Microwave level measurement
continuous level measuring for bulk goods

Dust

Explosion protection information
and supplement to the operating instructions

Type plate details

- Model designation
- Marking
- Ambient temperature (Operation temperature)
- Vessel pressure
- Unique serial number
- Number which the order was handled

Manufacturer and address

CE sign with the number of the "Notified Body"
which is involved in the production control phase.

EC-type examination certificate number
Type of protection
Details to supply voltage and current consumption with 24 V DC
Details for the analog signal output
Details for the signal contact

Month and year of delivery

Competence in explosion protection
Microwave level indicator for use on the boundary from zone 20 to zone 21.

Marking in accordance with ATEX and DIN EN IEC 60079-0

Ex II 1/2 D Ex ta[ia]/tb III C T86°C

Order code B1
Marking: II 1/2 D

Dust Ex

Equipment category appropriation by zones
Microwave level indicator for use on the boundary from zone 20 to zone 21.

Ambient temperatures Ta
The ambient temperature Ta defines the maximum operating temperature of the indicators. Inside the vessel this is process temperature (the air or the bulk goods temperature) nearby the device.

maximum surface temperature T
The maximum surface temperature T means the hottest point at the equipment.

Pressure, vacuum p (Process)

The surface temperature of the probe depends on the bulk goods temperature respectively the ambient temperature (Process temperature).

The probe produces no hot surface by itself.
Special conditions and instructions for safe application

1.1 The installation, maintenance, initial operation, removal and repair have to be controlled resp. checked by an “authorized person” for explosion protection.

1.2 The device can also be installed in the walls of silos, vessels, filters and so on when the interior of those are classified as zone 20.

1.3 The maximal working temperature on the passing through must not exceed +70 °C when the level indicator is installed in the walls of silos or vessels with deviating atmospheric conditions.

1.4 Using the device in ambient temperatures > +60 °C, the applied connection cables have to be made for temperatures of min. +80 °C.

1.5 For the electrical connection you have to take notice of the local and statutory requirements and/or the VDE 0100.

1.6 Before electrical connection, compare the supply voltage with the details at the data plate.

1.7 A fuse (with max. 4A) has to be connected in series to the voltage supply.

1.8 Take notice of the specifications on the data plate.

1.9 As soon as the device will be brought into the explosion hazardous area it has to be mounted immediately at the precaused place and a cable has to be brought into the cable gland.

1.10 The cable gland were screwed and protected at the factory. Please check if the cable gland have loosened during on the mounting or at the transport. When it is loosened, it has to be fitted again.

1.11 To secure the type of protection, the screw nut of the cable gland has to be fixed at the installation with a torsional force of min. 5 Nm. ATTENTION! If it will be fastened too strong, the IP-protection can be affected.

1.12 The earth connection of the device has to be installed in such a way that mechanical damage will be excluded.

1.13 The device may put into operation with built-in cap-sealing and when it is closed, only.

1.14 Switch off the power supply, before opening the device.

1.15 Tear-off danger! Maximum traction at the probe 10 kN.

1.16 Take notice of the requirements of DIN EN 60079-14, DIN EN 60079-17 and DIN EN 1127-1, especially regarding the dust deposits and temperatures and follow the pertinent rules and regulations.