FISCHER MESS- UND REGELTECHNIK

ME61 || Pressure Transmitter

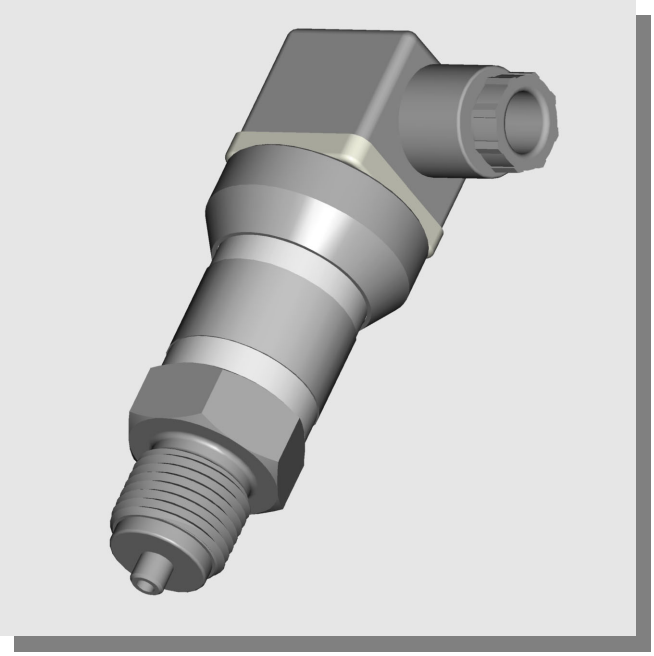
Application

Pressure transmitter for pressure and partial vacuum, with directly measuring ceramic diaphragm.

Measuring ranges from 0..1 bar up to 0..400 bar.

This series is suitable for multiple applications in

- process engineering
- process technology
- environmental technology



Main Features

- robust design
- high accuracy
- high overload protection
- high vibration-resistance
- minimum hysteresis

Construction and Functioning

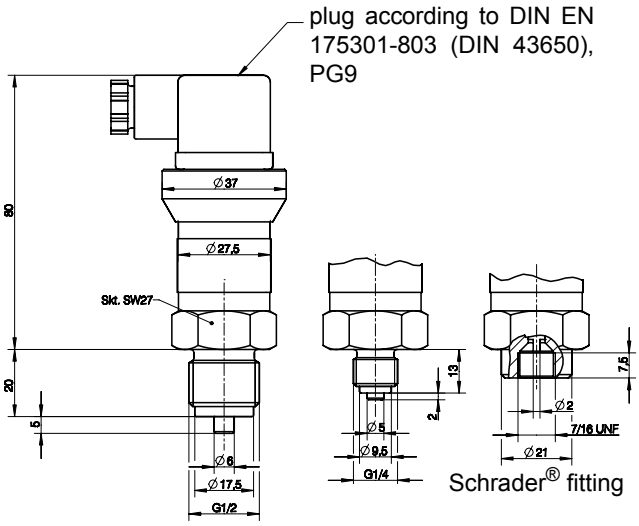
The measured pressure is transmitted directly to a ceramic diaphragm deforming under the admission of pressure.

The mechanical deformation is converted to an electric signal by means of a DMS-bridge located at the rear side.

An electronic system is integrated in the set-up of the appliance, converting the DMS-signals to electric standard signals:

0..20 mA
4..20 mA
0..10 V DC.

Dimensions

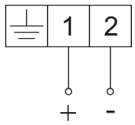


Specifications

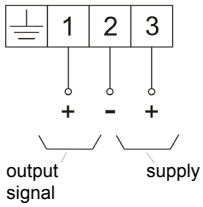
General														
Measuring ranges in bar	0-1	0-1.6	0-2.5	0-4	0-6	0-10	0-16	0-25	0-40	0-60	0-100	0-160	0-250	0-400
Max. pressure in bar	2	3.2	5	8	12	20	32	50	80	120	150	240	375	600
Linearity	< 1% of full scale													
Hysteresis	< 0.5% of full scale													
Max. ambient temperature	0° bis 60°C													
Max. medium temperature	0° bis 85°C													
Pressure connection	male thread G1/2 B according to DIN EN 837													
Electrical connection	plug according to DIN EN 175301-803 (formerly DIN 43 650)													
Enclosure protection	IP 65 according to DIN EN 60 529													
Material: contacted by media	Chrome-nickel-steel 1.4305, ceramic: Al_2O_3, gasket: Viton®													
Material: body	Chrome-nickel-steel 1.4305													
Electrical														
Nominal power supply	24 V DC			24 V DC			24 V DC							
Allowable power supply	15...36 V DC 15...30 V AC			15...36 V DC -			15...36 V DC 15...30 V AC							
Output signal	0-20 mA			4-20 mA			0-10 V DC							
Electrical connection	3-wire			2-wire			3-wire							
Max. load	(U_B-15 V) / 0.02 A			(U_B-15 V) / 0.02 A			≥5 kΩ above 15 VDC ≥2 kΩ above 20 VDC							
Current / voltage limiting	approx. 26 mA			approx. 26 mA			approx. 10.5 V DC							
Temperature drift, offset	0.4 % FS/10 K			0.4 % FS/10 K			0.4 % FS/10 K							
Temperature drift, scale	0.05 % FS/10 K			0.05 % FS/10 K			0.05 % FS/10 K							

Connection Scheme

2-wire



3-wire (standard)



The transmitter is protected against short circuit and reverse connection.

Ordering Code

Pressure Transmitter **ME61** [ ][ ][M][ ][ ][ ][H][ ][0][V][0][0]

Measure range

0 . . . 1.6 bar	>	0 3
0 . . . 2.5 bar	>	0 4
0 . . . 4 bar	>	0 5
0 . . . 6 bar	>	0 6
0 . . . 10 bar	>	0 7
0 . . . 16 bar	>	0 8
0 . . . 25 bar	>	0 9
0 . . . 40 bar	>	1 0
0 . . . 60 bar	>	1 1
0 . . . 100 bar	>	1 2
0 . . . 160 bar	>	1 3
0 . . . 250 bar	>	1 4
0 . . . 400 bar	>	1 5
-1 . . . 0 bar	>	3 1
-1 . . . 0.6 bar	>	3 2
-1 . . . 1.5 bar	>	3 3
-1 . . . 3 bar	>	3 4
-1 . . . 5 bar	>	3 5
-1 . . . 9 bar	>	3 6
-1 . . . 15 bar	>	3 7
0 . . . -1 bar	>	3 9

Precision

linearity error, gauge pressure 1.0	>	M

Pressure connection

male threaded connection G 1/4 B stainless steel	>	8 5
male threaded connection G 1/2 B stainless steel	>	8 7
Schrader®-threading	>	S 1
G 1 B with nearly deadroom free pressure port	>	A 3
G 3/4 B with nearly deadroom free pressure port	>	A 8

Electrical output signal

0 - 20 mA 3-wire (STANDARD)	>	A
4 - 20 mA 2-wire	>	B
0 - 10 VDC 3-wire (STANDARD)	>	C
0 - 20 mA 3-wire (special bond out)	>	1
0 - 10 VDC 3-wire (special bond out)	>	2

Electrical connection

removeable plug (4-pol.), according to DIN EN 175301-803 (formerly DIN 43 650)	>	H

Power supply

24 V DC ± 10%	>	9
24 V DC/AC (only 3-wire types)	>	L

Gasket (in touch with media)

FKM (Viton®) **Standard**	>	V

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