

With Integrated Amplifier and Integrated Temperature Measurement

DTAI Series Pressure Transmitter



The DTAI first of all offers the user the comfort of operating a DAI in combination with a temperature measurement. One process connection is enough to measure both values.

These model offers mA and V output signals for further processing. The popular and most commonly used 2-wire and 4...20 mA configurations provide unequalled interference in critical environments.

- Liquid filled measuring system
- Maximum reliability through new membrane technology
- Standard G-coating to counteract adhesive materials
- Combined pressure and temperature measurement
- Robust design with G-Armor flexible components
- Applications with process temperatures of up to 500°C (932 °F) possible
- Pressure ranges from 0...17 and 0...2.000 bar (0-240 to 29,000 psi) available
- Interference resistant signals over long distances
- Stable output signals

Technical specifications

Pressure range	0...17 to 0...2000 bar
Accuracy incl. linearity, hysteresis, and reproducibility in % to full scale	0,15 %, 0,25 % or 0,5 %
Reproducibility in % to full scale	± 0,1 %
Membrane coating	G-Coating
Resolution	16 Bit
Max. pressure overload without influence on operating value	2 x range up to 1000 bar (14,500 psi) 1,5 x pressure range over 1000 bar (14,500 psi)
Bridge resistance	3500 Ohm Wheatstone Bridge
Supply voltage	15...32 V DC
Output signal	V oder mA
Transmission medium	NTX™ as standard
Process connection	1/2"20 UNF or M18 x 1,5
Calibration point	80 %
Insulation resistance	>1000 MOhm at 50 V
Max. temperature at diaphragm	300 °C NTX (572 °F) 400 °C HG (750 °F) 500 °C NAK (932 °F)
Max. temperature at terminal head during operation	- 40... +85 °C (40 °F...185 °F)
Zero point deviation against diaphragm temperature changes at the diaphragm % / ° C (% / 1,8 ° F)	± 0,02 bar / °C (± 0,29 psi / °C) *
Zero point deviation against temperature changes at terminal head in % / ° C (% / 1,8 ° F)	± 0,003 %
Ingress protection housing	IP 65 /
Ingress protection connector	IP 55
Max torque	1/2"20 UNF 30 Nm (22 lbf ft) M18 x 1,5 50 Nm (32 lbf ft)

* With standard diaphragm, transmission medium NTX™ and 1/2"20 UNF. Modifications can differ.

Product variations (examples)



Special shaft length



PT100 measuring element