The Series DPG-200 Digital Pressure Gage has a precise ±0.25% full scale accuracy. The 4 digit digital display will reduce the potential for errors in readings by eliminating parallax error commonly produced with analog gages. The DPG-200 is packaged in a durable extruded aluminum case designed to meet NEMA 4X (IP66). The unit is powered by 12 to 24 VDC/VAC and contains two alarm set points along with a 4 to 20 mA process output. A four-button keypad allows easy access to features. These features include backlight, peak and valley, auto zero and conversion of the pressure units.

**INSTALLATION**

When installing gage always use 1” hex at the base of the housing to tighten the gage to a mating fitting. Do not apply wrench to housing.

**WIRING**

<table>
<thead>
<tr>
<th>WHITE</th>
<th>N.O.</th>
<th>HIGH ALARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>N.C.</td>
<td></td>
</tr>
<tr>
<td>BLACK</td>
<td>COM</td>
<td></td>
</tr>
<tr>
<td>BLUE</td>
<td>N.O.</td>
<td>LOW ALARM</td>
</tr>
<tr>
<td>ORANGE</td>
<td>COM</td>
<td></td>
</tr>
<tr>
<td>GREEN</td>
<td>N.C.</td>
<td></td>
</tr>
<tr>
<td>RED</td>
<td>10 to 28 VDC or VAC</td>
<td>POWER SUPPLY</td>
</tr>
<tr>
<td>BLACK</td>
<td>4 to 20 mA</td>
<td>RECEIVER</td>
</tr>
<tr>
<td>ORANGE</td>
<td>BROWN</td>
<td>SHIELD</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

### DIGITAL GAGE SPECIFICATIONS
- **Service:** Liquids and non-combustible compatible gases.
- **Wetted Materials:** Type 316L SS.
- **Housing:** Black polycarbonate front & back cover, anodized aluminum extruded housing with recessed grooves, polycarbonate overlay, Buna-N O-rings, 316L SS sensor construction.
- **Accuracy:** 0.25% FS ±1 least significant digit. (Includes linearity, hysteresis, repeatability).
- **Pressure Limit:** 2x pressure range for models 1000 psi; 5000 psi for 3000 psi range; 7500 psi for 5000 psi range.
- **Temperature Limits:** 0 to 158°F (0 to 70°C).
- **Process Connection:** 1/4” male NPT.
- **Display:** 4 digit (.425 H x .234 W digits).
- **Size:** 3.00” OD x 1.90 deep (not including cables).
- **Weight:** 8.84 oz (275 g).

### SWITCH SPECIFICATIONS
- **Switch Type:** 2 SPDT Form C contacts.
- **Electrical Rating:** 0.5A @ 125 VAC resistive, 1A @ 24 VDC.
- **Relay Differential:** 1 least significant digit.
- **Electrical Connections:** Two 3 ft (.91 m) cables.
- **Mounting Orientation:** Mount in any position.
- **Set Point Adjustment:** Via menu.

### TRANSMITTER SPECIFICATIONS
- **Temperature Limits:** 0 to 158°F (0 to 70°C).
- **Thermal Effect:** Between 70 to 158°F = 0.016%/°F. Between 0 to 70°F = 0.026%/°F.
- **Power Requirements:** 12 to 24 VAC ±20% 50 to 400 HZ, 12 to 24 VDC ±20%.
- **Output Signal:** 4 to 20 mA.
- **Loop Resistance:** 600 Ω maximum.
- **Power Consumption:** 0.8 W max.
- **Electrical Connections:** 2 three foot cables.
- **Enclosure Rating:** Designed to meet NEMA 4X (IP66).
UNIT CHART

