



Microwave level measurement continuous level measuring for bulk goods

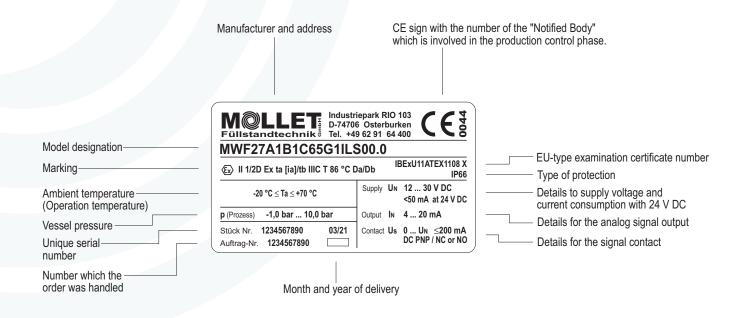




Explosion protection information

and supplement to the operating instructions

Type plate details



MOLLET

Competence in explosion protection

Microwave level measurement **MWF**



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. 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 I = Level indicators, which are installed on the boundary between different zones **D** = Dust - Type of explosive atmosphere 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 intrisically 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 **Equipment Protection Level (EPL) D** = Dust - Type of explosive atmosphere a = Device with "very high level of protection" for use in potentially explosive atmospheres where in

Order code B1

Marking: II 1 / 2 D



normal operation, foreseeable or infrequent faults/malfunctions no ignition hazard is given. **b** = Device with "high level of protection" for use in potentially explosive atmospheres where in normal operation or foreseeable faults/malfunctions no ignition hazard is given.

Equipment category appropriation by zones

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

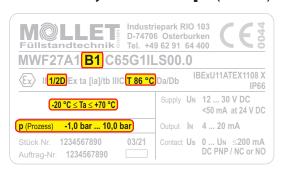
Ambient temperatures Ta

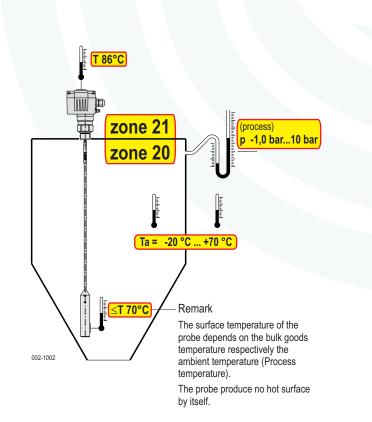
The ambient temperature **Ta** defines the maximum operating temperature of the indicators. Inside the vessel this is process temperature (the air or the bulk goods temperature) nearby the device.

maximum surface temperature T

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

Pressure, vacuum p (Process)







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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.



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Space for notes