

Membrane level indicator

Level limit switch for bulk goods

Gas+
Dust



Explosion protection information

and supplement to the operating instructions

Type plate details B1

Manufacturer and address

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

Model designation

Unique serial number

Number which the order was handled

Month and year of delivery

Dust marking




Ambient temperature (operation temperature)

EC-type examination certificate number

Connection diagram

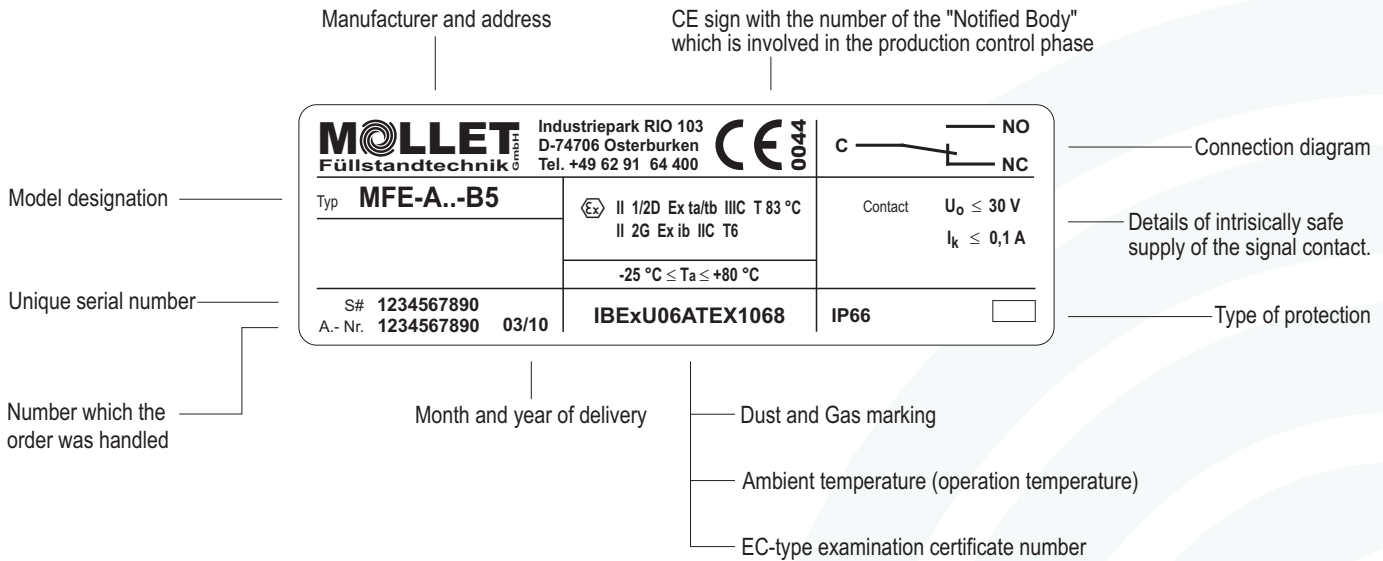
Details to loadability of the signal contact

Type of protection

MOLLET Füllstandtechnik GmbH Industriepark RIO 103 D-74706 Osterburken Tel. +49 62 91 64 400		 0044	
Typ MFE-A.-B1	 II 1/2D Ex ta/tb III C T 83 °C	Contact 4 A 240 V~	
S# 1234567890 A.- Nr. 1234567890 03/10		IBExU06ATEX1068	IP66 <input type="checkbox"/>
-25 °C ≤ Ta ≤ +80 °C			

