicators	LED green (in operation) Bar chart (e.g. field strength)
Max. Load	500 Ohm

