

# PUM01

## Pressure Transmitter for OEM Applications

- **Compact construction**
- **Integrated amplifier**
- **Economical operation**
- **Compatible with a wide range of media**



### Description:

Model series PUM01 pressure transmitters are among the finest pressure sensors available. Their economical price makes them particularly suitable for OEM applications. Depending on the pressure range, the PUM01 measures the applied pressure by means of a piezo-resistive cell or a thin-film cell. The combination of these two technologies covers all DIN measuring ranges from 0...1000 bar. The pressure-dependent resistance signal transmitted by these cells is converted by an amplifier to a current signal or voltage signal. The transmitter can be configured to output either a current signal of 4 to 20 mA in two-wire circuitry or a voltage signal of 0 to 10 V in three-wire circuitry. Other output signals are available upon request.

### Fields of Application:

PUM01 pressure transmitters are used to measure the pressure of liquid or gaseous media when the process does not need to meet especially high standards of accuracy but must be able to provide good reproducibility. All transmitter parts coming in contact with the pressurized media are made of stainless steel. This construction allows it to be used with a wide variety of media. For media that are particularly difficult to handle (caustic, corrosive), we recommend installing the PUM01 with a diaphragm seal (commercially available models available upon request). PUM01 devices can handle high overloads, are unaffected by corrosion, mechanical vibration, mechanical shock and temperature and have long-term stability. These combined characteristics allow them to be reliably used in numerous industrial applications.

## Designs:

### PUM01 pressure transmitter

**Output signal:** possible output signals are: Current signal of 4 to 20 mA in two-wire circuitry or voltage signal of 0 to 10 V in three-wire circuitry

**Calibration:** If desired, these devices can be calibrated up to a measuring range of from 0 to 10 bar at absolute pressure.

**Electrical connection:** standard DIN EN 175301-803 plug connector, model A with cable box. Permanently attached connection cable optional, standard length of 1m

## Electrical Specifications:

**Supply voltage:** 10 to 30 VDC with current output  
14 to 30 VDC with voltage output

**Power consumption, max.:** 20 mA

**Output:** voltage output load  $\geq 5$  kOhm  
current output load  $\leq (U-10V)/0.02A$

**Interference emission:** as per EN 61326

**Noise Immunity:** as per EN 61326

**Protection type:** IP65 EN 60 529/IEC 529

**Electrical protection types:** incorrect polarity, overvoltage, and short-circuit protection

## Technical Details:

**Process connection:** G1/4 B male thread

**Parts in contact with media:** stainless steel 1.4571 and 1.4542

**Max. pressure:** 3.5 times the upper range value with measuring range  $\leq 10$  bar  
2 times the upper range value with measuring range  $\leq 600$  bar  
1.5 times the upper range value with measuring range  $\leq 1000$  bar  
Vacuum-proof

**Max. media temp.:** -40 to +100°C

**Max. ambient temp.:** -30 to +80°C

**Max. storage temp.:** -30 to +100°C

**Compensated range:** 0 to 80°C

**Housing:** stainless steel, European standard no. 1.4301

**Weight:** approx. 0.15 kg

**Accuracy:** class 1.0

**Reproducibility:**  $< \pm 0.2\%$  f. s.

**Response time:**  $\leq 1$  ms  
(between 10% to 90% f.s.)

## Ordering Code:

**Order number:** PUM01. 2. 1. 2. R79

**Pressure transmitter for OEM applications**

**Output signal:**

1 = 4 to 20 mA, 2-wire  
2 = 0 to 10 V, 3-wire

**Calibration**

1 = Relative pressure  
2 = Absolute pressure

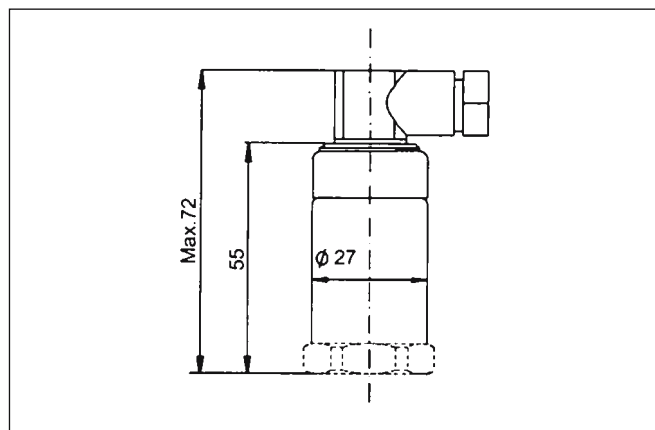
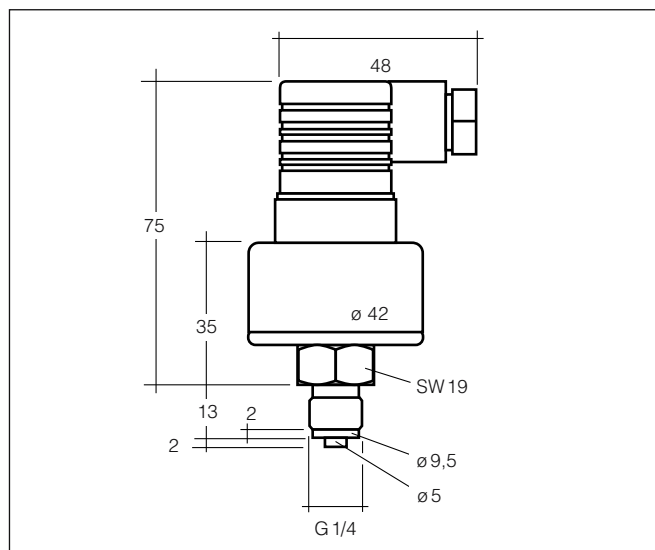
**Electrical connection:**

1 = Plug connector

**Measuring range:**

R = relative	A = absolute
R65 = 0 - 0,25 bar*	A69 = 0 - 1 bar
R66 = 0 - 0,4 bar*	A70 = 0 - 1,6 bar
R67 = 0 - 0,6 bar*	A72 = 0 - 2,5 bar
R69 = 0 - 1 bar	A73 = 0 - 4 bar
R70 = 0 - 1,6 bar	A74 = 0 - 6 bar
R72 = 0 - 2,5 bar	A75 = 0 - 10 bar
R73 = 0 - 4 bar	
R74 = 0 - 6 bar	
R75 = 0 - 10 bar	
R76 = 0 - 16 bar	
R78 = 0 - 25 bar	
R79 = 0 - 40 bar	
R80 = 0 - 60 bar	
R81 = 0 - 100 bar	
R82 = 0 - 160 bar	
R84 = 0 - 250 bar	
R86 = 0 - 400 bar	
R87 = 0 - 600 bar	
R88 = 0 - 1000 bar	

\*with Hirschmann mini plug connector



PKP Prozessmesstechnik GmbH

Borsigstraße 24 · D-65205 Wiesbaden

+49 (0) 6122-7055-0 · +49 (0) 6122-7055-50

Email: info@pkp.de · Internet: www.pkp.de

PKP Process Instruments Inc.

10 Brent Drive · Hudson, MA 01749

+1-978-212-0006 · +1-978-568-0060

Email: info@pkp.eu · Internet: www.pkp.eu

