

► Read and follow these safety instructions first and take notice of the operating instructions.

Safety instructions

1. The installation, initial operation and maintenance may be done by a qualified expert with electrical know-how only.
2. Comply with the local and statutory rules and regulations and/or the VDE 0100.
3. Take notice of the temperature specifications at the data plate.
4. A fuse (with max. 4A) has to be connected in series to the voltage supply.
5. The device may put into operation if it is closed, only.
6. Switch off the power supply, before opening the device.
7. Attention safety device! Don't modify anything at the device!

Operating instructions

1. Description

1.1 Intended use

The electronic pressure transmitter monitors continuously the pressure in a silo or bin.

1.2 Function

Use of pressure variation in a silo or bin. The pressure on the membrane is detected and evaluated by the electronic.

1.3 Technical data

Manufacturer

MOLLET
Füllstandtechnik GmbH

Address

Industriepark RIO 103
74706 Osterburken

Name

Silo pressure transmitter

Type

MSD-420.

Bulk good temperature T_s

-25 °C ... +75 °C

Ambient temperature T_a

-20 °C ... +70 °C

Supply voltage V_{DC}

Supply

24 V DC (12 - 28 V DC)

Apparent ohmic resistance R_{app}

$\leq (U-11) / 0.02 (\Omega)$

Output signal I_{out}

Output

4 ... 20 mA

Electrical connection

2-wire

Measuring range/relative pressure

0 ... 100 mbar (0 ... 10000 Pa)

Linearity

< 0,5 % FS

Temperature error

0-area 0.02 % FS/K

measuring range 0.02 % FS/K

Overpressure safety

up to 0.5 bar

Relative humidity acceptable

0 ... 85 %

Cable entry

Cable gland M20x1.5

Type of protection

IP

IP65 acc. to DIN EN 60529

Weight

1,1 kg

Maintenance

none

Mounting position

vertical, $\pm 5^\circ$ inclination

1.4 Material

Housing

ABS (high impact plastic), grey

Flange

Aluminium or stainless steel

1.4571 / 316 Ti

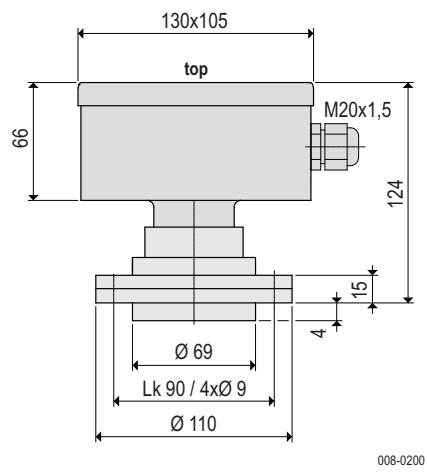
Membrane

Stainless steel 1.4301 / 304

Flange socket

Steel

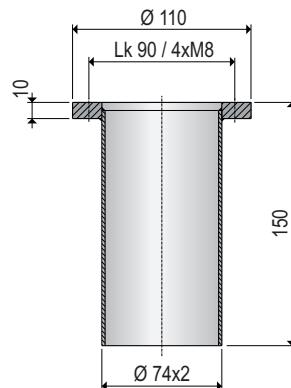
1.5 Dimensions



Flange gasket

1.6 Accessory (option)

Flange socket



2. Installation

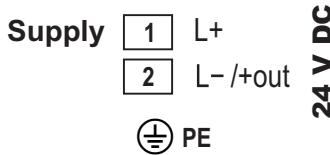
2.1 Preparation

- Check the membrane of visual transport damage.
- Read and follow the safety instructions and the operating instructions, before handling with the device !

2.2 Mounting in the vessel

- Weld the flange socket (as a option) vertical (flange is horizontal) in the silo top.
- Position the pressure transmitter (flange horizontal) with the gasket at the provided flange or flange socket and fix it with 4 washers and screws M8.

2.3 Electrical connection



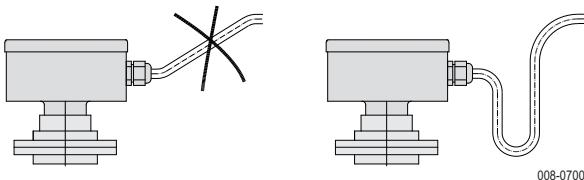
008-AP01

2.4 Cable gland

- After electrical connection, tighten the cable gland.
- Screw the cap nut, until the cable entry is closed tightly.

2.5 Cable run

Run the connection cable in a way that no traction can occur at the pressure transmitter.



3. Use

3.1 Commissioning

- Put the pressure transmitter into operation only, if the installation in the silo or vessel and the electrical connection have been done correctly.

3.2 Normal operation

- Use the pressure transmitter in its intended use only.
- Comply with the specifications on the data plate.
- Damaged devices have to put out of operation immediately.
- The pressure transmitter must not be modified. If there is any modification, the warranty of the manufacturer will be cancelled.

3.3 Inexpert handling

- Ignoring of the safety instructions and the operating instructions.
- Not intended use.
- Modification at the device.
- Violation against applicable law and standards.

4. Maintenance and servicing

4.1 Maintenance

- In case of intended use, the silo pressure transmitter needs no maintenance.

4.2 Servicing

- The servicing of the pressure transmitter may be carried out by the manufacturer only.

5. Storage

- Store the pressure transmitter dry and dust-free.
- Protect the membrane from damage.

6. Disposal

- The pressure transmitter can be recycled.
- The disposal applies to the valid environmental guidelines according to the location of the carrier and the local manufacturing conditions.

EU-Konformitätserklärung EU-Declaration of Conformity

Wir/We

MOLLET Füllstandtechnik GmbHIndustriepark RIO 103
D-74706 Osterburken
Tel. 06291 64400 Fax 06291 9846erklären in alleiniger Verantwortung, dass das Produkt:
declare under our sole responsibility, that the product:**Silo-Druckmessgerät / Silo pressure measuring device**Typen/Types **MSD-4.., MSD-A...4..**den folgenden Europäischen Richtlinien entspricht:
conforms with the following European directives:**Richtlinie 2014/30/EU** (EMV-Richtlinie) / **Richtlinie 2014/35/EU** (Niederspannungsrichtlinie)
Directive 2014/30/EU (Directive EMC) / **Directive 2014/35/EU** (Low voltage directive)Angewandte harmonisierte Normen oder normative Dokumente:
Applied harmonized standards or normative documents:**DIN EN 61010-1:2020****DIN EN 60529:2014****DIN EN 61326-1:2013**Und die Geräte mit - Kennzeichnung entsprechen zusätzlich der folgenden Europäischen Richtlinie:
And the devices with - marking conform additional with the following European directive:**ATEX-Richtlinie****ATEX directive****2014/34/EU**Je nach Ausführungsvariante angewandte harmonisierte Normen oder normative Dokumente:
Depending on the design applied harmonized standards or normative documents:**DIN EN IEC 60079-0:2019****DIN EN 60079-31:2014**EU-Baumusterprüfbescheinigungsnummer:
EU-Type Examination Certificate:**IBExU21ATEX1015X**Ausgestellt von:
Issued by:

IBExU Institut für Sicherheitstechnik GmbH, 09599 Freiberg (0637)

Qualitätssicherung:
Quality assurance:

TÜV NORD CERT GmbH, 30159 Hannover (0044)

Osterburken, den 05.06.2022


Wolfgang Hageleit
Geschäftsführer / Managing directorDiese Erklärung darf nur unverändert weiterverbreitet werden.
This declaration is only allowed to hand out in unchanged form.