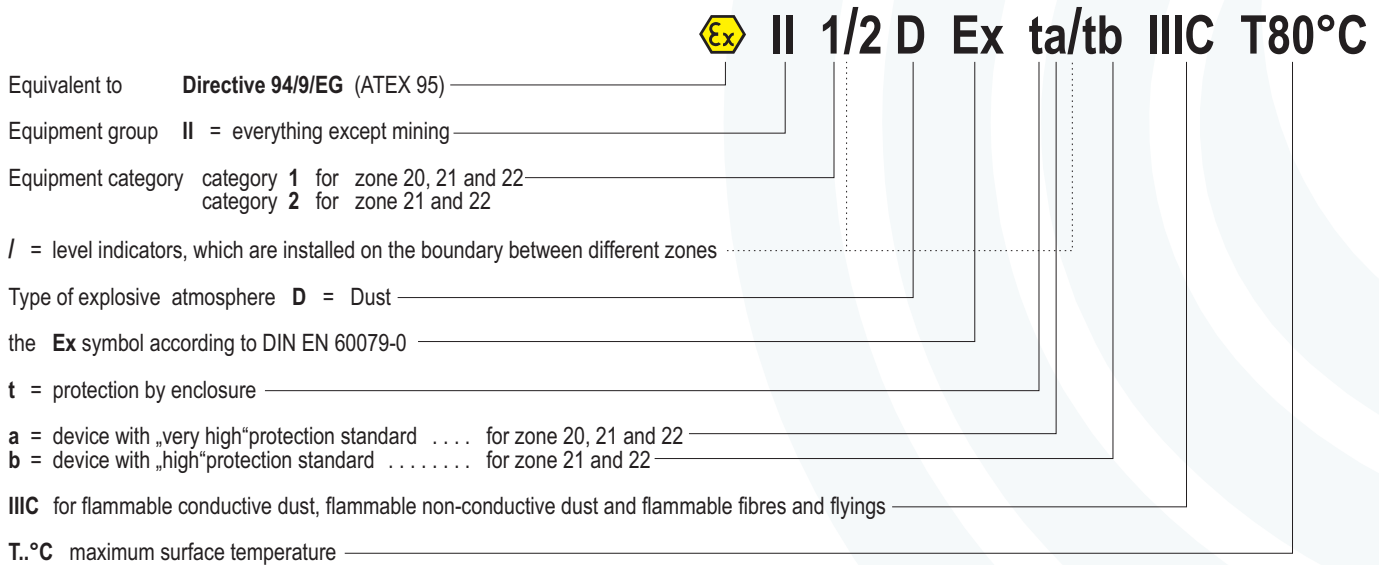
Type plate details B5

Gas+Dust  and hybrid mixtures

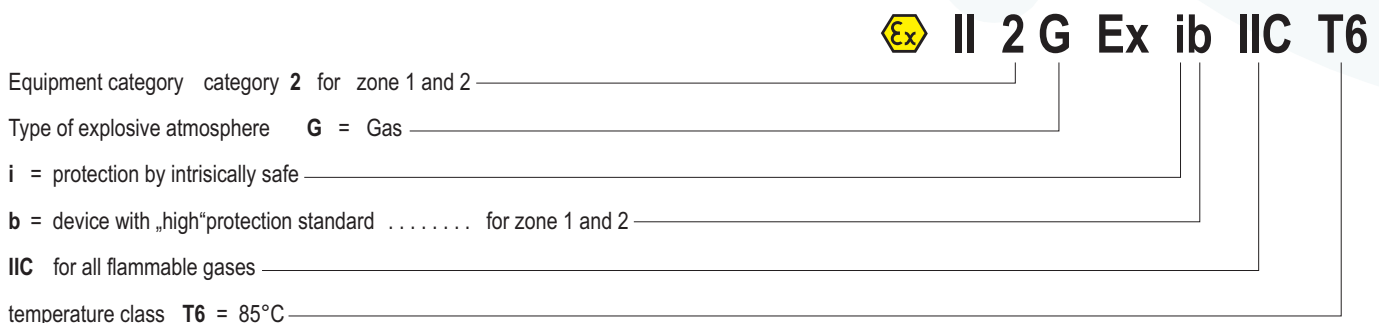


Marking in accordance with ATEX 95 and DIN EN 60079-0:2009

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



Membrane level indicator for use in zone 1



Order code **B1**

Marking: II 1D / 2D



Equipment category appropriation by zones

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

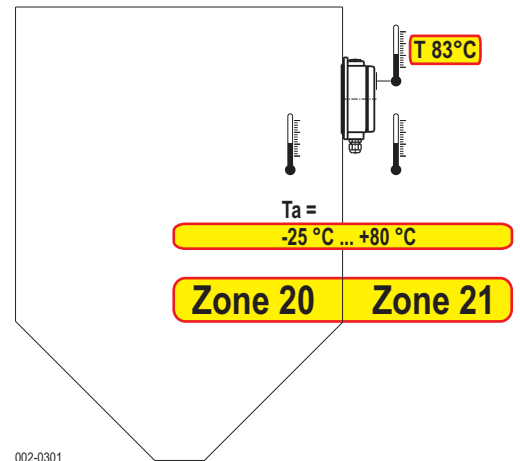
Ambient temperatures T_a

The ambient temperature T_a 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 means the hottest point at the equipment.

