Bourdon Tube Pressure Gauges with Electrical Output Signal
Stainless Steel Case
Type PGT21

Applications
- CNG operated vehicles
- General machine building

Special features
- Non-contact sensor (wear-free)
- Nominal size 2" (50 mm)
- Robust stainless steel case
- Scale ranges 0/30 PSI to 0/6,000 PSI
- Choice of output signals

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
0/30 PSI to 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: -4°F to +140°F (-20°C to +60°C)
Medium: +190°F (+90°C) maximum

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.

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

Bourdon tube
Material: Copper-alloy, C-type

Movement
Copper alloy

Dial
White plastic with black lettering and stop pin

Pointer
Black plastic

Case
Stainless steel

Window
Clear plastic

Weather protection
NEMA 4X / IP 65
**Electronics**

**Output signal** (275° scale angle)
- 0.5 to 2.5 V @ 5 V DC
- 0.5 to 3.5 V @ 5 V DC
- 0.5 to 4.5 V @ 5 V DC
- 0.5 to 2.5 V, $V_s = 12$ to 32 V DC
- 0.5 to 3.5 V, $V_s = 12$ to 32 V DC
- 0.5 to 4.5 V, $V_s = 12$ to 32 V DC
- 4 to 20 mA, 2-wire, $V_s = 12$ to 32 V DC

**Supply voltage** ($V_s$)
- 5 V DC / 12 to 32 V DC

**Electrical connections**

<table>
<thead>
<tr>
<th>Color</th>
<th>Terminal</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>black</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td>orange</td>
<td>-</td>
<td>$U_{sig}$</td>
</tr>
</tbody>
</table>

**Electromagnetic compatibility**

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

**Dimensions**

**Output signal and allowed load**

Output voltage (3-wire):
$$R_x > 5 \text{ kOhm}$$

Output current (2-wire)
$$R_x < \left(\frac{U_{sig} - 10 \text{ V}}{0.02 \text{ A}}\right)$$

*With $R_x$ in Ohm and $U_{sig}$ in V DC*

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**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
- Weather protection NEMA 6 / IP 67
- Accuracy ±2/1/2% of span
- Custom dial layout
- Other pressure scales available
  - bar, kPa, MPa, kg/cm² and dual scales

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### Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>H</th>
<th>T</th>
<th>W</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot;</td>
<td>mm</td>
<td>55</td>
<td>34</td>
<td>63</td>
<td>12</td>
<td>48</td>
<td>14</td>
<td>0.2 kg</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>2.17</td>
<td>1.34</td>
<td>2.48</td>
<td>0.47</td>
<td>1.89</td>
<td>0.55</td>
<td>0.44 lb</td>
</tr>
</tbody>
</table>

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**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.