Bourdon tube pressure gauge with electrical output signal
Stainless steel case, ingress protection IP 41
Model PGT11

Applications

- General machine building
- Medical gases

Special features

- Non-contact sensor (wear-free)
- Robust stainless steel case
- Nominal size 40, 50, 63
- Scale ranges 0 ... 1.6 bar to 0 ... 400 bar
- Different output signals

Description

**Design**
EN 837-1

**Nominal size in mm**
40, 50, 63

**Accuracy class**
2.5

**Scale ranges**
0 ... 1.6 to 0 ... 400 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: -40 ... +70 °C

**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**
Copper alloy
Lower mount (LM) or centre back mount (CBM) (NS 40 only back mount)
G 1/4 B (male), 14 mm flats

**Pressure element**
Copper alloy
Movement
Copper alloy

Dial
Plastic, white, black lettering

Pointer
Plastic, black

Case
Stainless steel

Window
Plastic, crystal-clear (PC)

Ingress protection
IP 41 per EN 60529 / IEC 60529

Electronics

Power supply
DC 5 V / DC 12 ... 32 V

Output signal (275° indication angle)
With $U_S = DC 5$ V, ratiometric:
- $0.5 ... 2.5$ V, $0.5 ... 3.5$ V or $0.5 ... 4.5$ V
With $U_S = DC 12 ... 32$ V, not ratiometric:
- $0.5 ... 2.5$ V, $0.5 ... 3.5$ V or $0.5 ... 4.5$ V or
- $4 ... 20$ mA, 2-wire

Electrical connections
Cable outlet, standard length 2 m

<table>
<thead>
<tr>
<th>Colour</th>
<th>2-wire</th>
<th>3-wire</th>
</tr>
</thead>
<tbody>
<tr>
<td>red</td>
<td>$UB +$</td>
<td>$UB +$</td>
</tr>
<tr>
<td>black</td>
<td>$GND$</td>
<td>$GND$</td>
</tr>
<tr>
<td>orange</td>
<td>-</td>
<td>$USIG +$</td>
</tr>
</tbody>
</table>

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

Output signal and permissible load
Voltage output (3-wire): $R_A > 5 \, k\Omega$

Current output (2-wire)
$4 ... 20$ mA:
- $R_A \leq (USIG - 10 \, V) / 0.02 \, A$ with $R_A$ in $\Omega$ and $USIG$ in DC V

Options
- Other process connection (with adapter, copper alloy)
- Sealings (model 910.17, see data sheet AC 09.08)
- Other electrical connections (e.g. connector M12 x 1)
- Other cable length

CE conformity

Pressure equipment directive
97/23/EC, PS $\geq 200$ bar, module A, pressure accessory, for instruments $< 200$ bar article 3.3 applies - sound engineering practice

EMC directive
2004/108/EC, EN 61326 emission (group 1, class B) and interference immunity (industrial application)

Approvals
- EAC, import certificate, customs union Russia/Belarus/Kazakhstan
- GOST, metrology/measurement technology, Russia
- CRN, safety (e.g. electr. safety, overpressure, ...), Canada

Certificates (option)
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

Approvals and certificates, see website
Dimensions in mm

Standard version

Lower mount (LM), NS 50, 63

Centre back mount (CBM), NS 40, 50, 63

<table>
<thead>
<tr>
<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
<td>b1</td>
</tr>
<tr>
<td>40</td>
<td>10.7</td>
<td>30.6</td>
</tr>
<tr>
<td>50</td>
<td>11</td>
<td>35.5</td>
</tr>
<tr>
<td>63</td>
<td>11.4</td>
<td>35.1</td>
</tr>
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</table>

Process connection per EN 837-1 / 7.3

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We reserve the right to make modifications to the specifications and materials.

Ordering information
Model / Nominal size / Scale range / Connection size / Connection location / Output signal / Options