

# Microwave level measurement

## continuous level measuring for bulk goods

# MWF

# Dust



# Explosion protection information

## and supplement to the operating instructions

### Type plate details

Manufacturer and address

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

Model designation

Marking

Ambient temperature  
(Operation temperature)

Vessel pressure

Unique serial  
number

Number which the  
order was handled

|                                     |                       |   |                                       |
|-------------------------------------|-----------------------|---|---------------------------------------|
| <b>MOLLET</b> Füllstandtechnik GmbH |                       | Industriepark RIO 103<br>D-74706 Osterburken<br>Tel. +49 62 91 64 400 | <b>CE</b><br>0044                     |
| <b>MWF27A1B1C65G1ILS00.0</b>        |                       |   |                                       |
| II 1/2D Ex ta[ia]/tb IIIC T 86 °C   |                       | IBExU11ATEX1108 X<br>IP66   |                                       |
| -20 °C ≤ Ta ≤ +70 °C                |                       | Supply Un   | 12 ... 30 V DC<br><50 mA at 24 V DC   |
| p (Prozess)                         | -1,0 bar ... 10,0 bar | Output In   | 4 ... 20 mA                           |
| Stück Nr.                           | 1234567890            | 09/11   | Contact Us                            |
| Auftrag-Nr.                         | 1234567890            |   | 0 ... Un ≤200 mA<br>DC PNP / NC or NO |

Month and year of delivery

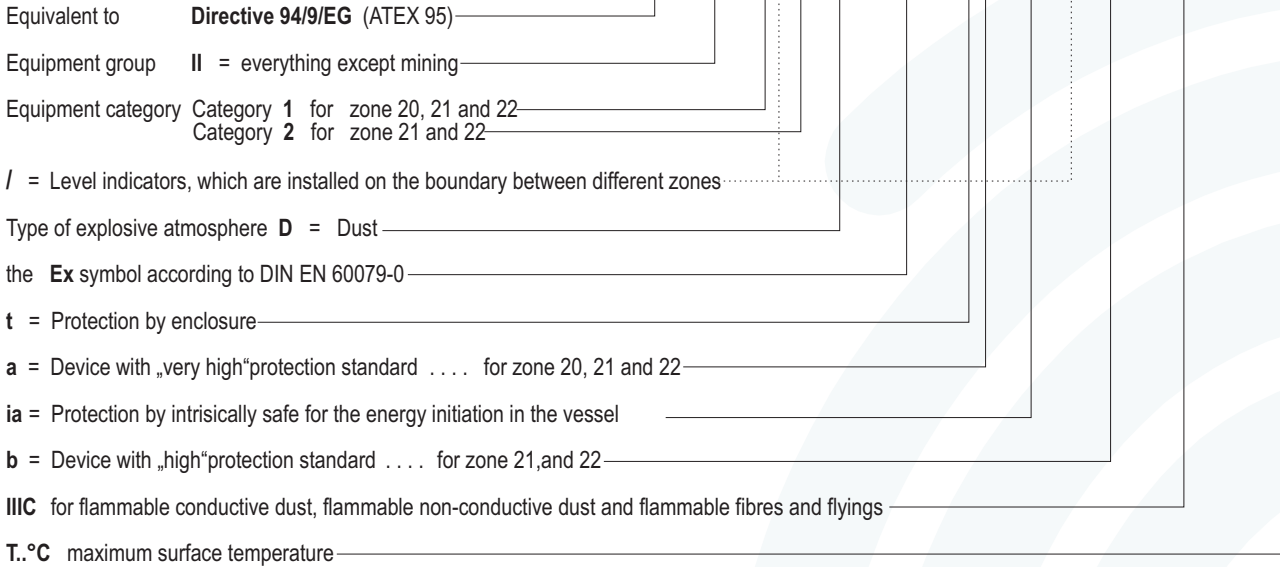
- EC-type examination certificate number
- Type of protection
- Details to supply voltage and current consumption with 24 V DC
- Details for the analog signal output
- Details for the signal contact

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**Marking in accordance with ATEX 95 and DIN EN 60079-0:2009**

Microwave level indicator for use on the boundary from zone 20 to zone 21.

**Ex II 1/2 D Ex ta[ia]/tb IIIC T86°C**



Order code **B1**

Marking: **II 1 / 2 D**



**Equipment category appropriation by zones**

Microwave level indicator for use on the boundary from zone 20 to zone 21.

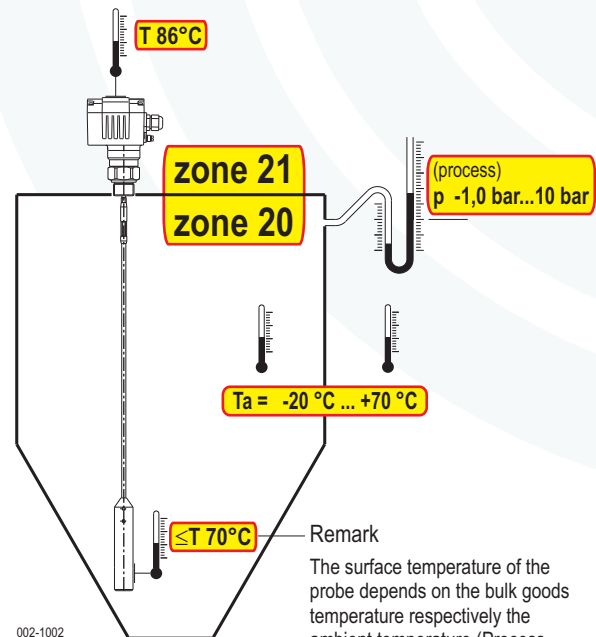
**Ambient temperatures Ta**

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)**



Remark  
The surface temperature of the probe depends on the bulk goods temperature respectively the ambient temperature (Process temperature).  
The probe produce no hot surface by itself.

|   |   |         |
|---|---|---------|
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| <b>MWF27A1 B1 C65G11LS00.0</b>              |   |         |
| <b>Ex II 1/2D Ex ta[ia]/tb IIIC T 86 °C</b> | IBExU11ATEX1108 X<br>IP66   |         |
| <b>-20 °C ≤ Ta ≤ +70 °C</b>                 | Supply Un 12 ... 30 V DC<br><50 mA at 24 V DC                         |         |
| <b>p (Process) -1,0 bar ... 10,0 bar</b>    | Output In 4 ... 20 mA   |         |
| Stück Nr. 1234567890 09/11                  | Contact Us 0 ... Un ≤200 mA   |         |
| Auftrag-Nr. 1234567890                      | DC PNP / NC or NO   |         |



## 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 pre-caused 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.

**1** Space for notes

