Pressure device
protects silos during pneumatic filling

MSD

Appliance information

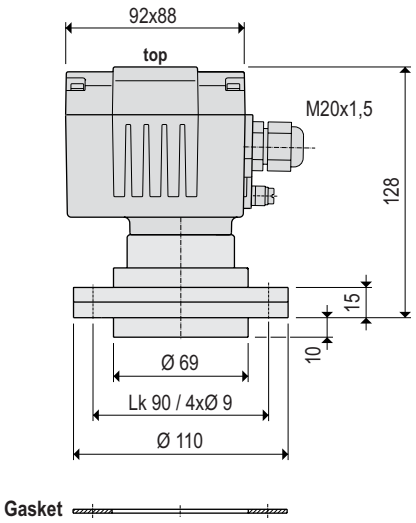
Index

MOLLET silo protection

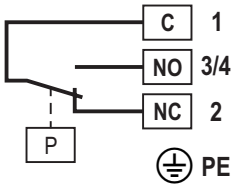
Appliance information

for potentially dust explosive atmospheres

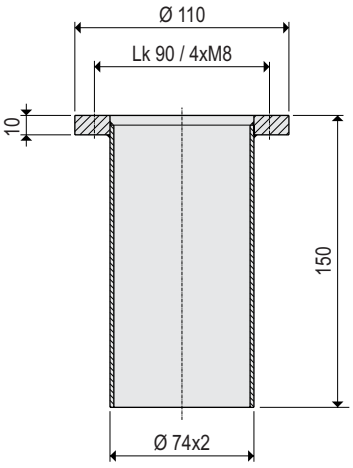
Dimensions



Electrical connection



Accessories Flange tube



Use

The silo pressure detector is used as limit switch to control the pressure in silos and vessels, being filled by a pneumatic conveying system. If the pressure is reaching the switching point, the pressure detector will give a signal. Consequently it protects silos and vessels against to high pressure during the pneumatic filling process.

Mode of operation

Using the increasing pressure in the silo or vessel. Increases the pressure to the membrane, the signal switch registers the pressure difference and evaluates it.

Technical data

Materials	Housing **A1**	Aluminium
	Housing **A2**	Stainless steel 1.4408 / 316
	Flange **F1A**	Aluminium
	Flange **F1I**	Stainless steel 1.4571 / 316 Ti
	Membrane	Stainless steel 1.4301 / 304
	Protruding nozzle	Steel
Bulk goods temperature	*Ts*	-25 °C … +80 °C
Ambient temperature	*Ta*	-20 °C … +70 °C
Signal-contact	*Contact*	change-over contact, potentialfree
Capacity of the contact		4 A / 250 V AC
Switching voltage		24 V...250 V AC or 12 V...125 V DC
Switching point	*SP*	40 mbar = 0.04 bar = 400 mm WS
Overpressure safety		up to 0.5 bar
Cable entry		Gland M20x1.5
Type of protection	*IP*	**IP66** acc. to DIN EN 60529
Weight	**A1F1A**	1.2 kg
	A1F1I	2.1 kg
	A2F1I	2.9 kg
Maintenance		none
Installation		vertical

