

# Battery Powered Digital Pressure Gauge

## SERIES: DG50

- > HIGH ACCURACY (±0.2% F.S.)
- > 4-DIGIT LCD DISPLAY
- > STAINLESS STEEL CASE
- > IP-67 PROTECTION (WATERPROOF)
- > LONG BATTERY LIFE (2 AA)
- > LOW BATTERY WARNING
- > TEMPERATURE COMPENSATION
- > DIAPHRAGM SEALS (OPTION)
- > INTRINSICALLY SAFE (OPTION)
- > AVAILABLE RANGES: VACUUM TO 6000 PSI (400 BAR)



#### INTRODUCTION

Indumart *DG50 Series* Digital Pressure Gauges / Test Gauges are high-accuracy, high-resolution pressure indicators. Because of their robust design, these gauges meet stringent demands and can be used in critical industrial applications where particular importance is attached to measuring accuracy, reproducibility, long term stability and protection against water immersion and dust penetration.

The electronics and sensing element of the *DG50 Series* are housed in a 4" diameter, stainless steel case. The measuring element is an alumina ceramic diaphragm strain gauge, compatible with most gases and liquids. When used for food applications, the *DG50 Series* may be supplied with hygienic fittings, and for viscous or corrosive media services diaphragm seals can be included at the time of ordering.

The four-digit, 12.7 mm high LCD display can show pressure measurements in either of the two selected units of measurements. The two units of measurements are selected by the customer at the time of ordering and operators may switch between the two units at the site.

As a standard practice, all *DG50 Series* are calibrated at 20°C. If working constantly at a higher or a lower temperature, the instrument can be calibrated to the user specifications. While operating at a significant temperature range, temperature compensation will correct both zero and span drifts.

If the DG50 Pressure Gauges are to be used in potentially explosive environments specified to EEX ia IIC T4, the intrinsically safe option must be ordered for optimum safety.

#### **SPECIFICATIONS**

Accuracy ±0.2% of full scale Case & Bezel 304 stainless steel

**Case Diameter** 100 mm

4-digit LCD; 12.7 mm high Display

Sensor Alumina ceramic (Al, O3)

diaphragm strain gauge

Connection Back, bottom;

1/4" male; St. steel

**Pressure Ranges** Variable ranges: vacuum up

to 6000 psi - see the table

**Over Pressure** 1.25 x max. pressure

Temp. Compensation -10...+60°C

Storage Temp. -20...+85°C

-10...+60°C **Ambient Temp.** 

-20...+100°C Medium Temp.

Case Temp. -10...+60°C

3 VDC; 2 x 1.5 V "AA Cells" **Power** 

**Battery Life** 1 year @ 2 sec. update rate

**Low Power Warning** Display will alternate between

pressure reading and BATT

**Explosion Protection** EEx ia IIC, T4

**Display Update Rate** 2 sec. / 0.5 sec. - selectable

**Protection Class IP67** 

Weight 2 lb (900 g)

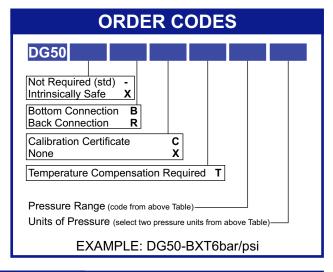
Specifications may change without prior notice

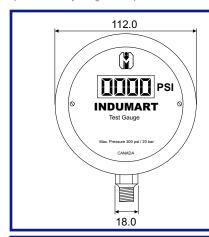
PRESSURE RANGES & PERFORMANCE SPECIFICATIONS				
Code	Range <sup>†</sup>			Accuracy*
	kPa	PSI	Bar	
1	-100+100	-14.5+15	-1+1	±0.25% f.s
2	050	07.5	00.5	±0.25% f.s
3	0100	015	01	±0.20% f.s
4	0200	030	02	±0.20% f.s
5	0500	075	05	±0.20% f.s
6	01000	0150	010	±0.20% f.s
7	02000	0300	020	±0.20% f.s
8	05000	0750	050	±0.20% f.s
9		01500	0100	±0.20% f.s
10		03000	0200	±0.20% f.s
11		05000	0350	±0.20% f.s
12		06000	0400	±0.20% f.s

\* Accuracy includes: Linearity + Hysteresis + Repeatability

† Other available measurement units are: mm H2O, cm H2O, in H2O, mm Hg, in Hg, mbar and MPa.

Above figures are for instruments operating at the calibration temperature of 20°C. While working at other temperatures, add ±0.01%fs/°C zero drift and ±0.01%fs/°C span drift.





### **DIMENSIONS (mm)**

