

## 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

### Main Features

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



### Principles of Operation

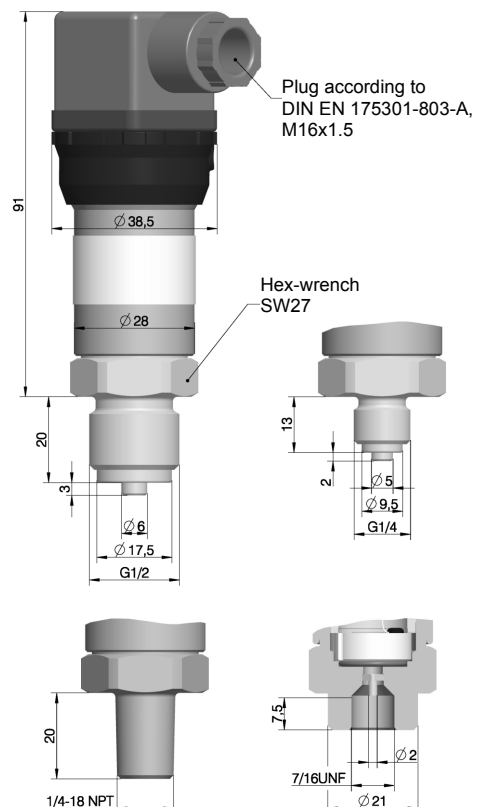
The measured pressure is transmitted directly to a ceramic diaphragm deforming under the admission of pressure.

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  
0..10 V DC.

### Dimensions (all units in mm unless otherwise stated)



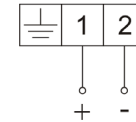
## Specifications

Measuring ranges (bar)	-1 - 0	-1 - 0.6	-1 - 1.5	-1 - 3	-1 - 5	-1 - 9	-1 - 15	-1 - 24	0 - 1.6	0 - 2.5	0 - 4	0 - 6	0 - 10	0 - 16	0 - 25	0 - 40	0 - 60
Max. pressure (bar)	3	5	8	12	20	32	50	80	5	8	12	20	32	50	80	120	200

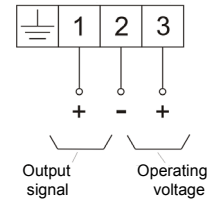
<b>General</b>		
Linearity	< 1% FS	
Hysteresis	< 0.5% FS	
perm. ambient temperature	0° to 60°C	
perm. medium temperature	0° to 85°C	
Pressure connection	See Ordering Code	
Electrical connection	Plug acc. to DIN EN 175301-803-A	
Protection class	IP 65 acc. to DIN EN 60 529	
Materials (media contact)	Chrome-nickel-steel 1.4305, ceramics: Al <sub>2</sub> O <sub>3</sub> , gasket: see Ordering Code	
Materials (housing)	Chrome-nickel-steel 1.4305	
<b>Electrical Data</b>		
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
Load	(U <sub>B</sub> -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

### Connection Scheme

2-wire



3-wire (standard)



The transmitter is protected against short circuit and reverse connection.

## Ordering Code

### Pressure Transmitter

**ME11**     M     H   0     0

#### 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	↑

#### Accuracy

Linearity error, gauge pressure 1.0 ..... > M

#### Pressure Connection

Male threaded stem G 1/4 B, 1.4305	>	8	5
Male threaded stem G 1/2 B, 1.4305	>	8	7
Male threaded stem 1/4 -18 NPT EXT, 1.4305	>	8	8
Schrader®-fitting	>	S	1

#### Electrical Output Signal

4 - 20 mA 2-wire	>	B
0 - 10 VDC 3-wire (STANDARD)	>	C

#### Electrical Connection

Removeable plug, 4-pin, DIN EN 175301-803-A ..... > H

#### Power Supply

24 V DC (only for output signal 4-20mA, 2-wire)	>	9
24 V DC/AC (NOT for output signal 4-20mA, 2-wire)	>	L

#### Gasket (in touch with media)

FKM (Viton®) Standard	>	V
CR (neoprene, chloroprene)	>	C
EPDM (ethylene, propylene-dien, rubber)	>	E
H-NBR (applicable up to 25°C)	>	H

#### Measuring system / Model

Standard	>	0
Measuring system applicable for O <sub>2</sub> -measurement (only for measuring ranges -1..60 bar with Viton®)	>	3
Casted model	>	V
Silicone-free model	>	A