Subject to modification

ATEX option

B1
or
B2

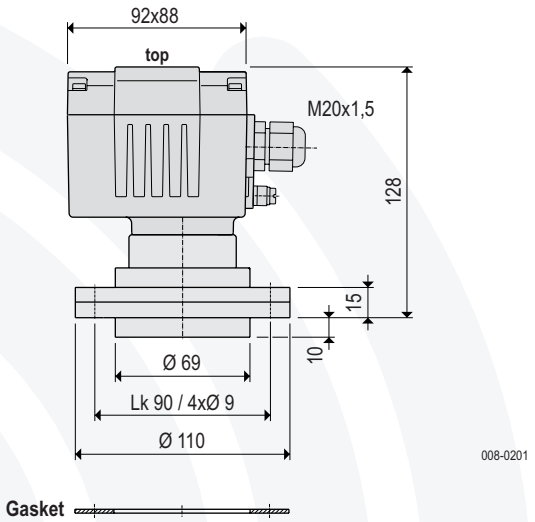
Dust

II 1/2D Ex ta/tb IIIC T80 °C
or
II 1D Ex ta IIIC T80 °C

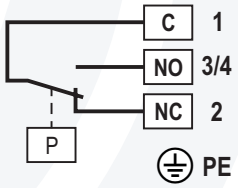
Appliance information

for potentially gas and dust explosive atmospheres

Dimensions

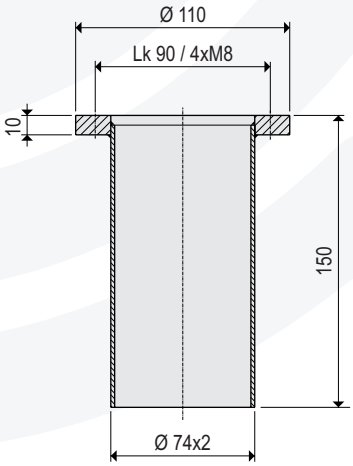


Electrical connection



Accessories

Flange tube



Use

The silo pressure detector is used as limit switch to control the pressure in silos and vessels, being filled by a pneumatic conveying system. If the pressure is reaching the switching point, the pressure detector will give a signal. Consequently it protects silos and vessels against to high pressure during the pneumatic filling process.

Mode of operation

Using the increasing pressure in the silo or vessel. Increases the pressure to the membrane, the signal switch registers the pressure difference and evaluates it.

Technical data

Materials	Housing **A1**	Aluminium
	Housing **A2**	Stainless steel 1.4408 / 316
	Flange **F1A**	Aluminium
	Flange **F1I**	Stainless steel 1.4571 / 316 Ti
	Membrane	Stainless steel 1.4301 / 304
	Protruding nozzle	Steel
Bulk goods temperature	*Ts*	-25 °C … +80 °C
Ambient temperature	*Ta*	-20 °C … +70 °C
Signal-contact	*Contact*	change-over contact, potentialfree
Maximum switching voltage		$U_i \leq 30$ V
Maximum breaking capacity		$I_i \leq 0.1$ A **intrinsically safe**
Switching point	*SP*	40 mbar = 0.04 bar = 400 mm WS
Overpressure safety		up to 0.5 bar
Cable entry		Gland M20x1.5
Type of protection	*IP*	**IP66** acc. to DIN EN 60529
Weight	**A1F1A**	1.2 kg
	A1F1I	2.1 kg
	A2F1I	2.9 kg
Maintenance		none
Installation		vertical

Subject to modification

ATEX option

B5
or
B22

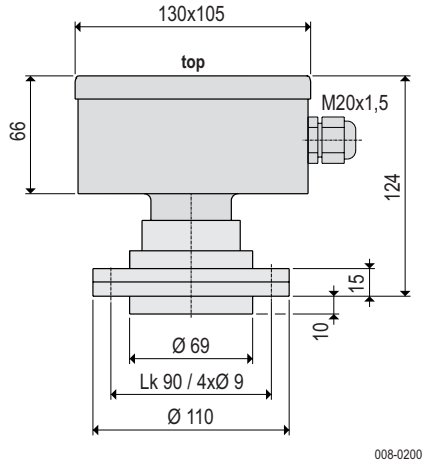
Gas+ Dust

II 1/2D Ex ta/tb IIIC T80 °C
II 2G Ex ib IIC T6
or
II 1D Ex ta IIIC T80 °C
II 1G Ex ia IIC T6

