



# PU-01N

## Pressure Transmitter for OEM Applications



## Features

/ Compact design

/ Integrated amplifier

/ Affordable price to performance ratio

/ Broad-based media compatibility

## Description:

The PU-01N series of pressure measuring transmitters belongs to the top-class products among pressure sensors which are ideally suited for OEM applications considering their attractive price levels. In PU-01N, the close-lying pressure is measured, depending on the pressure range, by means of a piezo-resistive or a thin-film sensor element. The pressure-dependent resistance signal output by this sensor element is converted into a power or voltage signal through an amplifier. Alternatively, a power signal of 4...20 mA in 2-wire method or a voltage signal of 0...10 VDC in 3-wire method can be delivered from the transmitter. Other types of output signals are available on request.

## Application:

The PU-01N series of pressure measuring transmitters is always used for measuring pressure in fluid or gaseous media, if the process does not demand absolute accuracy but a fair repeatability is sufficient for it. All wetted parts are made of stainless steel in order to cover a wide range of media. In case of particularly difficult media, we recommend mounting the PU-01N along side a diaphragm seal (most used types on request). The high overload capacity of the devices, their resistance from corrosion, mechanical vibrations, mechanical shocks and temperature and their durable stability are highly valued for use in the entire industry.

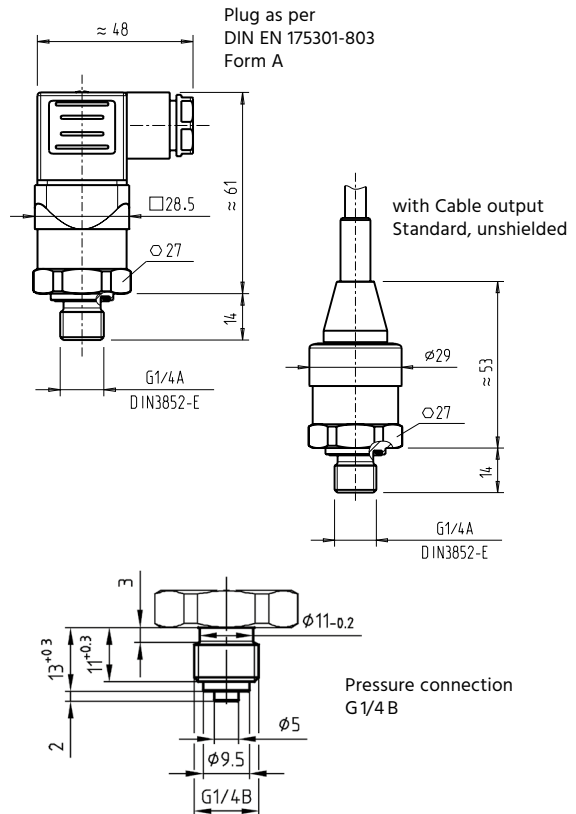


# Technical Specifications:

- Process connection /** G1/4" B male
- Wetted Parts /** stainless steel 316L  
(from 10 bar rel. st. steel 316 and 13-8PH)
- max. Pressure /** overrange limit [bar]: 2-times  
operating range end value
- max. Media temp. /** -30...+100°C with seal at process connection  
NBR<sup>1</sup> (standard)
- max. Ambient temp. /** -30...+100°C
- max. Storage temp. /** -40...+100°C
- Compensated range /** 0...80°C
- Housing /** stainless steel 316L
- Weight /** approx. 0.08 kg
- Non linearity /**  $\leq 0.5\%$  of span according to IEC 61298-2
- Non repeatability /**  $\leq 0.2\%$  of span
- Set time /**  $\leq 4$  ms within 10...90% of span
- Temperature factor /**  $\leq \pm 1\%$  typ.,  $\leq \pm 2.5\%$  max. in range 0...+80°C

<sup>1</sup> Other seals on request  
(FPM/FKM, EPDM, copper, stainless steel)

# Dimensions in mm:

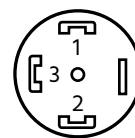


# Electrical Specifications:

- Output /** 4...20 mA (2-wire)  
current output, load  $\leq (U_B - 8V) / 0,02A$
- DC 0...10V (3-wire)  
voltage output, load,  
max. Output signal / 1 mA
- Power supply /** 8...30 VDC for (2-wire)  
14...30 VDC for (3-wire)
- max. Current consumption /** current: 25 mA, voltage: 8 mA
- CE-Conformity /** 2004/108/EWG interference emission  
and interference resistance to EN  
61326 interference emission limit class  
B 97/23/EG pressure gauge code
- Protection class /** IP65 EN 60529/IEC 529
- Electrical protection /** protection against polarity reversal,  
excess voltage and short-circuiting. No  
polarity reversal protection for ratio-  
metric output.

# Wiring Diagram:

## Angled plug DIN 175301-803 A /



	2-wire	3-wire
<b>U<sub>B</sub> (Supply +)</b>	1	1
<b>0V (Supply -)</b>	2	2
<b>S+ Analogue output</b>	-	3

## Cable output, unshielded /



	2-wire	3-wire
<b>U<sub>B</sub> (Supply +)</b>	brown	brown
<b>0V (Supply -)</b>	blue	blue
<b>S+ Analogue output</b>	-	black



# Ordering Codes:

<b>Order number</b>	<b>PU-01N.</b>	<b>2.</b>	<b>2.</b>	<b>1.</b>	<b>G</b>
<b>PU-01N Pressure Transmitter</b>					
<b>Output signal /</b> 1 = 4...20 mA, 2-wire 2 = 0...10 VDC, 3-wire					
<b>Calibration /</b> 1 = relative pressure 2 = absolute pressure (only up to operating range H)					
<b>Electrical Connection /</b> 1 = plug connection 2 = with permanent fixed connecting cable (2m)					
<b>Operating range /</b> A = 0...1 bar B = 0...1.6 bar C = 0...2.5 bar D = 0...4 bar E = 0...6 bar F = 0...10 bar G = 0...16 bar H = 0...25 bar I = 0...40 bar J = 0...60 bar K = 0...100 bar L = 0...160 bar M = 0...250 bar N = 0...400 bar O = 0...600 bar					

