

Pendulum level indicator

Level limit switch for bulk goods

PF

Dust



Explosion protection information

and supplement to the operating instructions

Type plate details B1

Dust

<p>Manufacturer and address</p> <p>MOLLET Industriepark RIO 103 Füllstandtechnik GmbH D-74706 Osterburken Tel. +49 62 91 64 400</p>		<p>CE sign with the number of the "Notified Body" which is involved in the production control phase</p> <p>CE 0044</p>		<p>Connection diagram</p>	
<p>Model designation</p> <p>Typ PF-B1-KFALP1</p>		<p>CE marking</p> <p>Ex II 1/2D Ex ta/tb IIIC T 80 °C Da/Db</p>		<p>Details to loadability of the signal contact</p> <p>Contact 4 A 240 V~</p>	
<p>Vessel pressure (tested pressure)</p> <p>Δp -0,08 bar...+0,08 bar</p>		<p>Operating temperature</p> <p>-25 °C ≤ Ta ≤ +80 °C / -20 °C ≤ Ta ≤ +70 °C</p>		<p>Type of protection</p> <p>IP66</p>	
<p>Serial number</p> <p>S# 1234567890</p>		<p>Order number</p> <p>A.-Nr. 1234567890</p>		<p>Month and year of delivery</p> <p>03/21</p>	
<p>EU-type examination certificate number</p> <p>IBExU05ATEX1174</p>		<p>Dust marking</p>		<p>Ambient temperature (Operation temperature)</p>	

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

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

Ex II 1/2 D Ex ta/tb IIIC T80°C Da/Db

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

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

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 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.

Order code **B1**

Marking: II 1D / 2D

Dust **Ex**

Equipment category appropriation by zones

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

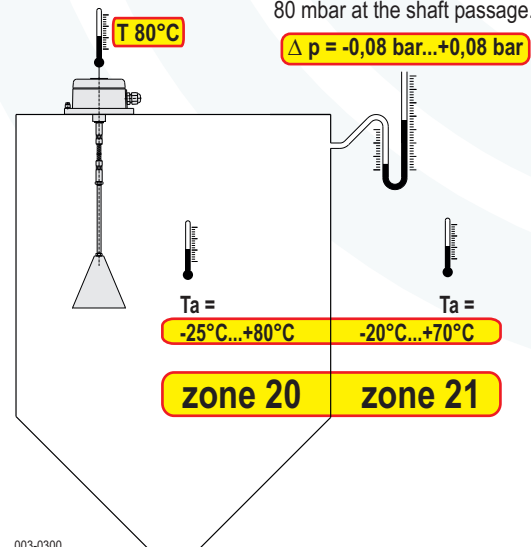
Ambient temperatures Ta

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 means the hottest point at the equipment.

The device can be installed in the walls of vessels with deviating atmospheric conditions with a difference in pressure up to Δp 80 mbar at the shaft passage.



MOLLET Füllstandtechnik GmbH Industriepark RIO 103 D-74706 Osterburken Tel. +49 62 91 64 400		CE 0044 C	NO NC
Typ PF B1 KFPALP1	Ex II 1/2D Ex ta/tb IIIC T 80 °C Da/Db	Contact 4 A 240 V~	
Δ p -0,08 bar...+0,08 bar	-25 °C ≤ Ta ≤ +80 °C / -20 °C ≤ Ta ≤ +70 °C		
S# 1234567890 A.-Nr. 1234567890 03/21	IBExU05ATEX1174	IP66	



Special conditions and instructions for safe application

1. The installation, maintenance, initial operation, removal and repair have to be controlled resp. checked by an “authorized person” for explosion protection.
2. For the electrical connection you have to take notice of the local and statutory requirements and/or the VDE 0100.
3. Take notice of the specifications on the data plate.
4. A fuse (with max. 4A) has to be connected in series to the voltage supply.
5. Protect the signal contact from voltage peaks when inductive loads are connected.
6. Using the device in ambient temperatures $> +60\text{ °C}$, the applied connection cables have to be made for temperatures of min. $+80\text{ °C}$.
7. 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.
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.
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. 5.0 Nm. **ATTENTION!** If it will be fastened too strong, the IP-protection can be affected.
10. The earth connection of the device has to be installed in such a way that mechanical damage will be excluded.
11. Using the level indicator in the silo wall under deviating atmospheric conditions, the maximum difference in pressure at the shaft passage must not exceed 80 mbar and the working temperature at the shaft passage has not to exceed $+80\text{ °C}$.
12. The device may put into operation with built-in cap-sealing and when it is closed, only.
13. Switch off the power supply, before opening the device. (touchdangerous voltage)
14. Tear-off danger! Don't pour on the measuring cone. In case of full indication the filling process has to be stopped immediately.
15. The cone has to be in stainless steel, in case of existing combustible dusts with a minimum ignition energy less than 3 mJ or with a minimum ignition temperature under $+300\text{ °C}$ (BAM assessment).
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.

