



Pressure measurement



Type:
Precont TN10

digital pressure switch and pressure transmitter with ceramic membrane - newest generation with great display, analog- and 4 switching outputs

Description

The devices of the series Precont® TN with integrated digital evaluation electronic are compact sensors for measuring and monitoring of pressure levels.

The excellent characteristics like highest strength against pressure and pressure blows, high resistance against chemicals and corrosion, very good insensitiveness against temperature shocks and EM interference, highest accuracy and long term stability and also low influence of temperature makes it possible to use the sensor in all pressureless containers for liquid medium like water, waste water, solvents, oil, sludge, grease, cleaning agents, etc.

Application

- Pressure measurement from vacuum to high pressure
- Volume measurement and calculation in nonlinear container shapes
- Flow measurement through stored formulas for Venturi, V-weir, trapezoidal rectangular flume
- Level and Pressure Data Logger
- Limit transmitter with 4 adjustable switching outputs

Your benefits

- Simple commissioning thanks to *intuitive user guidance*
- Large display - values of great distance readable
- Volume Linear display in all container shapes possible
- Flow measurement with pre-stored formulas
- *Data logger function* for recording of measured values
- Closed smooth surface - no dirt holes
- Excellent display of measured values
- *Plain text operator guidance*



Specials



Ordercode Seite |04|

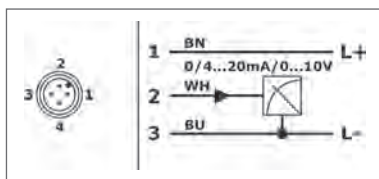




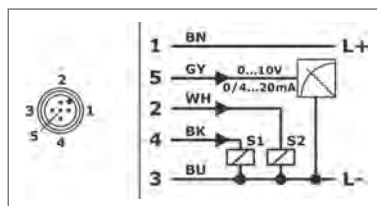
Technical data

Technical data	
power supply:	9...30V DC at output signal 0(4)...20mA 14...30V DC at output signal 0...10V
supply current:	≤ 130 mA; at Vs 9V Bluetooth ON; PNP-switching outputs in neutral ≤ 50 mA; at Vs 30V Bluetooth OFF; PNP-switching outputs in neutral
Analog output	
work space:	(0)4...20mA / 0...10V, adjustable
resolution:	≤ 1 μA
reaction time:	≤ 15 ms
PNP-switching output	
amount:	0/2/4 depending on device version
function:	PNP-switching on +Vs
output current:	≤ 250 mA current limited, short circuit protected
reaction time:	≤ 25 ms
Bluetooth Interface	
version:	Bluetooth 2.1 +EDR
class:	2
distance:	≤ 10m
Electrical connection	
version:	connector M12 4/5/8 pole, depending on the instrument version
Measurement accuracy	
model:	≤ ±0,05% / 0,1% / 0,2%
long term drift:	≤ ±0,1% FS not cumulative
temperature deviation:	≤ ±0,15% FS / 10 K (Zero / Span)
Materials	
membrane: (medium contact)	ceramics AL2O3 99,9%
process connection: (medium contact)	steel 1.4404/316L resp. 1.4571/316Ti
connection housing:	CrNi-steel
user interface:	PC/PES
gaskets: (medium contact)	FPM – fluoroelastomer (Viton®) EPDM – Ethylene-propylene-diene monomer CR – chloroprene rubber (Neopren®) FFKM – perfluorelastomere (Kalrez®)
environmental conditions	
ambient temperature:	-20°C...+50°C
process temperatures:	- 40°C...+125°C
process pressure ranges:	- 1 bar ...60 bar
turn down:	30:1
protection:	IP68 EN/IEC 60529

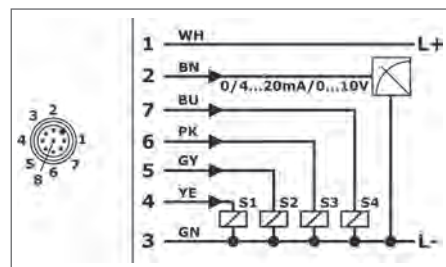
Connection



Signal 0/4...20 mA / 0...10 V
wire colors standard connection cable M12:
BN = brown, WH = white, BU = blue

