

# Yo-Yo sensing level measurement continuous level measuring for bulk goods







# **Explosion protection information**

and supplement to the operating instructions

Type plate details

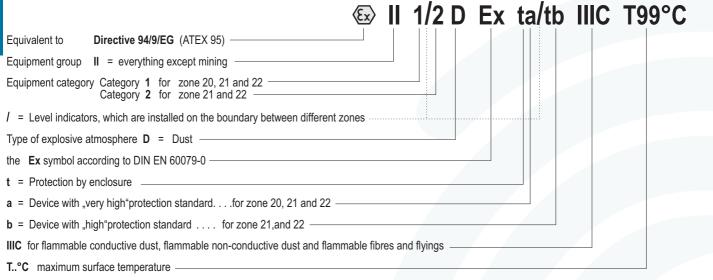
Manufacturer and address Industriepark RIO 103 D-74706 Osterburken Model designation Year of manufacturing LF20-B84B1AD1C1 S/N: 12345678 A.Nr. 123456789/1 Unique serial Details to supply voltage and number current consumption with 24 V DC € 90-253VAC, 50/60Hz, 150VA Number which the Relay SPDT, 250VAC, 6A Details for the signal contact order was handled Current 4-20mA Details for the analog signal output FW: 01.01.10-X3 Ambient temperature -20°C<Tamb<+60°C Type of protection (Operation temperature) II 1/2D Ex ta/tb IIIC T99°C Da/Db BVS 14 ATEX E 120 EC-type examination certificate number Marking CE sign with the number of the "Notified Body" which is involved in the production control phase.



Competence in explosion protection

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

Yo-Yo sensing level indicator for use at the boundary from zone 20 to zone 21.



The marking extensions Da/Db has been added by EXAM and are a repetition of the already above explained characters and signs: **D** for dust, **a** for very high "protection standard and so on.

#### Order code B1

Marking:

II 1 / 2 D



# **Equipment category appropriation by zones**

Yo-Yo sensing levelindicator for use at the boundary from zone 20 to zone 21.

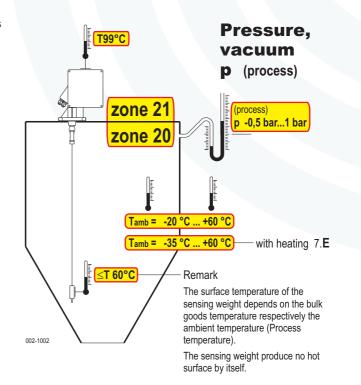
## Ambient temperatures Ta

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.







LF20





# 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 For the electrical connection you have to take notice of the local and statutory requirements and/or the VDE 0100.
- 1.4 Take notice of the specifications on the data plate.
- 1.5 A fuse (with max. 6A) has to be connected in series to the voltage supply.
- 1.6 Before installation of the measuring device into a potentially explosive atmosphere it has to be parametrised. (see parameterisation manual)
- 1.7 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.
- 1.8 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.
- 1.9 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.
- 1.10 The earth connection of the device has to be installed in such a way that mechanical damage will be excluded.
- 1.11 The device may put into operation when it is closed, only.
- 1.12 Switch off the power supply, before opening the device.
- 1.14 By taking appropriate safety measures you have to ensure that static discharges of the material cone are prevented.
- 1.15 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**