

MAFA GUIDED MICROWAVE

Guided microwave, ATEX-classified according to EEX I/2 D

MAFA guided microwave enables you to simply monitor delivered material and consumption.



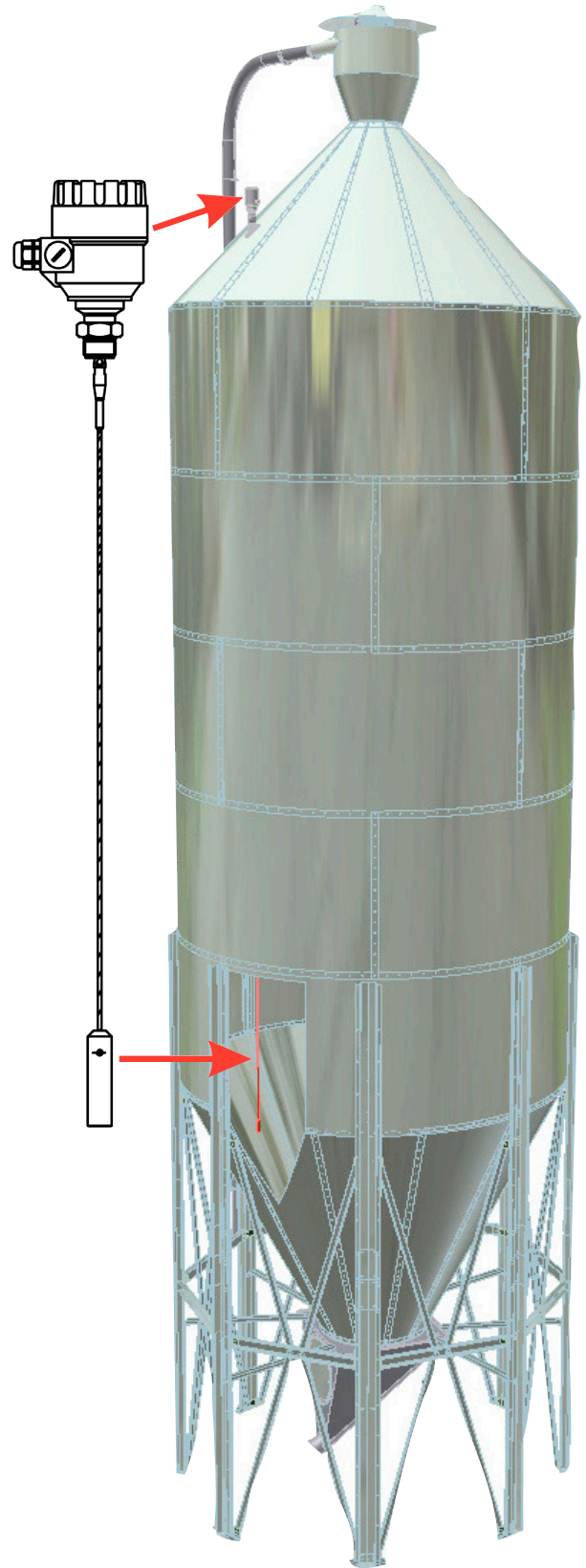
Level transmitter Micro TREK H-400/H-500

A unit used to measure the level in silos with guided microwave. Consists of level transmitter, 4 mm/ 8 mm cable with counterweight adapted to the height of the silo, holder with 1 inch/ 1.5 inch connection for sensor. Output signal analogue 4-20 mA. Digital panel instrument is available as an accessory.

Guided microwave is ideal for wood pellets, powder, granulate and animal feed and works according to the TDR (Time Domain Reflectometry) principle, which is well-known in connection with measuring breaks in cables. Micropulses are transmitted along a cable at the speed of light.

When the pulse reaches the surface of the material, it is reflected back to the level gauge. The distance to the material is directly proportional to the pulse period. TDR technology is independent of the material and the space above it.

The measured data is converted to a 4-20 mA current + HART signal for further processing.



Technical data and installation

Specifications guided microwave:

2-wired TDR level transmitter. Supplied with stainless steel counterweight.

Range: max 24 m.

Output 4-20 mA + HART.

Accuracy for powder and bulk material:
+/- 20 mm for length < 15m

(+/- 20 mm +/- 0,05% for length > 15m).

Power supply: 18-35V DC

Protection class: IP65

ATEX-classified acc. to EEX I/2 D.

When ATEX-classified a intrinsically safe isolator always has to be used.



DD10-10S isolation amplifier 1-channel

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Reservation for typos. See quote for specific conditions. Version October 2011

The illustration shows a MAFA BIB silo with guided microwave.

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PRW 110-5 built-in in plastic case with cable bushings. The instrument is used in those cases where there is no other overall control system.

