FISCHER MESS- UND REGELTECHNIK

ME67 Pressure transformers for wastewater / process measuring techniques

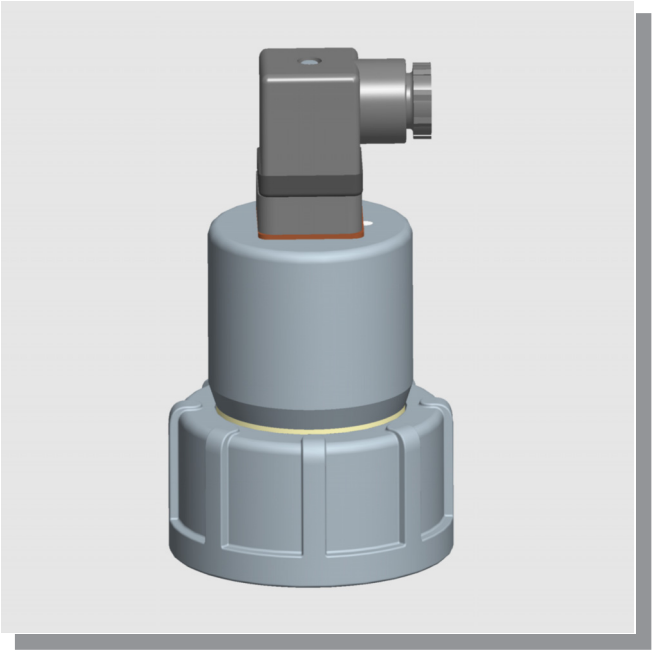
Application

Pressure transmitter with ceramic measuring cell.

Measuring ranges from -25…25 mbar up to 0…1000 mbar are possible.

The pressure transmitter in this series is suitable for diverse measuring tasks in the following areas:

- Process engineering
- Process technology
- Environmental engineering
- Renewable energy (biogas, etc.)
- Wastewater engineering



Setup and action

Ceramic measuring cell:

The pressure acts directly on the ceramic diaphragm which deforms as a result. A pressure-dependent capacity change is measured at the electrodes of the ceramic substrate and the diaphragm.

The electronics accommodated in the pressure transmitter housing now covert this capacity change into standard electrical signals.

Main features

- Suitable for aggressive media (99.9% Al_2O_3 ceramic)
- Robust design
- High accuracy
- High vibration resistance
- Low hysteresis
- Parameterisable

Parameter assignment

The device is delivered as defined in the order code.

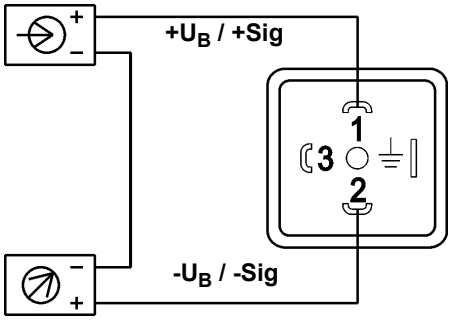
However, parameters can also be assigned to the pressure transmitter on site using the connection cables to optimally adjust the device to the process conditions. For this, you require the EU13 programming adapter, available as an accessory, and a PC.

Specifications

Measuring range	-25…25 mbar	-50…50 mbar	-100…100 mbar	0…40 mbar	0…60 mbar	0…100 mbar	0…160mbar	0…250 mbar	0…400 mbar	0…600mbar	0…1000mbar
Smallest adjustable measuring span	10 mbar	20 mbar	40 mbar	10 mbar	12 mbar	20 mbar	32 mbar	40 mbar	80 mbar	120 mbar	200 mbar
Pressure cut-off [bar]	4	4	4	4	4	4	4	4	4	4	4
Piezoresistive measuring cell											

General:	
Accuracy	±0.25% of the FS measuring range (incl. hysteresis & reproducibility)
all. ambient temperature	0…60 °C
all. continuous medium temp.	0…60 °C
Pressure connection	Plastic bolted flange joint DM32-G2"
Electrical connection	Standard plug to EN 175 301-803A
Degree of protection	IP65 to EN 60529
Materials of parts in contact with media	PVDF, ceramic (99.9% Al_2O_3), gasket FFKM
Housing material	PVDF, PP, PA
Electrical data:	
Nominal voltage (U_B)	24V DC
all. supply voltage	12…30 V DC
Output signal	4…20 mA
Type of electrical connection	Two wire
Load impedance	(U_B - 12 V) / 0.02 A
Limiting current	approx. 26 mA
Temperature drift Zero point / measuring range	Temperature error band over the whole temperature range 0…60°C ±0.5%
Parameter assignment	
Characteristic curve inversion	rising / falling
Attenuation	0…200 s
Adjustable signal limits	Upper current limit 3.5…22.5 mA Lower current limit 3.5…22.5 mA Error signal 3.5…22.5 mA

Connection diagram

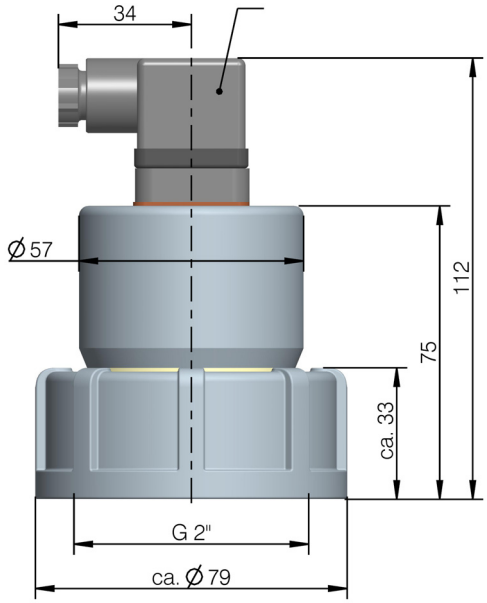


Legend:

Power supply

Consumer

Diomensioned drawings (all dimenions in mm unless stated otherwise)



Order code

Pressure transformers for wastewater / process measuring techniques

ME67			G	H	5	B	H	9

Measuring range

-25	…	+25	mbar	5	4
-50	…	+50	mbar	5	5
-100	…	+100	mbar	5	6
0	…	40	mbar	5	7
0	…	60	mbar	5	8
0	…	100	mbar	5	9
0	…	160	mbar	6	0
0	…	250	mbar	8	2
0	…	400	mbar	8	3
0	…	600	mbar	C	1
0	…	1000	mbar	0	2

Measuring accuracy

Relative pressure conformity error 0.25 ..... G

Pressure connection

Plastic adapter DN32-G2“ ..... H 5

Electrical output signal

4…20 mA 2 conductor ..... B

Electrical connection

Plug-in connection 4-pole, standard plug to EN 175 301-803-A ..... H

Operating voltage

24 VDC (12…30 VDC) 9

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