

► 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.

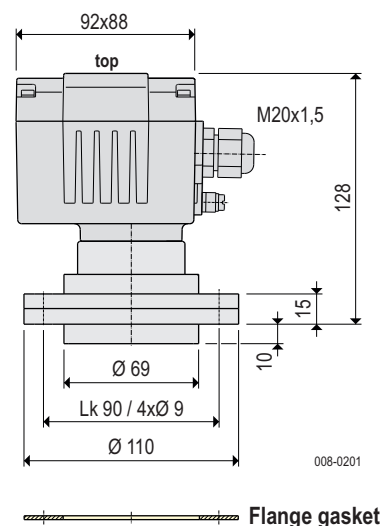
#### 1.3 Technical data

<b>Manufacturer</b>	<b>MOLLET</b>
	<b>Füllstandtechnik GmbH</b>
<b>Address</b>	Industriepark RIO 103 74706 Osterburken
<b>Name</b>	Silo pressure transmitter
<b>Type</b>	<b>MSD-A...420</b>
<b>Bulk goods temperature <math>T_s</math></b>	-25 °C ... +75 °C
<b>Ambient temperature <math>T_a</math></b>	-20 °C ... +70 °C
<b>Supply voltage</b>	24 V DC (12 - 28 V DC)
<b>Apparent ohmic resistance</b>	$\leq (U-11) / 0.02 (\Omega)$
<b>Output signal</b>	4 ... 20 mA
<b>Electrical connection</b>	2-wire
<b>Measuring range/relative pressure</b>	0... 100 mbar / (0 ... 10000 Pa)
<b>Linearity</b>	< 0.5 % FS
<b>Temperature error</b>	0-area 0.02 % FS/K
<b>measuring range</b>	0.02 % FS/K
<b>Overpressure safety</b>	up to 0.5 bar
<b>Relative humidity</b>	acceptable 0 ... 85 %
<b>Cable entry</b>	Cable gland M20x1.5
<b>Type of protection</b>	<b>IP66</b> acc. to DIN EN 60529
<b>Weight</b>	1.2-2.9 kg depending on design
<b>Maintenance</b>	none
<b>Mounting position</b>	vertical, $\pm 5^\circ$ inclination

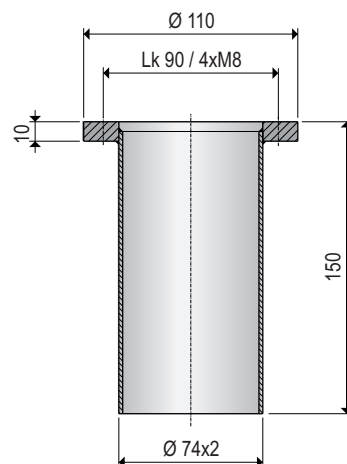
#### 1.4 Material

<b>Housing</b>	aluminium or stainless steel 1.4408 / 316 LN
<b>Flange</b>	aluminium or stainless steel 1.4571 / 316 Ti
<b>Membrane</b>	stainless steel 1.4571 / 316 Ti
<b>Flange nozzle</b>	steel

#### 1.5 Dimensions



#### 1.6 Accessory (option) Flange socket



## 2. Installation

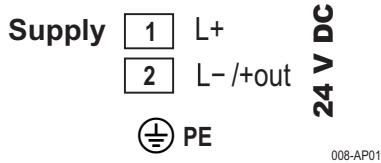
### 2.1 Preparation

- 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 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

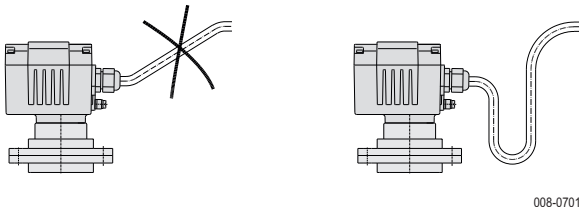


### 2.4 Cable gland

- 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 detector.



## 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 must be 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 GmbH**

Industriepark RIO 103  
D-74706 Osterburken  
Tel. 06291 64400 Fax 06291 9846

erklären hiermit, dass die Geräte:

declare that the devices:

**Silo-Druckmelder** der Typenreihen:

**Silo pressure detector** of type:

**MSD- ...**

**MSD- ...**

auf die sich diese Erklärung bezieht, den folgenden Normen oder normativen Dokumenten entsprechen:

to which this declaration relates is in accordance with the following standards or other normative documents:

**Richtlinie 2014/35/EU** (NSR-Richtlinie)  
**Richtlinie 2014/30/EU** (EMV-Richtlinie)

**Directive 2014/35/EU** (Directive LVD)  
**Directive 2014/30/EU** (Directive EMC)

und

and

**DIN EN 61010-1:2011, DIN EN 60529:2014  
DIN EN 61326-1:2013**

**DIN EN 61010-1:2011, DIN EN 60529:2014  
DIN EN 61326-1:2013**

Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt gemäß den Bestimmungen der Richtlinien und durch Einhaltung der Normen soweit es im Rahmen des Lieferumfanges möglich ist.

The Essential Health and Safety Requirements are assured by compliance with the directive and observance of the normative documents, as far as the scope of delivery allows.

Osterburken, 07. Januar 2020

Osterburken, January 7th 2020



Wolfgang Hageleit

Diese Erklärung darf nur unverändert weiterverbreitet werden.

This declaration is only allowed to hand out in unchanged form.