

# FlowSwitch FS 550

**Contactless flow monitor  
for bulk solids with trend measurement**



## Application

The FlowSwitch FS 550 monitors the flow of solids.

It is a robust microwave-based flow monitor that detects faults in the transportation of powders, dusts, pellets or granulates at an early stage. This helps to avoid difficulties that can arise due to blocked pipes, material loss or other problems with the conveying system. The compact device can be used wherever monitoring of bulk material movement is required.

## Industries

Animal feed industry  
Building 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.

**HUMY 300/3000**  
Continuous inline  
moisture  
measurement

**MF 3000**  
Microwave  
flow  
measureme

**FS 550**  
Microwave  
flow  
monitoring

**FS 600**  
Electrostatic  
flow monitoring

**FS 710/750/780**  
Triboelectric dust  
monitoring

**LC 510**  
Microwave  
point level  
monitoring

## Advantages

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

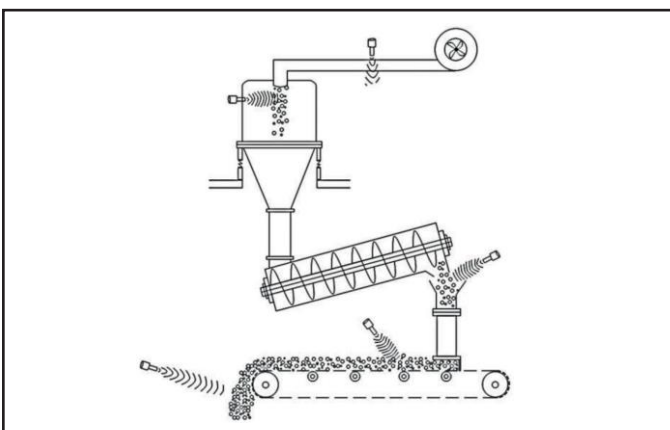
## Function

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 conveyor systems. It enables reliable detection of the material flow and detects insufficient or missing material, blockages or standstills - 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 monitor in its class. It is made of high-quality stainless steel and is optimized for a long service life. The optionally available AD 512-C adapter for abrasive materials and high process temperatures enables use in the most difficult environments.



## Technical data

Material of the housing	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
With adapter AD 512-C	up to 140°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
Transmission power	10 dBm
Analog output	4-20mA
Electrical connection	Pluggable screw terminals
Adjustable parameters	Amplification, filter
Parameterization	Directly on the device via buttons
Indicators	LED green (in operation) Bar chart
Max. Load	500 Ohm

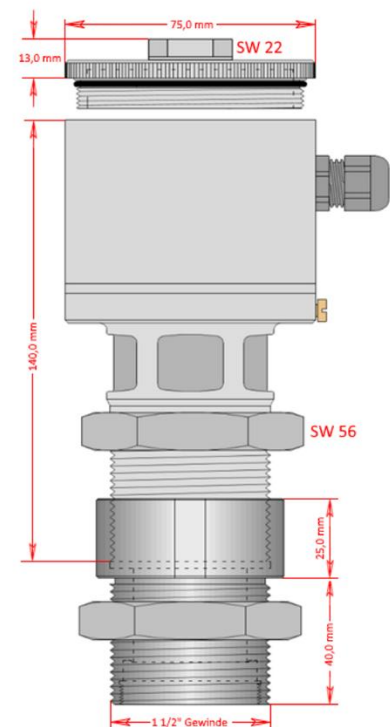


Illustration with AD 512-C