

Bourdon Tube Pressure Gauges with Stepped Electrical Output Signal Type PGT15

WIKA Datasheet PGT15

Applications

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

Special features

- Non-contact optical sensor (wear-free)
- Nominal size 2" (50 mm)
- Robust steel case
- Scale range 0/6,000 PSI

Standard Features

Design

ASME B40.100 & EN 837-1

Sizes

2" (50 mm)

Accuracy class

± 3/2/3% of span (ASME B40.100 Grade B)

Range

0/6,000 PSI
or other equivalent units of pressure or vacuum

Working pressure

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

Operating temperature

Ambient: -40°F to +250°F (-40°C to +120°C)
Medium: -40°F to +250°F (-40°C to +120°C)
(with max. working pressure 4,000 PSI)

Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% for every 18°F (10°C) rising or falling. Percentage of span.

intelliGAUGE®



intelliGAUGE Type PGT15

Pressure connection

Material: Copper alloy
Lower mount (LM)
1/4" NPT or G 1/4B, 14 mm flats

Bourdon tube

Material: Copper-alloy, helical type

Movement

Copper alloy

Dial

White plastic with black lettering and stop pin

Pointer

Black plastic

Case

Black-painted steel

Window

Polycarbonate (PC), with integrated optical electronics

Cover ring

Black-painted steel

Weather protection

NEMA 3 / IP 54

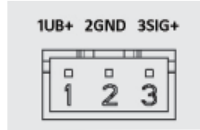
Electronics

Output signal (with supply voltage 12 V DC)

| | |
|--------------------|---------------|
| 600 PSI ±150 PSI: | 2.5 V ± 1.5 V |
| 1000 PSI ±150 PSI: | 5 V ± 1.5 V |
| 1500 PSI ±150 PSI: | 7.5 V ± 1.5 V |
| 2000 PSI ±150 PSI: | 11.3 V - 2 V |

Output signal (with supply voltage 5 V DC)

| | |
|--------------------|---------------|
| 600 PSI ±150 PSI: | 1.5 V ± 0.3 V |
| 1000 PSI ±150 PSI: | 2.5 V ± 0.3 V |
| 1500 PSI ±150 PSI: | 3.5 V ± 0.5 V |
| 2000 PSI ±150 PSI: | 4.5 V ± 0.5 V |



Supply voltage

12 or 5 V DC

Electrical connections

Connector, 3-pin, model YST XH (built-in protection against reverse polarity)

Electromagnetic compatibility

According to European test standards EN 61000-4-6 & EN 61000-4-3

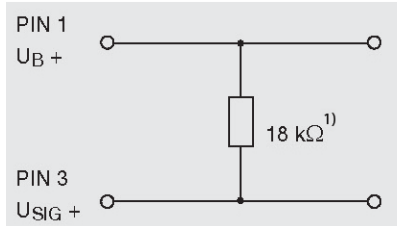
CE mark

This product is exclusively intended for installation in instruments that comply with the requirements of the EC directives. The CE proof is provided by the customer.

Optional extras

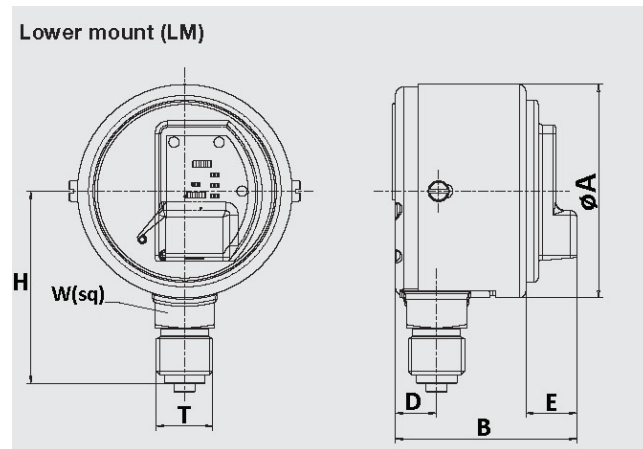
- Other pressure connections
- Custom dial layout
- Other pressure scales available
bar, kPa, MPa, kg/cm² and dual scales

Electrical connection details



1) Requires minimum resistive load of 18 kΩ across pin 1 and pin 3.

Dimensions



| Dimensions | | A | B | D | E | H | T | W | Weight |
|------------|---------|----|----------|------|------|----------|------|------|----------|
| Size | 1.5" mm | 50 | 42.5±0.5 | 9.5 | 10 | 45±1 | | 14 | 0.125 kg |
| | in | 2 | 1.67±.02 | 0.37 | 0.39 | 1.77±.04 | 1/4" | 0.55 | 0.28 lb |

Ordering information

Pressure gauge model / Nominal size / Scale range / Size of connection / Optional extras required
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.
Modifications may take place and materials specified may be replaced by others without prior notice.



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