Appliance information

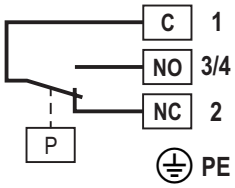
Dimensions

Plastic-housing



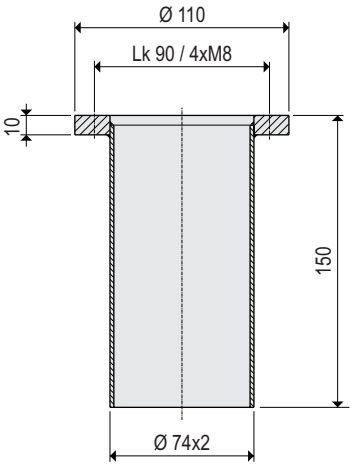
Flanschdichtring

Electrical connection



Accessories

Flange tube



Use

The silo pressure detector is used as limit switch to control the pressure in silos and vessels, being filled by a pneumatic conveying system. If the pressure is reaching the switching point, the pressure detector will give a signal. Consequently it protects silos and vessels against to high pressure during the pneumatic filling process.

Mode of operation

Using the increasing pressure in the silo or vessel. Increases the pressure to the membrane, the signal switch registers the pressure difference and evaluates it.

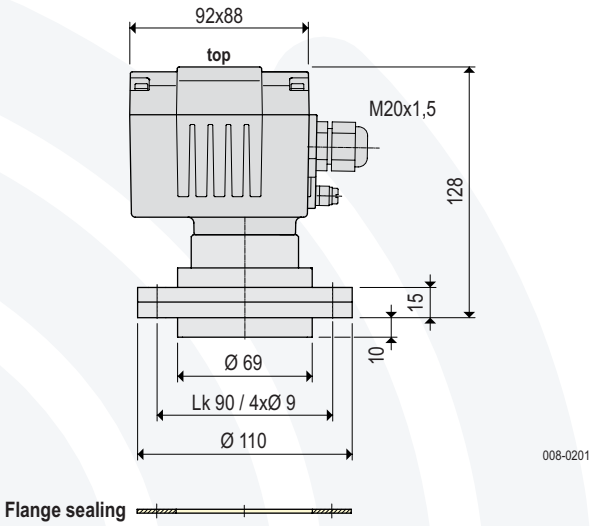
Technical data

Materials	Housing	ABS, grey (high impact plastic)
	Flange	Aluminium
	Membrane	Stainless steel 1.4301 / 304
	Protruding nozzle	Steel
Bulk goods temperature	*Ts*	-25 °C … +80 °C
Ambient temperature	*Ta*	-20 °C … +70 °C
Signal-contact	*Contact*	change-over contact, potentialfree
Capacity of the contact		4 A / 250 V AC
Switching voltage		24 V...250 V AC or 12 V...125 V DC
Switching point	*SP*	40 mbar = 0.04 bar = 400 mm WS
Overpressure safety		up to 0.5 bar
Cable entry		Gland M20x1.5
Type of protection	*IP*	**IP65** acc. to DIN EN 60529
Weight		1.1 kg
Maintenance		none
Installation		vertical

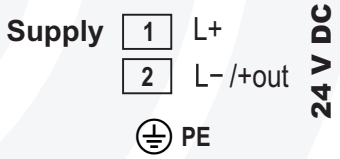
Subject to modification

Appliance information

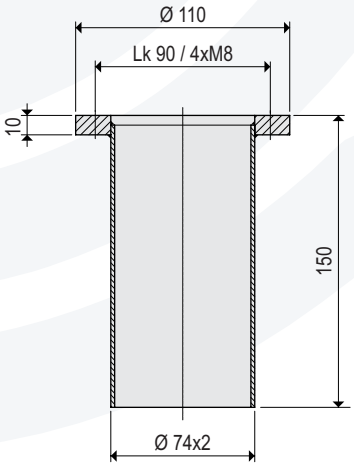
Dimensions



Electrical connection



Accessories Flange tube



Use

The electronic pressure measurement device monitors continuously the increasing pressure in a silo or bin (including the occurrent last torrent) during the pneumatic filling process.
The mechanical pressure is transmitted in the standard industry signal 4 ... 20 mA by this pressure measurement device.