<table>
<thead>
<tr>
<th>Model</th>
<th>Range psi</th>
<th>Pressure Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPG-200</td>
<td>-14.70-0</td>
<td>-1.033</td>
</tr>
<tr>
<td>DPG-202</td>
<td>15.00</td>
<td>1.055</td>
</tr>
<tr>
<td>DPG-203</td>
<td>30.00</td>
<td>2.109</td>
</tr>
<tr>
<td>DPG-204</td>
<td>50.00</td>
<td>3.515</td>
</tr>
<tr>
<td>DPG-205</td>
<td>100.0</td>
<td>7.03</td>
</tr>
<tr>
<td>DPG-206</td>
<td>200.0</td>
<td>14.06</td>
</tr>
<tr>
<td>DPG-207</td>
<td>300.0</td>
<td>21.09</td>
</tr>
<tr>
<td>DPG-208</td>
<td>500.0</td>
<td>35.15</td>
</tr>
<tr>
<td>DPG-209</td>
<td>1000</td>
<td>70.3</td>
</tr>
<tr>
<td>DPG-210</td>
<td>3000</td>
<td>210.9</td>
</tr>
<tr>
<td>DPG-211</td>
<td>5000</td>
<td>351.5</td>
</tr>
</tbody>
</table>

*feet of seawater @ 4°C

This symbol indicates waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.
SECURITY
• 1=full access, password is 1110.
• 2=protected, password is 1101.
• Factory set to full access.
• All menus except backlight are protected.

ALARM #1 SETPOINT
• Activates Alarm #1 relay on increase.
• AL1 indicator and alarm #1 relay turned on when pressure is greater than or equal to setpoint.

ALARM #1 DIFFERENTIAL
• AL1 indicator and alarm #1 relay turned off when pressure is less than the setpoint minus the differential.

ALARM #2 SETPOINT
• Activates Alarm #2 relay on decrease.
• AL2 indicator and alarm #2 relay turned on when pressure is less than or equal to setpoint.

ALARM #2 DIFFERENTIAL
• AL2 indicator and alarm #2 relay turned off when pressure is greater than the setpoint plus the differential.

ALARM #2 INHIBIT
• Prevents low alarm on power up.
• When set to “On” alarm #2 is disabled until the pressure is greater than the setpoint plus the differential.
• Factory set to ON.

MENU BUTTON OPERATION
- Advances menu. Hold for 1 second to go back to home page.
- Decreases value - top of display beings to blink. Hold for 1 second to decrease fast.
- Increases value - top line of display begins to blink. Hold for 1 second to increase fast.
- Stores value - top line of display stops blinking. If menu pressed before enter button pressed the value is lost.
**MENU CONTINUED**

**BACKLIGHT**
- Turns backlight on or off.
- Factory set to off.

**PROCESS OUTPUT HIGH**
- Pressure at which current output is set to 20 mA.
- Factory set to maximum scale.

**PROCESS OUTPUT LOW**
- Pressure at which current output is set to 4 mA.
- Factory set to minimum scale.

**SPAN ADJUSTMENT**
- Display shows pressure using existing span.
- Apply full scale pressure to instrument and hold enter for one second to acquire new span.

**MENU BUTTON OPERATION**
- Advances menu. Hold for 1 second to go back to home page.
- Decreases value - top of display beings to blink. Hold for 1 second to decrease fast.
- Increases value - top line of display begins to blink. Hold for 1 second to increase fast.
- Stores value - top line of display stops blinking. If menu pressed before enter button pressed the value is lost.

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**RL1S** sets the relay on point, and **RL1S - RL1D** sets the relay off point. The relay’s output functions in the direct acting mode, which means the relay activates with an increase in pressure. In the above graph, an instrument with a 50 psi range has the RL1S set at 40. The relay will turn on at 40 psi increase. The RL1D is set at 30. The relay will turn off at 10 psi decrease (40 - 30 = 10).

**RL2S** sets the relay on point, and **RL2S + RL2D** sets the relay off point. The relay’s output functions in the reverse acting mode, which means the relay activates with a decrease in pressure. In the above graph, an instrument with a 50 psi range has the AL2S relay turn on at 10 psi decrease. The RL2D is set at 30. The relay will turn off at 40 psi increase (10 + 30 = 40).