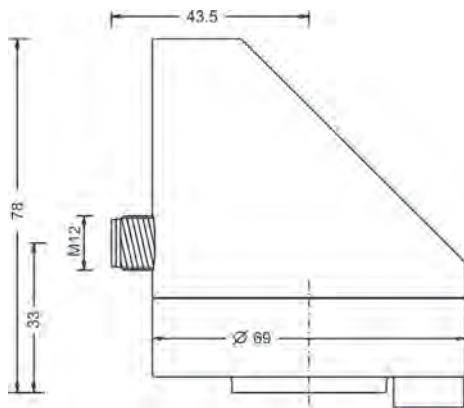


Signal 0/4...20 mA / 0...10 V
2x PNP switching output
wire colors standard connection cable M12:
BN = brown, WH = white, BU = blue,
BK = black, GY = grey

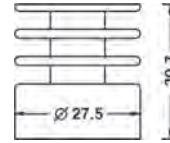


Signal 0/4...20 mA / 0...10 V
4x PNP switching output
wire colors standard connection cable M12:
WH = white, BN = brown, GN = green, YE = yellow,
GY = grey, PK = pink, BU = blue, RD = red

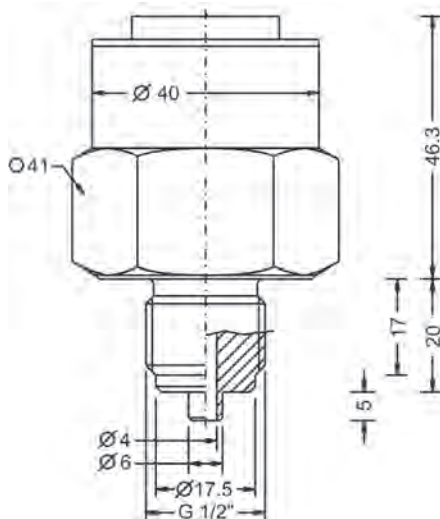
connection housing



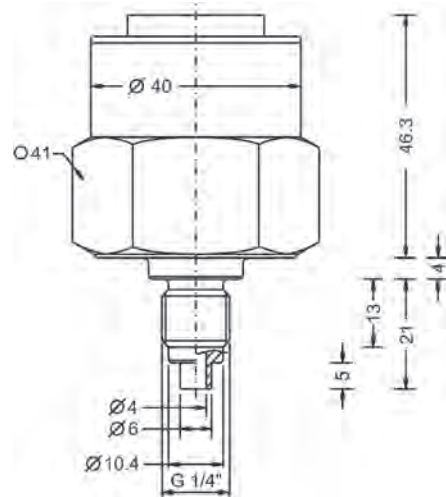
temperature decoupler
for extended temperature range
- 40 °C up to +125 °C



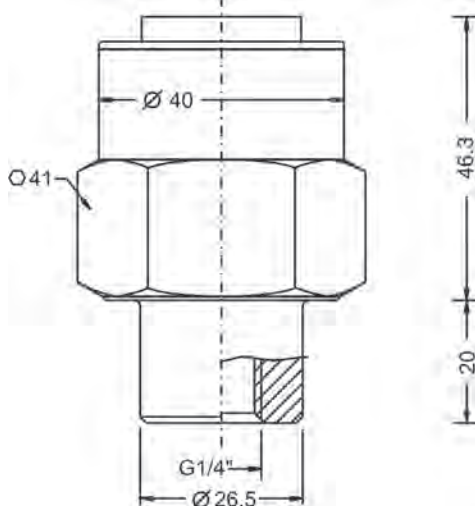
type 0
G 1/2" ISO 228-1 DIN 837-3



type 1
G 1/4" ISO 228-1 DIN 837-3



type 4
G 1/4" ISO 228-1 internal thread



type 6
G 1/2" ISO 228-1 inner bore 11,4mm

