Cooper Instruments & Systems 1-800-344-3921

# **DPG 1203 & DPG 1204 Operating Instructions**

The Series DPG 1203 & DPG 1204 Digital Pressure Gages have a precise +/- 1.0% 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 1203 & DPG 1204 are packaged in an ABS plastic case. The unit is battery powered and has an auto-shut off to conserve battery life. A two-button key pad allows easy access to features without the need to work through complex menus. These features include, auto zero and conversion of the pressure units. Readings may be converted to various engineering units. See second page for available units.

#### **OPERATING INSTRUCTIONS**

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

On/Off: Press ON/OFF to toggle on and off. Device will automatically shut off after 20 minutes if not used.

**Zero:** Zeros the display - Push & hold for 2 seconds to zero the display. If after pressing zero the display does not rezero, 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: To change units, press both On/Off and Zero buttons simultaneously.

Overpressure Indicator: The LCD will flash "OFL", if the pressure applied is over 105% F.S.

## **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 screw on backplate. Lift backplate off by hand. To reassemble, replace backplate and screw.

Replace batteries per polarity indicators.

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

#### **SPECIFICATIONS**

Service: DPG 1203: Air and compatible gases; DPG 1204: Compatible gases and liquids.

Wetted Materials: DPG 1203: 316L SS, silicone sensor; DPG 1204: 316L SS.

Housing Materials: ABS plastic.

**Accuracy:** ±1.0% F.S. (Includes linearity, hysteresis, repeatability).

Pressure Limits: 2X pressure range. Vacuum range max pressure is 30 psig.

**Temperature Limits:** 30 to 120°F (-1 to 49°C).

Thermal Effect: 0.05% FS/°F. Size: 2.62" O.D. x 1.52" deep. Process Connections: ¼" male NPT.

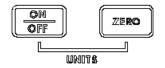
Display: 4-digit LCD (.425" H x .234" W digits).

Power Requirements: 9 volt alkaline battery. Battery included but not connected.

Auto Shut-off: 20 minute auto shut-off.

**Weight:** 5.6 oz (160 g). **Agency Approvals:** CE.

### **DPG 1203 & DPG 1204 BUTTON OPERATION**



#### To Turn On & Off:



Press to turn unit on.
Press again to turn unit off.

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# To Zero Display:

Zero

To zero display, disconnect gage from any pressure source. Press and hold zero button until the LCD displays "- - -", then release.

# To Change Units:



To change units, disconnect gage from any pressure source. Press both with a buttons simultaneously until desired units are displayed.

## **DPG 1203 MODELS**

Model		Pressure Ranges Re										Resolution	
Number	Range	psi	kg/cm <sup>2</sup>	bar	in Hg	ft wc	kPa	oz/in <sup>2</sup>	in wc	mbar	cm wc	mm Hg	psi
DPG 1203-00	0 to 30 in. Hg (vac)	-14.70	-1.033	-1.013	-29.93	-33.94	-101.4	-235.2	-407.3	-1013	-1034	-761	0.01
DPG 1203-01	0 to 20 in. w.c.	0.722	.0508	.0498	1.471	1.667	4.980	11.55	20.00	49.80	50.8	37.37	0.001
DPG 1203-02	0 to 1 psi	1.000	.0703	.0689	2.036	2.307	6.89	16.00	27.68	68.9	70.3	51.7	0.001
DPG 1203-03	0 to 2 psi	2.000	.1406	.1379	4.072	4.614	13.79	32.00	55.4	137.9	140.6	103.4	0.001
DPG 1203-04	0 to 5 psi	5.000	.3515	.3447	10.18	11.53	34.47	80.0	138.4	344.7	351.5	258.6	0.002
DPG 1203-05	0 to 15 psi	15.00	1.055	1.034	30.54	34.60	103.4	240.0	415.2	1034	1055	776	0.01
DPG 1203-06	0 to 30 psi	30.00	2.109	2.068	61.1	69.2	206.8	480.0	830	2068	2109	1551	0.01
DPG 1203-07	0 to 50 psi	50.00	3.515	3.447	101.8	115.3	344.7	800	1384	3447	3515	2586	0.02
DPG 1203-08	0 to 100 psi	100.0	7.03	6.89	203.6	230.7	689	1600	2768				0.1
DPG 1203-09	0 to 200 psi	200.0	14.06	13.79	407.2	461.3	1379	3200					0.1
DPG 1203-10	0 to 300 psi	300.0	21.09	20.68	611	692	2068	4800				•	0.1
DPG 1203-11	0 to 500 psi	500.0	35.15	34.47	1018	1153	3447						0.2

#### **DPG 1204 MODELS**

Model		Pressure Ranges R											Resolution
Number	Range	psi	kg/cm <sup>2</sup>	bar	in Hg	ft wc	kPa	oz/in <sup>2</sup>	in wc	mbar	cm wc	mm Hg	psi
	0 to 30 in. Hg												
DPG 1204-00	(vac)	-14.70	-1.033	-1.013	-29.93	-33.94	-101.4	-235.2	-407.3	-1013	-1034	-761	0.01
DPG 1204-04	0 to 5 psi	5.000	.3515	.3447	10.18	11.53	34.47	80.0	138.4	344.7	351.5	258.6	0.002
DPG 1204-05	0 to 15 psi	15.00	1.055	1.034	30.54	34.60	103.4	240.0	415.2	1034	1055	776	0.01
DPG 1204-06	0 to 30 psi	30.00	2.109	2.068	61.1	69.2	206.8	480.0	830	2068	2109	1551	0.01
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