Pressure Gauges
General Purpose Gauge with ECE R110 Approval

PGN Series

- ECE R110 approval for use on compressed natural gas vehicles
- 50 and 63 mm (2 and 2 1/2 in.) dial sizes
- Orifice: 0.023 in. (0.58 mm)
- Polycarbonate lens for additional protection
- Transducer output available on 50 mm gauge with brass end connections

Technical Data

Dial Ranges
Positive-Pressure Gauges
- 0 to 40 MPa (400 bar, 6000 psi)

Accuracy

Stainless Steel End Connections
- 1.6 % of span (ASME B40.1, Grade B, EN 837-1 Class 1.6, JIS B7505 Class 1.6)

Brass End Connections
(50 mm dial size only)
- 2.5 % of span (ASME B40.1, Grade B, EN 837-1 Class 2.5, JIS B7505 Class 2.5)

Configurations
Center-back and lower mount

End Connections
50 mm (2 in.) Dial Size
- Stainless Steel End Connections
  - 1/4 in. and 6 mm Swagelok® tube adapter
  - 1/4 in. male NPT
  - G1/4B (EN)

Brass End Connections
- 1/4 in. male NPT
- G1/4B (EN)

63 mm (2 1/2 in.) Dial Size
- 1/4 in. and 6 mm Swagelok tube adapter
- 1/4 in. male NPT
- G1/4B (EN)

Operating Temperature
Ambient
- Stainless steel end connections: –40 to 248°F (~–40 to 120°C)
- Brass end connections: –40 to 248°F (~–40 to 120°C); at ambient temperatures greater than 212°F (100°C), the maximum working pressure is limited to 3480 psig (240 bar) for a maximum of 8 h continuous operation

Media
- 392°F (200°C) maximum

Temperature Error
- ± 0.4 % for every 18°F (10°C) temperature change from 68°F (20°C)

Electrical Data For Transducer Output
Available on 50 mm Dial Size with Brass End Connections
- Power supply:
  - 5 V(dc)/10 to 16 V (dc)
- Output signal:
  - 0.5 to 4.5 V (dc) for 3-pin female connector with AMP Superseal® or flying leads

Materials of Construction

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>End connection</td>
<td>316 SS</td>
</tr>
<tr>
<td>Bourdon tube</td>
<td>304 SS</td>
</tr>
<tr>
<td>Case</td>
<td>Stainless steel</td>
</tr>
<tr>
<td>Movement</td>
<td>Polycarbonate</td>
</tr>
<tr>
<td>Lens</td>
<td>Buna N</td>
</tr>
<tr>
<td>Lens gasket</td>
<td>Aluminum</td>
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<tr>
<td>Dial</td>
<td></td>
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<tr>
<td>Pointer</td>
<td></td>
</tr>
</tbody>
</table>

Wetted components listed in italics.

Brass available on 50 mm dial size; see Ordering Information, next page.
Dimensions

Dimensions are for reference only and are subject to change.

<table>
<thead>
<tr>
<th>Dial Size</th>
<th>End Connection</th>
<th>Dimensions, in. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Size</td>
<td>Type</td>
</tr>
<tr>
<td>63</td>
<td>1/4 in.</td>
<td>Swagelok tube adapter</td>
</tr>
<tr>
<td></td>
<td>6 mm</td>
<td></td>
</tr>
<tr>
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<td>6 mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male NPT</td>
<td>G1/4B (EN)</td>
</tr>
</tbody>
</table>

Ordering Information

Build a PGN series gauge ordering number by combining the designators as shown below. List option designators alphabetically.

1  2  3  4  5  6
PGN - 63 - CNG400 - L AQ - BE

1 Product Function and Type
Pressure gauge, ECE R110 approval

2 Dial Size and Model
50 = 50 mm (2 in.) dial
63 = 63 mm (2 1/2 in.) dial

3 Dial Range
CNG400 = 0 to 40 MPa (400 bar) (MPa primary, bar secondary)
CNG6000 = 0 to 40 MPa (6000 psi) (MPa primary, psi secondary)

4 Process Connection Location
L = Lower mount
C = Center-back mount

5 Fitting Size and Type
AQ = 1/4 in. Swagelok tube adapter\(^\text{1}\)
AS = 6 mm Swagelok tube adapter\(^\text{1}\)
AO = 1/4 in. male NPT
AV = G1/4B (EN)
\(^1\) Not available for gauges with brass end connection and Bourdon tube (option R).

6 Options
B = Certificate of calibration
E = Material certification (not available for gauges with brass end connection and Bourdon tube [option R])
R = Brass end connection and Bourdon tube (50 mm [2 in.] gauge [model 50] only)

Transducer Output
Only available with brass end connection and Bourdon tube (option R)
T = Rear-mounted wire, 3-pin female connector with AMP Superseal
V = Rear-mounted wire, 3-wire flying leads

Safe Product Selection
When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

WARNING
Do not mix/interchange Swagelok products or components not governed by industrial design standards, including Swagelok tube fitting end connections, with those of other manufacturers.

Warranty Information
Swagelok products are backed by The Swagelok Limited Lifetime Warranty. For a copy, visit swagelok.com or contact your authorized Swagelok representative.