PG-2000

Digital Pressure Gauge

- Large 4 digit display with 0.5 in. digits
- Available ranges from 0 up to 2,000 psi
- Rugged, chemical-resistant case
- Display capability to 2000
- Battery operated with convenient on/off switch
- ±0.25% accuracy of full scale (on selected ranges)
- Gauge reference pressure
- Internally complaint to CE
- On/off button
- 1/4” NPTM process connection

Options
- 16 minute auto-off optional at no extra cost
- Rear pressure port
- Zero adjust knob
- External power
- ±0.25% accuracy with NIST certification (on select ranges)

Accessories
- Panel mount flange (rear pressure port only)
- AC to DC external power supply
- Shock dampening rubber boot

Operational Description

Battery Powered Digital Gauge Offers High Accuracy at Low Cost

Utilizing a solid state design, the PG-2000 incorporates a semiconductor strain gage pressure transducer as the sensing element, conditioned by state of the art surface mount electronics. The unit has a very low power requirement, resulting in a battery life of two years in typical use. The large 4 digit display and ±0.25% full scale accuracy allows it to replace much larger mechanical gauges.

Applications

No special tools or adaptors are required for installation of the PG-2000. This makes the unit an easy, cost-effective replacement for less accurate, standard mechanical gauges. The unit’s long life, ease of operation, high accuracy, and low cost make it perfect for all applications where standard 2 1/2 in. or larger mechanical gauges have been used.
Specifications

Performance
- **Standard Pressure Ranges**: See table at right
- **Overpressure**: 2x full scale
- **Burst Pressure**: 10x full scale or 20,000 psi (whichever is less)
- **Accuracy (linearity & hysteresis)**: ±0.25% of full scale (B.F.S.L.) or 2 digital counts, whichever is greater; NIST traceable certification also available
- **Stability - One Year Zero Drift**: 15-5: < ±0.5% F.S., 316: < ±1% F.S.
- **Thermal Zero Shift**
  - > 100 psi: ±0.02% F.S./°F
  - ≤ 100 psi: ±0.04% F.S./°F
- **Thermal Sensitivity Shift**
  - > 100 psi: ±0.02% F.S./°F
  - ≤ 100 psi: ±0.04% F.S./°F
- **Life**: 10 million cycles minimum

Environmental
- **Compensated Temp**: 20 to 130°F (-7 to 54°C)
- **Storage Temp**: -40 to 160°F (-40 to 71°C)
- **Operating Temp**: 0 to 160°F (-18 to 71°C)

Electrical
- **Batteries**: Standard 9 V (1), user replaceable (2-year life typical with auto off option)
- **External Power**: 10-32 VDC
- **Display Type**: 4 digit LCD, 0.5 in. digits
- **Display Resolution**: 1 part in 2000
- **Low Battery Detection**: Displays “LBAT” @ 4.0 VDC ±5% with Vin = 9.0 VDC
- **Adjustments**: Front accessible “Z”: Zero Adjust; “S”: Span Adjust
- **Auto Off**: 16 minutes

Physical
- **Weight**: 0.36 lb.

Construction Materials
- **Case**: Injection molded case material EMI-X® PDX-W-88341
- **Wetted Materials**: 15-5 SS; 316L SS available at no extra charge (High resolution ranges under 100 psi, in 316L SS incorporate a Hastelloy® C276 diaphragm); One piece Hastelloy® fitting also available (minimum quantities required)

- **External Power Connector**: 1/8 in. – 3 conductor (included with optional external power selection)
- **External Power Mating Connector**: 1/8 in. – 3 conductor (included with optional external power selection)

- **Process Cavity Volume**: 0.07 in.

Specifications are subject to change without notice.

Linear Accuracy Chart

<table>
<thead>
<tr>
<th>Full Scale Display</th>
<th>Display Resolution</th>
<th>Standard Linear Accuracy</th>
<th>Accuracy Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.00*</td>
<td>0.01</td>
<td>0.25%</td>
<td>N0, N1</td>
</tr>
<tr>
<td>100.0</td>
<td>0.1</td>
<td>0.25%</td>
<td>N0, N1</td>
</tr>
<tr>
<td>160.0</td>
<td>0.1</td>
<td>0.25%</td>
<td>N0, N1</td>
</tr>
<tr>
<td>200.0</td>
<td>0.1</td>
<td>0.25%</td>
<td>N0, N1</td>
</tr>
<tr>
<td>250.0</td>
<td>0.1</td>
<td>Better than 1%</td>
<td>N3, N4</td>
</tr>
<tr>
<td>500.0</td>
<td>0.1</td>
<td>Better than 1%</td>
<td>N3, N4</td>
</tr>
<tr>
<td>1000</td>
<td>1</td>
<td>0.25%</td>
<td>N0, N1</td>
</tr>
<tr>
<td>2000</td>
<td>1</td>
<td>0.25%</td>
<td>N0, N1</td>
</tr>
</tbody>
</table>

*Requires high resolution option

Note: This table lists linear accuracies for specific ranges. For an explanation of how linear accuracy is calculated, please contact APG.
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### Dimensions — in./mm

- **Body Center Tip**: 2.66 in. / 67.6 mm
- **External Power Plug**: 1.20 in. / 30.3 mm
- **Port**: 3/4 HEX / 38.1 mm
- **1/4 NPT**: 1.50 in. / 38.1 mm

### Ordering Information

- **Range**
  - 20.00
  - 100.0
  - 160.0
  - 200.0
  - 250.0
  - 500.0
  - 1000
  - 2000

- **Pressure Type**
  - G: Gauge
  - G2: High resolution gauge

- **Auto Off**
  - A0: No auto off
  - A4: 16 minute auto off

- **Zero Adjustment**
  - Z0: Cover screw
  - Z1: Z knob

- **Port**
  - F0: Bottom
  - F1: Rear
  - F6: Rear port with panel bracket
  - F7: Bottom port with rubber boot

- **Operation**
  - L0: 9V battery
  - L4: External power

- **Electrical Connection**
  - E0: No connector
  - E2: 1/8 in., 3-conductor external power

- **Electrical Cable Length**
  - W0: 0 ft. (Use with E2 (no cable) connections)
  - W1-W5: Use with E2 connections. (See Electrical Cable Length chart for details)

- **Accuracy**
  - N0: ±0.25%
  - N1: ±0.25% with NIST certification
  - N3: ±1%
  - N4: ±1% with NIST certification

- **Materials**
  - M0: 15-5 SS
  - M1: 316L SS

*This option is standard.*

### Accessories

Please order separately, by part number. When ordering a flange or boot as an accessory, they will not be installed on the gauge.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel mount flange (rear port only)</td>
<td>512598</td>
</tr>
<tr>
<td>AC to DC external power supply (includes E2 mating connector)</td>
<td>511641</td>
</tr>
<tr>
<td>Rubber boot</td>
<td>512625</td>
</tr>
</tbody>
</table>