Bourdon tube pressure gauge with stepped electrical output signal
Model PGT15

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

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. ±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

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

Electronics

Output signal (with supply voltage DC 12 V)
- 40 bar ±10 bar: 2.5 V ±1.5 V
- 60 bar ±10 bar: 5 V ±1.5 V
- 90 bar ±10 bar: 7.5 V ±1.5 V
- 140 bar ±10 bar: 11.3 V -2 V

Output signal (with supply voltage DC 5 V)
- 40 bar ±10 bar: 1.5 V ±0.3 V
- 70 bar ±10 bar: 2.5 V ±0.3 V
- 100 bar ±10 bar: 3.5 V ±0.5 V
- 140 bar ±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

<table>
<thead>
<tr>
<th>PIN 1</th>
<th>UB +</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN 3</td>
<td>USIG +</td>
</tr>
</tbody>
</table>

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

Dimensions in mm

<table>
<thead>
<tr>
<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>a: 9.5 b: 42.5 ±0.5 D1: 50 G: 1/4 B h: 45 ±1 SW: 14</td>
<td>0.125</td>
</tr>
</tbody>
</table>

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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