

LevelCheck 510M

Contactless level monitoring
for bulk material



Application

The microwave barrier LevelCheck 510M is designed for level monitoring of solids in silos, container, bunkers, shafts, etc.

Furthermore it can be used for: blockage-report, for counting piece goods or for positioning items. The devices are certified up to ATEX Zone 20 and optionally authorized for a process pressure up to 25 bar.

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.

HUMY 3000
Moisture
measurement

MF 3000
Mass flow
measurement

FS 510M
Microwave
mass flow
monitoring

FS 600E
Electrostatic
mass flow
monitoring

FS 700E
Triboelectric
dust monitoring

LC 510M
Limit level
monitoring

Main Benefits

- ◆ Reliable microwave measuring principle
- ◆ Self-monitoring with additional relay
- ◆ For level monitoring
- ◆ Adjustable sensitivity, damping, hysteresis and filter function
- ◆ Adjustment via 2 key buttons and bargraph
- ◆ Easy installation by compact form
- ◆ Process connection with flange, thread, etc.

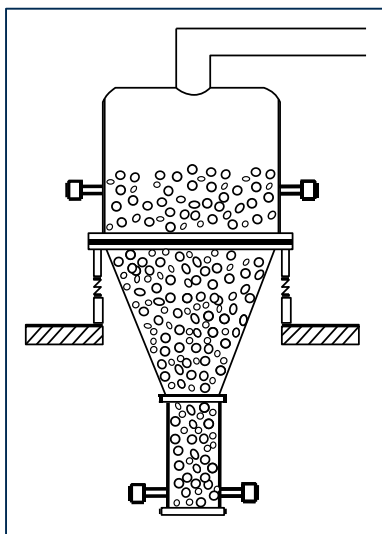
Function

The measurement procedure of the LevelCheck 510M is based on the newest microwave technology. Therefore the sensor sends out a microwave signal. The signal is analyzed by the opposite receiver. Material, which has built up within this field, put a damp on the signal effect. This is converted into a switching process. The measurement is contactless.

Sensitivity, signal damping and hysteresis of the microwave barrier can be adjusted continuously and exactly by use of the bargraph. This enables a variable determination of the switching point resp. a switching process for different process applications.

The installation can be carried out within silos, bunkers, pipe systems or at similar transport facilities.

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



Technical Data

Housing material	Stainless steel
Sensor surface	Teflon (optional ceramic)
Protection class	IP65
Ambient temperature	-20°C till +60°C
Process temperature	-20°C till +80°C
Process pressure	2 bar (optional 25 bar)
Power supply	18-30 VDC (typical 24 VDC)
Current consumption	Ca. 80 mA at 24 VDC
Transmitting power	10 dBm
Output (switching)	2x Relay output (change-over contact, pot.-free) optional transistor
Switching voltage	45 VDC / 35 VAC
Switching current	Min. 10 µA & max. 1 A
Switching power	30W / 35 VA
Electr. connection	Screw terminals (behind a screw cap with cable gland)
Adjustable parameters	Sensitivity, filter time, hysteresis
Parameterization	via key buttons and switch
Indicators	LED green (power supply) LED orange (switch) Bargraph

