

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

MOLLET Industriepark RIO 103 Füllstandtechnik GmbH D-74706 Osterburken Tel. +49 62 91 64 400		0044
MWF27A1B1C65G1ILS00.0		
II 1/2D Ex ta[ia]/tb IIIC T 86 °C		IBExU11ATEX1108 X IP66
-20 °C ≤ Ta ≤ +70 °C		Supply Un 12 ... 30 V DC <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 0 ... Un ≤200 mA DC PNP / NC or NO
Auftrag-Nr. 1234567890		

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

MOLLET

Competence in explosion protection

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

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

		II	1/2 D	Ex	ta[ia]/tb	IIIC	T86°C
Equivalent to	valid ATEX-Product-Directive						
Equipment group	II = everything except mining						
Equipment category	Category 1 for zone 20, 21 and 22 Category 2 for zone 21 and 22						
/ = Level indicators, which are installed on the boundary between different zones							
Type of explosive atmosphere	D = Dust						
the Ex symbol according to DIN EN IEC 60079-0							
t = Protection by enclosure							
a = Device with „very high“ protection standard for zone 20, 21 and 22							
ia = Protection by intrinsically safe for the energy initiation in the vessel							
b = Device with „high“ protection standard for zone 21, and 22							
IIIC for flammable conductive dust, flammable non-conductive dust and flammable fibres and flyings							
T..°C maximum surface temperature							

Order code **B1**

Marking: **II 1 / 2 D**

Dust 

Equipment category appropriation by zones

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


Ambient temperatures **Ta**

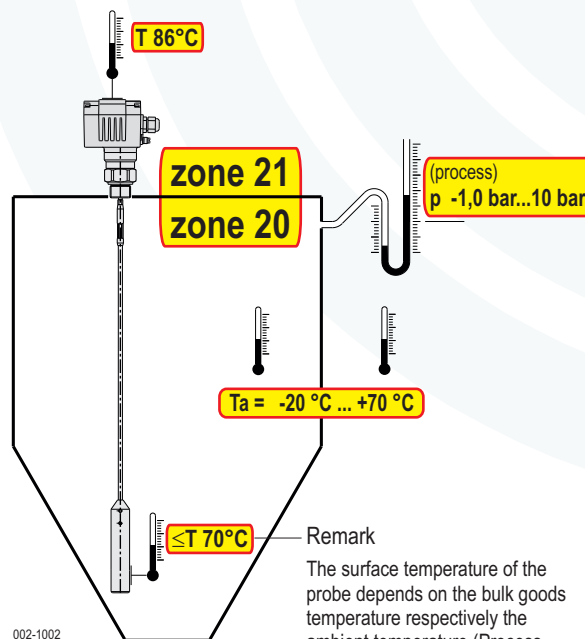
The ambient temperature **Ta** defines the maximum operating temperature of the indicators. Inside the vessel this is process temperature (the air or the bulk goods temperature) nearby the device.

maximum surface temperature **T**

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

Pressure, vacuum **p** (Process)

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Auftrag-Nr.	1234567890		<input type="text"/>			



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.



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.

Space for notes

