

# Bourdon tube pressure gauge with output signal

## Standard version, plug outlet

### Model PGT01

WIKA data sheet PV 11.01



for further approvals  
see page 3

**intelliGAUGE®**

#### Applications

- For monitoring water pressure changes in heating systems (wall-type boilers, free-standing boilers)

#### Special features

- Non-contact sensor (wear-free)
- Process connection and case made of plastic
- Nominal size 40
- Scale ranges 0 ... 2.5 bar to 0 ... 10 bar
- Voltage signal, e.g. DC 0.5 ... 4.5 V ratiometric



Bourdon tube pressure gauge model PGT01

#### Description

The model PGT01 intelliGAUGE® is a combination of a Bourdon tube pressure gauge and a pressure sensor. On the one hand, the instrument offers the usual external energy-free analogue display, which makes it possible to read the process pressure on-site, and on the other hand an additional electrical analogue signal is output.

The output signal is available as a voltage signal (e.g. DC 0.5 ... 4.5 V ratiometric with DC 5 V supply voltage). The integrated connector system for electrical connection provides cable strain relief and protects the contacts from damage.

The mechanical measuring system with Bourdon tube fulfils the requirements of EN 837-1 and the electronic components have been tested in accordance with EN 61000-4-3 and EN 61000-4-6.

#### Individual customer variants

Based on many years of experience in manufacturing and development, WIKA is happy to offer support in the construction and production of customer-specific solutions.

## Specifications

**Version**  
EN 837-1

**Nominal size in mm**  
40

**Accuracy class**  
2.5

**Scale ranges**  
0 ... 2.5 to 0 ... 10 bar  
or all other equivalent vacuum or combined pressure and vacuum ranges

**Pressure limitation**  
Steady: 3/4 x full scale value  
Fluctuating: 2/3 x full scale value  
Short time: Full scale value

**Permissible temperature**  
Ambient: -20 ... +60 °C  
Medium: +60 °C maximum  
Storage temperature: -40 ... +70 °C

**Temperature effect**  
When the temperature of the measuring system deviates from the reference temperature (+20 °C): max.  $\pm 0.4 \%$ /10 K of the span

**Process connection**  
Plastic (PA)  
Lower mount (radial) or centre back mount  
G 1/8 B (male), SW 14

**Pressure element**  
Copper alloy

**Movement**  
Copper alloy

**Dial**  
Plastic, white, black lettering

**Pointer**  
Plastic, black

**Case**  
Plastic, black (PA)

**Window**  
Plastic (PA)

**Ingress protection**  
IP40 per IEC/EN 60529

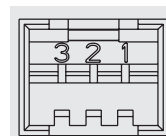
## Electronics

**Supply voltage ( $U_B$ )**  
DC 5 V

**Electrical connection**  
3-pin connector, AMP Duoplug (TE Connectivity)

$U_B$	Output signal $U_{SIG}$
DC 5 V	0.5 ... 2.5 V, 0.5 ... 3.5 V or 0.5 ... 4.5 V, ratio-metric

Connector assignment	
1	$U_B$
2	GND
3	$U_{SIG}$








### Permissible load

$R_A > 5 \text{ k}\Omega$

## Options

Sealings (model 910.17, see data sheet AC 09.08)

## Approvals

Logo	Description	Country
	<b>EU declaration of conformity</b> <ul style="list-style-type: none"> <li>■ EMC directive <sup>1)</sup> EN 61326 emission (group 1, class B) and immunity (industrial application) Per test standards EN 61000-4-6 / EN 61000-4-3</li> <li>■ Pressure equipment directive</li> </ul>	European Union
	<b>EAC (option)</b> <ul style="list-style-type: none"> <li>■ EMC directive</li> <li>■ Pressure equipment directive</li> </ul>	Eurasian Economic Community
	<b>GOST (option)</b> Metrology, measurement technology	Russia
	<b>BelGIM (option)</b> Metrology, measurement technology	Belarus
	<b>UkrSEPRO (option)</b> Metrology, measurement technology	Ukraine

1) In the case of electrostatic discharge per IEC 61000-4-2 and fast transients per IEC 61000-4-4, the measuring signal can deviate by up to  $\pm 75\%$  of the measuring span for the duration of the failure. After the failure, the instrument will operate within the specification again. For cable lengths of  $> 3$  m, shielded wires have to be used in order to efficiently reduce the effects of failures in the form of fast transients.

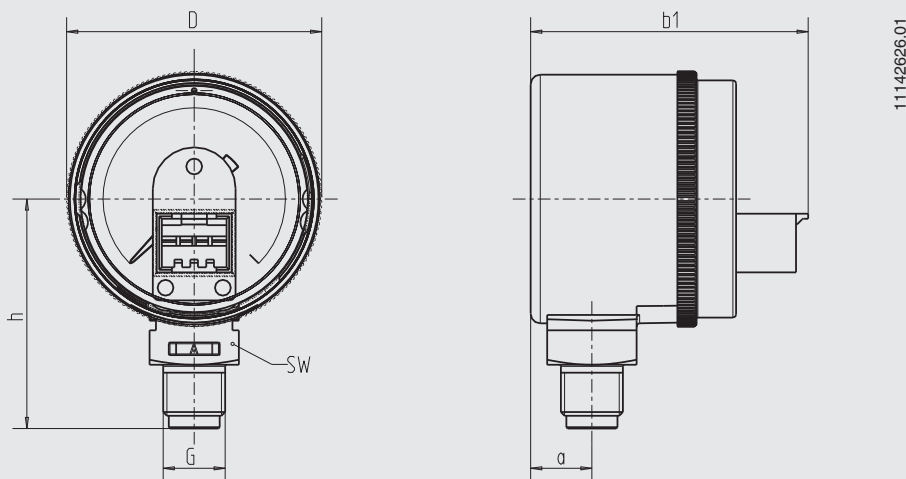
## Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

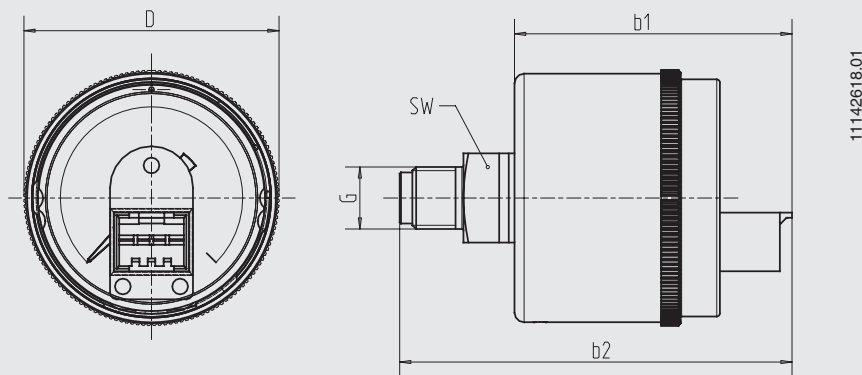
# Dimensions in mm

## Standard version

### Lower mount (radial)



### Centre back mount



NS	Dimensions in mm							Weight in kg
	a	b1	b2	D	G	h	SW	
40	9.6	43.5	61.5	40	G 1/8 B	36	14	0.08

Process connection per EN 837-1 / 7.3

## Ordering information

Model / Nominal size / Scale range / Process connection / Connection location / Output signal / Options

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