



TTKN

Pressure transmitter for liquids and gases

Pressure transmitter for measurement of liquids and gases.

- ✓ Measuring ranges from 0...100 kPa (1 bar) up to 0...4000 kPa (40 bar)
- ✓ High accuracy, 0.3 % of the measuring range
- ✓ Extremely low temperature dependency (0.03 % / °C)
- ✓ Output signal 0...10V DC or 4...20 mA
- ✓ Durable to most pressure media
- ✓ Excellent long-term stability
- ✓ Ceramic technology

Function

The pressure transmitter consists of a piezoresistive ceramic measuring cell with a membrane, installed in a stainless steel housing. The transmitter is available with current or voltage output.

Technical data

Output signal	0...10 V DC (three-wire) or 4...20 mA (two-wire)
Pressure connection	G 1/4" (outside thread)
Dynamic response time	< 2 ms, 1 ms typically
Tolerable overload	≤ 4 bar 3.0 x full scale, > 4 bar 2.5 x full scale
Media temperature	-15...+125 °C
Ambient temperature	-30...+85 °C
Storage temperature	-50...+100 °C
Accuracy, characteristic line	±0.3 % full scale *
Accuracy, resolution	0.1 % full scale *
Accuracy, thermal characteristic	Max. ±0.2 % full scale / 10 K *
Accuracy, long-term stability according to IEC EN 60770-1	Max. ±0.25 % full scale *
Packing	FPM (-15...+120°C)
Weight	134 g
Cable length	1.5 m
Protection class	IP67

* Test conditions: 25°C, 45 % RH, 24 V DC supply voltage

Models

Article	Working range	Output signal	Supply voltage	Power consumption	Load
TTKN1	0...100 kPa (1 bar)	0...10 V DC	12...33 V DC / 24 V AC ±15 %	< 7 mA	> 10000 Ω
TTKN1-420	0...100 kPa (1 bar)	4...20 mA	7...33 V DC	< 23 mA	((Supply voltage - 7 V) / 0.02 A) Ω
TTKN2.5	0...250 kPa (2.5 bar)	0...10 V DC	12...33 V DC / 24 V AC ±15 %	< 7 mA	> 10000 Ω
TTKN2.5-420	0...250 kPa (2.5 bar)	4...20 mA	7...33 V DC	< 23 mA	((Supply voltage - 7 V) / 0.02 A) Ω
TTKN6	0...600 kPa (6 bar)	0...10 V DC	12...33 V DC / 24 V AC ±15 %	< 7 mA	> 10000 Ω
TTKN6-420	0...600 kPa (6 bar)	4...20 mA	7...33 V DC	< 23 mA	((Supply voltage - 7 V) / 0.02 A) Ω
TTKN10	0...1000 kPa (10 bar)	0...10 V DC	12...33 V DC / 24 V AC ±15 %	< 7 mA	> 10000 Ω
TTKN10-420	0...1000 kPa (10 bar)	4...20 mA	7...33 V DC	< 23 mA	((Supply voltage - 7 V) / 0.02 A) Ω
TTKN16	0...1600 kPa (16 bar)	0...10 V DC	12...33 V DC / 24 V AC ±15 %	< 7 mA	> 10000 Ω
TTKN16-420	0...1600 kPa (16 bar)	4...20 mA	7...33 V DC	< 23 mA	((Supply voltage - 7 V) / 0.02 A) Ω
TTKN25	0...2500 kPa (25 bar)	0...10 V DC	12...33 V DC / 24 V AC ±15 %	< 7 mA	> 10000 Ω
TTKN25-420	0...2500 kPa (25 bar)	4...20 mA	7...33 V DC	< 23 mA	((Supply voltage - 7 V) / 0.02 A) Ω
TTKN40	0...4000 kPa (40 bar)	0...10 V DC	12...33 V DC / 24 V AC ±15 %	< 7 mA	> 10000 Ω
TTKN40-420	0...4000 kPa (40 bar)	4...20 mA	7...33 V DC	< 23 mA	((Supply voltage - 7 V) / 0.02 A) Ω

Accessories

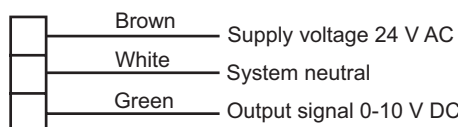
Article	Description
105074	Mounting spacer which lowers the temperature at higher media temperatures than the sensor can handle.
ADAPTER	Adapter 1/4" to 1/2". For mounting immersion sensors in 1/2".

CE

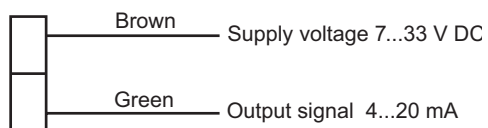
EMC emissions & immunity standards: This product conforms to the requirements of the EMC Directive 2014/30/EU through product standard EN 61326-2-3:2013.

RoHS: This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.

Wiring



0...10 V models



4...20 mA models

Dimensions

Measurements in mm unless otherwise specified.

