

## Differential Pressure Meters / Transmitters

## Product features

- Measuring of the pressure-differences of gases
- Medium temperature: up to 60 °C
- 8 measurement ranges between 0 and 5000 Pa
- 4-20 mA two-wire transmitter
- LCD display
- IP 65 protection



The **DT700 DP / DT701 DP Differential Pressure Transmitters** are suitable for measurement differential pressure of dry non corrosive gases.

The instruments provide 4-20 mA current signal, proportional to the pressure difference connected to their pressure ports. The DT700 DP presents the measured pressure value on an LCD display too, while the instrument DT701 DP is a version without display.

Eight different measurement ranges are available from 0-50 Pa up to 0-5000 Pa, but user defined measuring ranges are also available. The temperature of the measured medium may vary between -20°C and +60°C.

The signal to be measured can be connected to the transmitter via pneumatic tubes have 2 × Ø 4 mm inner diameter. The die-cast aluminium housing has IP 65 protection.

**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*	
[Pa]	
0-50	0-500
0-100	0-1000
0-250	0-2000
0-300	0-5000

\*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  
 Temperature-coefficient: 500 ppm / °C  
 Supply-voltage effect: no  
 Response time: 0.5 ms (10-90%)

**Display:**

Display: 3.5 digits, + or - sign, decimal point  
 Display unit: LCD, 12.7 mm with character height

**Power supply:**

Loop power supply voltage: 12-30 VDC

**Ambient conditions:**

Operating temperature range: see the table below

Type	Ambient temperature	Medium temperature
DT700 DP, DT701 DP	-20 °C < Ta < 60 °C	-20 °C < Tp < 50 °C

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

**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  
 Process connection: 2 × Ø 4 mm pneumatic tube  
 Electrical connection: 3-pole connector DIN43650/IP 65  
 Cross-section of the connected cable: 2 × 0,25 mm<sup>2</sup> (shielded cable)  
 Dimensions: 127 × 85 × 58 mm (width × height × depth)  
 Weight: DT700 DP: 0.45 kg  
 DT701 DP: 0.4 kg  
 Protection: IP 65

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