

Intrinsically safe pressure transmitters

Product features

- Measuring of the pressure of gases, vapours and liquids
- Measuring of relative / absolute pressure, vacuum
- Medium temperature: up to 140 °C
- 32 measurement ranges between 0 and 25 bar
- Intrinsically safe
- 4-20 mA two-wire transmitter
- G 1/2"A / M20×1,5 / G 3/4"A process connections
- IP 65 protection



The **DT7200 ...Intrinsically safe pressure transmitters** provide a 4-20 mA current signal in proportional to the pressure connected to their input. The transmitters are intrinsically safe devices, and they can be operated in a potentially explosive environment falling into the category Zone 0 and Zone 1.

The transmitters are available with 32 different measurement ranges, for the measuring of relative / absolute pressure and vacuum. Depending on the construction of the device, the temperature of the medium under measurement may vary between -25 °C and 140 °C, while the ambient temperature may be between -25 °C and 70 °C.

The material being in contact with the medium is KO36 steel; the sealing applied depends on the medium and the temperature of the medium, and it can be: Teflon (PTFE), Buna EP (EPDM), Viton (FKM), or Isolast 9503 (FFKM).

The transmitters are available with various threaded connections: G1/2"A / M20x1,5 manometer connection, and G 3/4" A front-membrane construction.

Intrinsic safety data:

Certification: BKI 04 ATEX 145 X

Protection marking:  II 1/2 G EEx ia IIC T4/T3 (Class T3 in the case of more than 130 °C temperatures of the medium)

Safety data pertaining to intrinsic safety:

Ui [V]	Ii [mA]	Pi [W]	Ci [nF]	Li [uH]
28	100	0,7	37	506

Input parameters:

Input signal: pressure

Ranges: see the table below

RANGES*							
[mbar] rel.	[bar] rel.				[mbar] absz.	[bar] absz.	
0-100	0-1,00	0-10	-1-0	-1-6,00	0-400	0-1,00	0-10
0-160	0-1,60	0-16	-1-1,00	-1-10	0-600	0-1,60	0-16
0-250	0-2,50	0-25	-1-1,60	-1-16		0-2,50	0-25
0-400	0-4,00		-1-2,50	-1-25		0-4,00	
0-600	0-6,00		-1-4,00			0-6,00	

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

Overdrive capacity: 150 %

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 (-20-90 °C between)

Supply-voltage effect: no

Response time: 0,5 ms (10-90 %)

Power supply:

Loop power supply voltage: 12-28 VDC

Ambient conditions:

Operating temperature range: see the table below

Type	Ambient temperature	Medium temperature
DT7200 L	-25 °C < Ta < 60 °C	-25 °C < Tp < 70 °C
DT7200 M	-25 °C < Ta < 70 °C	-25 °C < Tp < 90 °C
DT7200 H	-25 °C < Ta < 70 °C	-25 °C < Tp < 140 °C

Relative humidity: 90 % (max., non-condensing)

Place of installation: potentially explosive area

Elektromagnetic compatibility (EMC):

accordance with the standard EN 61326:2000

Immunity: -A- criterion

Noise emission: -A- class

Data in general:

Housing: KO36 steel housing

Process connection: G1/2"A, M20x1,5 (manometer-connection),
G3/4"A (front-membrane connection)

Elektrical connection: 3-pole connector DIN43650/IP 65

Cross-section of the connected cable: 2 x 0,25 mm² (shielded cable)

Dimensions: DT7200 L: 36 x 154 mm DT7200 M, DT7200 H: 36 x 203 mm
(diameter x length)

Weight: DT7200 L: 0,3 kg, DT7200 M, DT7200 H: 0,35 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!