MOLLET Füllstandtechnik GmbH Industriepark RIO 103 D-74706 Osterburken Tel. +49 62 91 64 400				NO NC
Typ MFE-A...B1	II 1/2D Ex ta/tb III C T 83 °C	Contact 4 A 240 V~		
$-25\text{ °C} \leq T_a \leq +80\text{ °C}$				
S# 1234567890 A.-Nr. 1234567890 03/10	IBExU06ATEX1068	IP66		



Order code **B5**

Marking: II 1D / 2D

II 2G



Equipment category appropriation by zones

Membran level indicator for use on the boundary from zone 20 to zone 21 and in zone 1

Ambient temperatures T_a

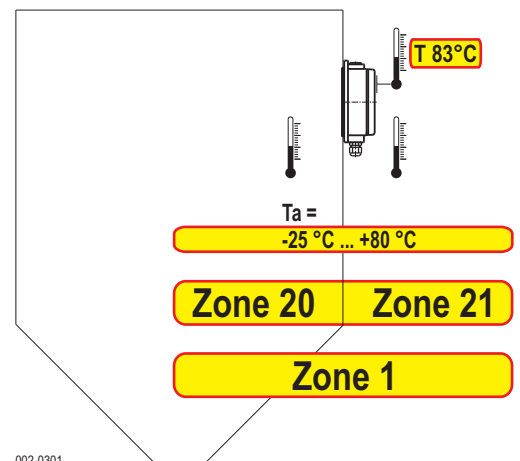
The ambient temperature T_a defines the maximum operating temperature of the indicators. Inside the vessel this is process temperature (the air or the bulk goods temperature) nearby the device.

maximum surface temperature T

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

The device matches with temperature class **T 6**.

MOLLET Füllstandtechnik GmbH Industriepark RIO 103 D-74706 Osterburken Tel. +49 62 91 64 400				NO NC
Typ MFE-A...B5	II 1/2D Ex ta/tb III C T 83 °C II 2G Ex ib III C T 6	Contact $U_o \leq 30\text{ V}$ $I_k \leq 0,1\text{ A}$		
$-25\text{ °C} \leq T_a \leq +80\text{ °C}$				
S# 1234567890 A.-Nr. 1234567890 03/10	IBExU06ATEX1068	IP66		





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 For the electrical connection you have to take notice of the local and statutory requirements and/or the VDE 0100.
- 1.3 Take notice of the specifications on the data plate.
- 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 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.
- 1.6 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.
- 1.7 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.
- 1.8 The earth connection of the device has to be installed in such a way that mechanical damage will be excluded.
- 1.9 The device may put into operation with built-in cap-sealing and when it is closed, only.
- 1.10 Switch off the power supply, before opening the device. (touchdangerous voltage)
- 1.11 Depending on the bulk goods characteristics and the wear, the carrier has to define resp. to find out in which intervals the membrane of the level indicator has to be checked for leakage to keep the type of protection (dust-proof). This inspection has to be repeated regularly. If there is a fault, the membrane has to be replaced with a new membrane.
- 1.12 Take notice of the requirements of DIN EN 61241-14 and DIN EN 60079-17 especially regarding the dust deposits and temperatures and follow the pertinent rules and regulations.

For the version B1



- 2.1 A fuse (with max. 4A) has to be connected in series to the voltage supply.
- 2.2 Protect the signal contact from voltage peaks when inductive loads are connected.

For the version B5



- 3.1 **ATTENTION!**
For load limitation a certified barrier or a certified isolation amplifier with an intrinsically safe circuit at least for the category “ib” has to be connected in series, witch is certified for gases of explosion group IIC.
- 3.2 Take additional notice of the requirements of EN 1127-1, especially regarding the temperatures and follow the pertinent rules and regulations.
- 3.3 The device with an intrinsically safe electric circuit can be used in dusty explosive hazardous areas.
- 3.4 **Hybrid Mixtures**
The level indicator is approved for the use in hybrid mixtures.