

Pressure meter / transmitters

Product features

- Measuring of the pressure of gases, vapours and liquids
- Measuring of relative / absolute pressure, vacuum
- Medium temperature: up to 90 °C
- 37 measurement ranges between 0 and 25 bar
- 4-20 mA two-wire transmitter
- G 1/2"A / M20 × 1.5 / G 3/4"A process connections
- LCD display
- IP 65 protection



The **DT700 Pressure meters / transmitters** provide a 4-20 mA current proportional to the pressure connected to their input, and they present the measured pressure value on an LCD display.

The transmitters are available in 37 different measurement ranges, for measuring relative / absolute pressure and vacuum. The temperature of the measured medium may vary between -20 °C and 90 °C (depending on the construction of the device), while the ambient temperature may range from -20 °C to 60 °C. The material being in contact with the medium is KO36 steel, and the sealing may be Teflon (PTFE), Buna EP (EPDM), Viton (FKM), or Isolast 9503 (FFKM), depending on the medium and the temperature of the medium.

The transmitters are available with various threaded connections: G1/2"A / M20 x 1.5 manometer, G3/4"A front membrane construction.

Safety data:

The connection terminals of the supply voltages are isolated from each other, the isolation is in compliance with the standard EN 61010-1, taking into consideration the following:

Pollution level: 2
 Measurement category: II

Input parameters:

Input signal: pressure
 Ranges: see the table below
 Overdrive capacity: 150%

RANGES*							
[mbar] rel.	[bar] rel.			[mbar] abs.	[bar] abs.		
0-100	0-1.00	0-25	-1-0	-1-16	0-400	0-1.00	0-25
0-160	0-1.60	0-40	-1-1.00	-1-25	0-600	0-1.60	
0-250	0-2.50	0-60	-1-1.60			0-2.50	
0-400	0-4.00	0-100	-1-2.50			0-4.00	
0-600	0-6.00	0-160	-1-4.00			0-6.00	
	0-10	0-250	-1-6.00			0-10	
	0-16		-1-10			0-16	

*Special ranges that differ from the above are also available upon request.

Output parameters:

Output signal: DC current, proportional to the measured pressure
 Range: 4-20 mA
 Accuracy: 0.25% (typically)
 Temperature-coefficient: 200 ppm / °C (0-75 °C between), 300 ppm / °C (-20-140 °C between)
 Supply-voltage effect: no
 Response time: 0.5 ms (10-90%)

Power supply:

Loop power supply voltage: 12-30 VDC

Ambient conditions:

Operating temperature range: see the table below

Type	Ambient temperature	Medium temperature
DT700	-20 °C <Ta< 60 °C	-20 °C <Tp< 70 °C
DT700 H	-20 °C <Ta< 60 °C	-20 °C <Tp< 90 °C

Relative humidity: 90% (max., non-condensing)
 Place of installation: outdoor

Electromagnetic compatibility (EMC):

accordance with the standard EN 61326

Immunity: industrial area
 Noise emission: Group 1, Class B

Data in general:

Housing: aluminium alloy box, KO36 steel connection
 Process connection: G1/2" A, M20 x 1.5 (manometer-connection),
 G3/4" A (front-membrane connection)
 Electrical connection: 3-pole connector DIN43650/IP 65
 Cross-section of the connected cable: 2 x 0.25 mm² (shielded cable)
 Dimensions: DT700: 127 x 113 x 58 mm (width x height x depth)
 DT700 H: 127 x 163 x 58 mm (width x height x depth)
 Weight: DT700 0.55 kg
 DT700 H: 0.6 kg
 Protection: IP 65
 Materials being in contact with the medium under measurement: KO36 steel / Teflon (PTFE) / Buna EP (EPDM) / Viton (FKM) / Isolast 9503 (FFKM)

Detailed information see in operating instructions. The Manufacturer maintains the right to change the technical data!