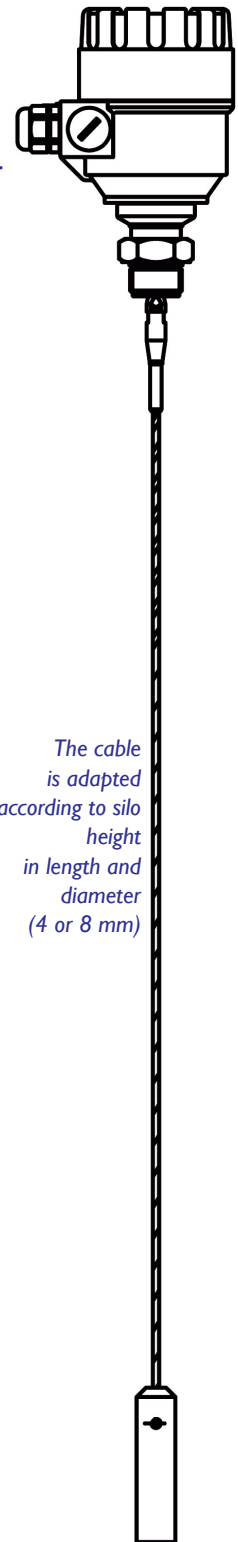
Level control MultiCONT

Range of applications:

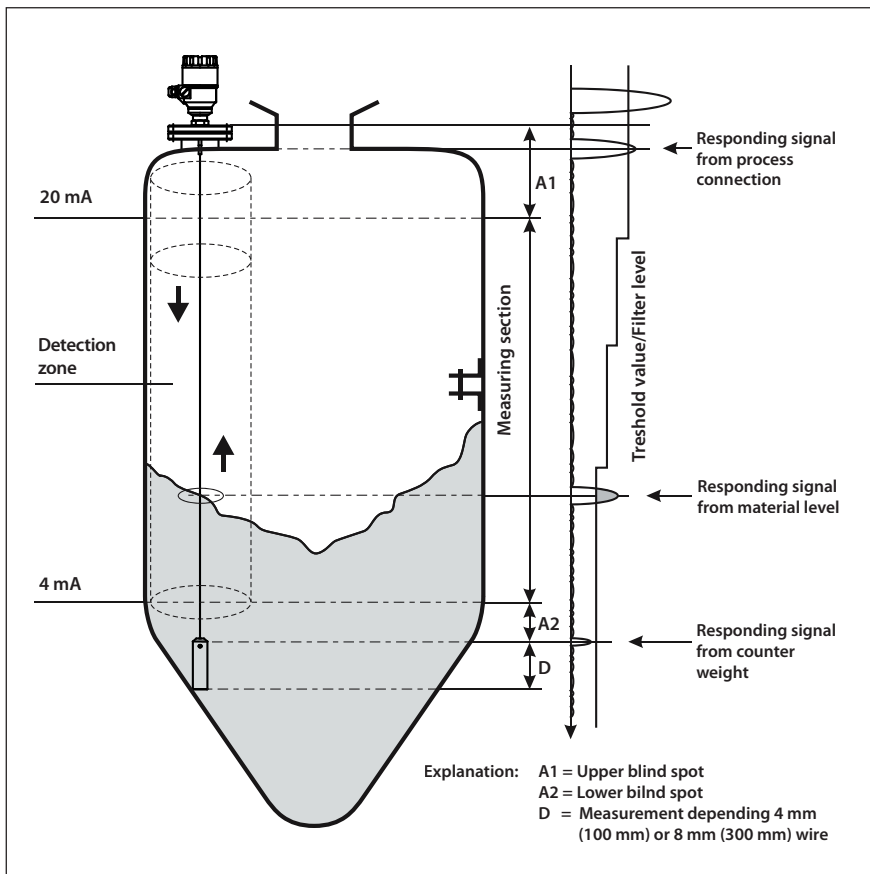
- Presentation of levels from Nivelco's sensor using HART.
- Handles various types and makes of HART-based sensors.
- Control and alarm functions via 4-20 mA and relay outputs.
- Additional outputs via supplementary modules.
- RS-485 output for connection to EXAC Monitor tank-presentation program.

Specifications:

- Supply voltage: 85 to 250 VAC, 10,5 to 28 VAC or 10,5 to 40 VDC
Temperature: -20 to +50 °C
Output signal: 4 relays (SPDT), 2 pcs 4 to 20 mA, RS-485, more relays and power outlets via supplementary modules
Enclosure class IP 65.
Certificate: ATEX [EEEx] ia



The cable is adapted according to silo height in length and diameter (4 or 8 mm)



Installation:

For factory-assembled silos the guided microwave sensor can be supplied electrically mounted with electric cable connected to a junction box about 2 metres from the ground on the leg of the silo. Guided microwave sensors can be installed on existing silos.

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