

Series DPG-000 Digital Pressure Gage

Specifications - Installation and Operating Instructions



The Series DPG-000 Digital Pressure Gage has a precise +/-0.50% 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-000 is packaged in a durable extruded aluminum case designed to meet NEMA 4/4X. The unit is battery powered and has an auto-shut off to conserve battery life. A four button key pad allows easy access to features without the need to work through complex menus or difficult key combinations. These features include backlight, peak and valley, auto zero and conversion of the pressure units. Readings may be converted to various engineering units. See reverse page for available units.

FEATURES

For complete instructions on the four button operation see the flow chart provided on back.

On/Backlight: Push to turn on; Press again for backlight. Press and hold for 5 seconds to turn unit off.

Zero: Zeros the display - Push & hold for 2 seconds to zero the display. If after pressing zero the display does not re-zero, the unit is no longer meeting specified accuracy and should be sent back to the factory for calibration. Do not use the zero button when pressure is applied.

Units: Scroll (see reverse).

P/V: Peak recorded reading retrieved by initial push of button; push again retrieves the valley or lowest value recorded.

INSTALLATION

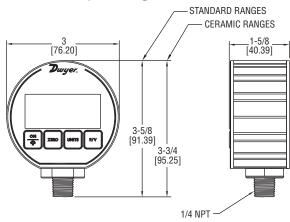
When installing gage always use 1" hex at the base of the housing to tighten the gage to a mating fitting. Do not apply wrench to housing.

MAINTENANCE

Battery Removal: Remove the three screws on backplate. Lift backplate off by hand. To reassemble, ensure O-Ring seats into housing evenly and press until seated completely. Replace screws.

Replace batteries per polarity indicators.

A "LOW BAT" descriptor indication will appear on the display when batteries need to be replaced.



SPECIFICATIONS

Service: Liquids and combustible compatible gases. **Wetted Materials:** Type 316L SS; Ceramic Ranges: Type 316L SS, ceramic, fluoroelastomer.

Housing Materials: Black Polycarbonate front & back cover, anodized aluminum extruded housing with recessed grooves, Polycarbonate Overlay, Buna-N O-Rings, 316L SS Sensor Construction.

Accuracy: 0.50% F.S. +/- 1 least significant digit 32 to 130°F (0 to 55°C). (Includes linearity, hysteresis, repeatability) ±2% F.S. @ 10°F. ±5% F.S. @ 0°F.

Pressure Limit: 2x pressure range for models ≤1000 psi; 5000 psi for 3000 psi range; 7500 psi for 5000 psi range. **Enclosure Rating:** Designed to meet NEMA 4/4X (IP65).

Temperature Limits: 0 to 130°F (-18 to 55°C). **Thermal Effect:** Between 70 to 130°F is 0.016%/F. Between 32 to 70°F is 0.026%/F. Between 10 to 32°F is

0.09%/F. Between 0 to 10°F is 0.50%/F. Size: 3.00" OD x 1.90 Deep (max). Process Connection: 1/4" male NPT.

Weight: 8.84 oz (275 g).

Display: 4 digit (.425 H x .234 W digits). **Power Requirements:** Two AAA batteries.

Battery Life: 2000 hours typical; Low battery indicator.

Auto Shut-Off:

Gage: 60 minute auto shut off. Auto shut-off may

be disengaged.

Backlight: 2 minute auto shut-off.

Agency Approvals:

CE EMC Directive:

EN 61000-4-2

EN 61000-4-3 & ENV50204

Phone: 219/879-8000

Fax: 219/872-9057

EN 61000-6-2 EN 61000-6-4

EN 55011.

*Note: Gages with ceramic sensor are not CE approved.

WARNING: DO NOT pressurize DPG over maximum allowable pressure limits. Extreme damage can occur if limits are exceeded (see Pressure Limit under Specifications). An overflow "OFL" designator will flash to acknowledge that the gages pressure range has been exceeded.

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DPG BUTTON OPERATION

Press to turn unit on.



Press again to turn backlight on (backlight: 2 minute auto shut-off).

Press again to turn backlight off.

Push and hold for 5 seconds to turn unit off.

Press and hold to zero display if a value is read when no pressure is applied.



If after pressing zero the display does not re-zero, the unit is no longer meeting specified accuracy and should be sent back to the factory for calibration.

DO NOT use the zero button when pressure is applied.

Press to scroll through engineering units.

(psi, in. Hg, oz in.2, in. w.c., ft. w.c., mm Hg, mm w.c., kg/cm2, kPa, mbar, bar, cm w.c.)

Selection of Units on Compound Ranges



Engineering units for vacuum readings may be set independently from engineering units for positive pressure readings. When selecting engineering units for vacuum readings a vacuum (negative pressure) must be applied to the instrument. The engineering units for positive pressure readings must be selected when a positive pressure is applied to the instrument. Once selected, the DPG will recall and display the engineering units chosen.

[Some units may not be present depending on range]

Press to read peak reading.



Press again to read valley reading.

Press and hold to reset peak and valley.

Press (a) at any time to return to home display.

Auto Shut-off Disengage

Press and hold $\frac{\mathbb{R}}{\mathbb{R}}$, then press and hold \mathbb{R} . A decimal will blink indicating that auto shut-off is disengaged and the unit is in "always-on" mode.

Repeat the process to return unit to auto shut-off mode. Unit will shut-off after 60 minutes.

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