Mode of operation

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

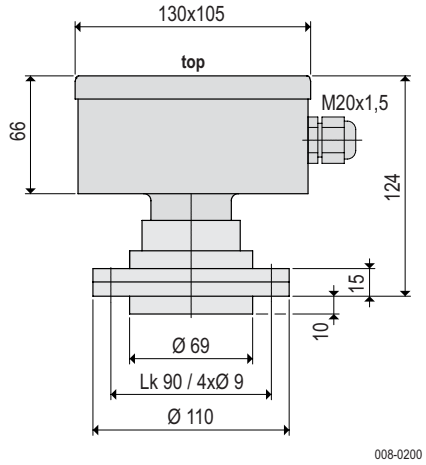
Technical data

Material	Housing **A1**	aluminium
	Housing **A2**	stainless steel 1.4408 / 316 LN
	Flange **F1A**	aluminium
	Flange **F1I**	stainless steel 1.4571 / 316 Ti
	Membrane	stainless steel 1.4571 / 316 Ti
	Flange nozzle	steel
Bulk goods temperature	Ts	-25 °C … +75 °C
Ambient temperature	Ta	-20 °C … +70 °C
Supply voltage	Supply	24 V DC (12 - 28 V DC)
Apparent ohmic resistance		≤ (U-11) / 0.02 (Ω)
Output signal	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
Temperature error	**measuring range**	0.02 % FS/K
Overpressure safety		up to 0.5 bar
Relative humidity	**acceptable**	0 ... 85 %
Cable entry		threaded connection M20x1.5
Type of protection	IP	**IP66** according DIN EN 60529
Weight	**A1F1A**	1.2 kg
	A1F1I	2.1 kg
	A2F1I	2.9 kg
Maintenance		none
Mounting position		vertical

Appliance information

Dimensions

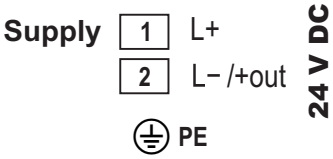
Plastic-housing



008-0200

Flange sealing

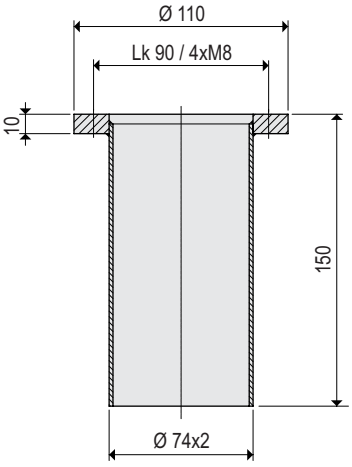
Electrical connection



008-AP01

Accessories

Flange tube



Use

The electronic pressure measurement device monitors continuously the increasing pressure in a silo or bin (including the occurrent last torrent) during the pneumatic filling process.
The mechanical pressure is transmitted in the standard industry signal 4 ... 20 mA by this pressure measurement device.

Mode of operation

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

Technical data

Material	Housing	ABS, grey
	Flange	aluminium
	Membrane	stainless steel 1.4571 / 316 Ti
	Flange nozzle	steel
Bulk goods temperature	Ts	-25 °C … +75 °C
Ambient temperature	Ta	-20 °C … +70 °C
Supply voltage	Supply	24 V DC (12 - 28 V DC)
Apparent ohmic resistance		≤ (U-11) / 0.02 (Ω)
Output signal	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
Temperature error	measuring range	0.02 % FS/K
Overpressure safety		up to 0.5 bar
Relative humidity	acceptable	0 ... 85 %
Cable entry		hreaded connection M20x1.5
Type of protection	IP	**IP66** according DIN EN 60529
Weight		1.1 kg
Maintenance		none
Mounting position		vertical

Subject to modification