

ME11 || Pressure Transmitter

Application

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

Measuring ranges from -1..0 bar up to 0..60 bar.

This series is suitable for multiple applications in

- process engineering
- process technology
- environmental technology



Principles of Operation

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 4..20 mA and 0..10 VDC.

Main Features

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

Specifications

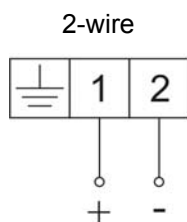
Measuring range (bar)	-1-0	-1-0,6	-1-1,5	-1-3	-1-5	-1-9	-1-15	-1-24						
Overpr. safety (bar)	3	5	8	12	20	32	50	80						

Measuring range (bar)	0-1,6	0-2,5	0-4	0-6	0-10	0-16	0-25	0-40	0-60					
Overpr. safety (bar)	5	8	12	20	32	50	80	120	200					

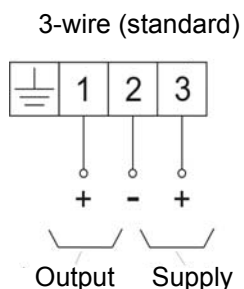
		General	
Linearity	< 1% FS		
Hysteresis	< 0.5% FS		
Max. ambient temperature	0° to 60°C		
Max. medium temperature	0° to 85°C		
Pressure connection	male thread G1/2 B according to DIN EN 837		
Electrical connection	plug according to DIN EN 175301-803		
Enclosure protection	IP 65 according to DIN EN 60 529		
Material: media contact	Chrome-nickel-steel 1.4305, ceramic: Al ₂ O ₃ , gasket: Viton®		
Material: body	Chrome-nickel-steel 1.4305		
		Electrical	
Nominal power supply	24 V DC	24 V DC/AC	
Allowable power supply	6...30 V DC	15...30 V DC	
	-	15...30 V AC	
Output signal	4-20 mA	0-10 V DC	
Electrical connection	2-wire	3-wire	
Max. load	(U _B -6 V) / 0.02 A	≥5 kΩ above 15 VDC	
		≥2 kΩ above 20 VDC	
Current / voltage limiting	approx. 26 mA	approx. 10.5 V DC	
Temperature drift, offset	0.07 % FS/K	0.07 % FS/K	
Temperature drift, scale	0.05 % FS/K	0.05 % FS/K	

The transmitter is protected against short circuit and reverse connection.

Connection Scheme

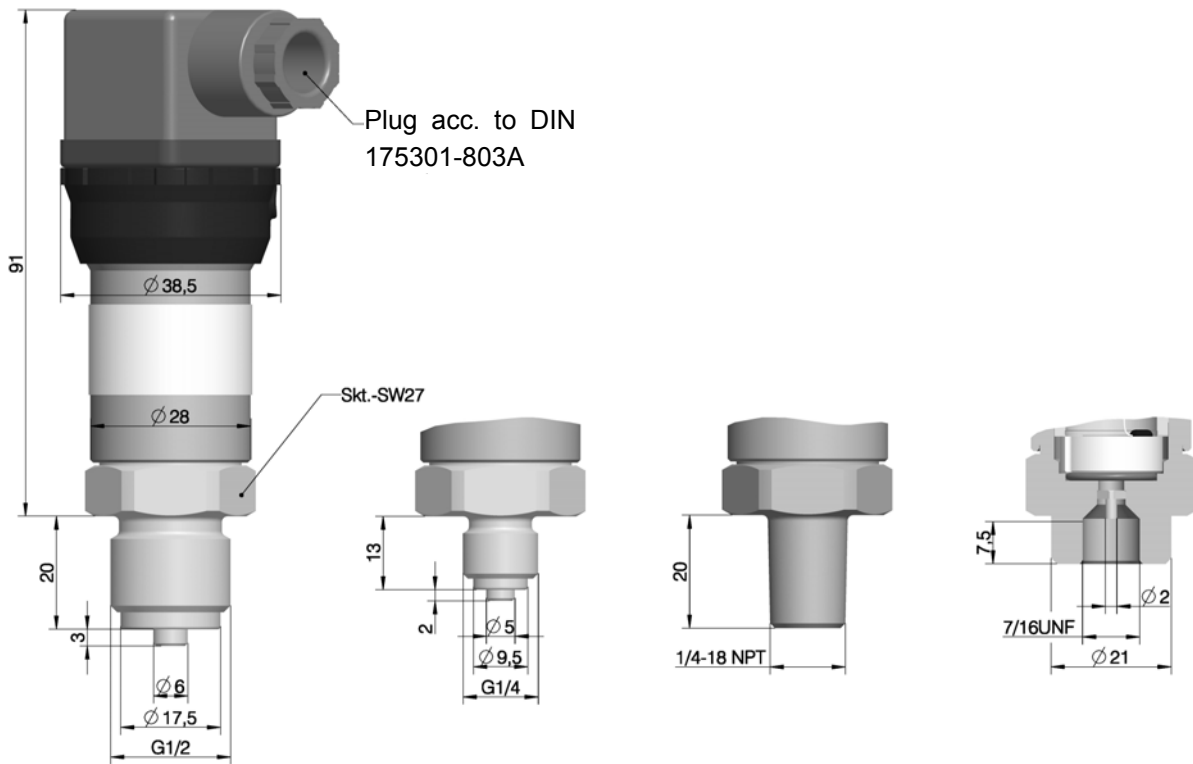


Ordering Code
B



Ordering Code
C

Dimensions (all units in mm unless stated otherwise)



Ordering Code

Pressure Transmitter

ME11

		M				H					0
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Measuring 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
-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
-1 ... 24 bar	> 3	8
0 ... 30 PSI	> H	5
0 ... 60 PSI	> H	6
0 ... 100 PSI	> H	7
0 ... 160 PSI	> H	9
0 ... 250 PSI	> Q	1
0 ... 500 PSI	> P	9
-30 inch HG vac...+ 15 PSI	> S	2
-30 inch HG vac...+100 PSI	> S	5

Accuracy

Curve deviation, gauge pressure 1.0%> M

Pressure Connection

Connection shank G 1/4"B; material: 1.4305	> 8	5
Connection shank G 1/2"B; material: 1.4305	> 8	7
Connection shank 1/4-18 NPT EXT; material: 1.4305	> 8	8
Connection for Schrader® fitting; material: 1.4305	> S	1

Electrical Output Signal

4 - 20 mA two conductor	> B
0 -10 VDC three conductor (STANDARD)	> C

Electrical Connection

4-pole connector according to DIN EN 175 301-803-A> H

Operating voltage

24 VDC (two conductor transmitter only)	> 9
24 VDC (15-30 VDC) (not two-conductor transmitter)	> A
24 VAC/DC (not two-conductor transmitter)	> L

Housing

IP 65 to DIN EN 60 529	> 0
IP 65 to DIN EN 60 529; encapsulated version	> V

Seal with medium contact

FKM (fluor rubber, Viton®)	> V
CR (chloroprene rubber, Neoprene®)	> C
EPDM (ethylene propylene diene monomer)	> E
H-NBR (hydrogenated nitrile-butadiene rubber) suitable to -25 °C	> H

Measuring system / version

Standard	> 0
Suitable for measuring O2 (with FPM seal only)	> 3