

Bourdon tube pressure gauge with stepped electrical output signal Model PGT15

WIKA data sheet PV 11.04

intelliGAUGE®

Applications

- Measurement of the filling pressure in gas tanks for CNG vehicles

Special features

- Non-contact opto-sensor (wear-free)
- Robust steel case
- Nominal size 50
- Scale range 0 ... 400 bar
- Approval in accordance with ECE-R 110



Bourdon tube pressure gauge model PGT15

Description

Design

EN 837-1

Nominal size in mm

50

Accuracy class

2.5

Indication range

0 ... 400 bar

Pressure limitation

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

Permissible temperature

At the vehicle: -40 ... +80 °C (permissible temperature range)
In the engine compartment: -40 ... +120 °C (for a maximum of 8 hours, at a maximum working pressure of 240 bar)

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

Cu-alloy,
lower mount (LM)
G 1/4 B (male), 14 mm flats

Pressure element

Cu-alloy, helical type

Movement

Cu-alloy

Dial

Plastic, white, with pointer stop pin

Pointer

Plastic, black, special design

Case

Steel, black lacquered

Electromagnetic compatibility

Per test standards EN 61000-4-6 / EN 61000-4-3

Window

Plastic, crystal-clear (PC), with integrated optoelectronics

Bezel ring

Slip-on bezel, steel, black lacquered

Ingress protection

IP 54 per EN 60529 / IEC 529

Options

- Other process connection

Electronics

Output signal (with supply voltage DC 12 V)

40 bar \pm 10 bar: 2.5 V \pm 1.5 V

60 bar \pm 10 bar: 5 V \pm 1.5 V

90 bar \pm 10 bar: 7.5 V \pm 1.5 V

140 bar \pm 10 bar: 11.3 V -2 V

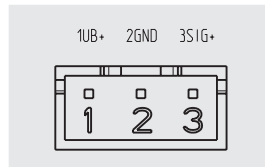
Output signal (with supply voltage DC 5 V)

40 bar \pm 10 bar: 1.5 V \pm 0.3 V

70 bar \pm 10 bar: 2.5 V \pm 0.3 V

100 bar \pm 10 bar: 3.5 V \pm 0.5 V

140 bar \pm 10 bar: 4.5 V -0.5 V



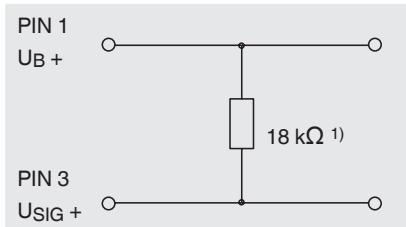
Supply voltage (Us)

DC 12 or 5 V

Electrical connections

Connector, 3-pin, model JST XH (reverse polarity safety ensured mechanically)

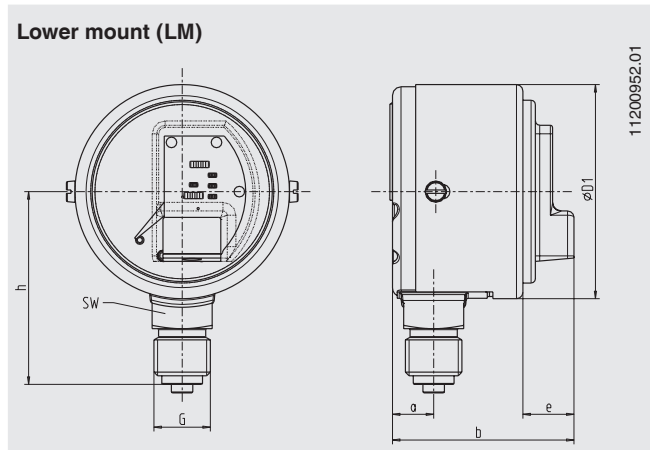
Electrical connection diagram



1) This electrical resistor has to be provided at the input of the measurement circuitry.

Dimensions in mm

Standard version



NS	Dimensions in mm					Weight in kg	
	a	b	D ₁	G	h	SW	
50	9.5	42.5 \pm 0.5	50	G 1/4 B	45 \pm 1	14	0.125

Process connection per EN 837-1 / 7.3

Ordering information

Model / Nominal size / Scale range / Connection size / Connection location / Supply voltage / Options

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