

# DigiGauge Digital Pressure Gauges & Transmitters

- High Accuracy  $\pm 0.2\%$  full scale
- Stainless steel IP67 case
- Long battery life - 1 year continuous operation from 2 AA cells
- Wide selection of pressure ranges from vacuum to 400 bar
- 4 to 20mA output option available
- Intrinsically safe versions available
- Supplied with calibration certificate traceable to National Standards
- Available with MAX and MIN pressure readings



High accuracy and a 4 digit display enables the DigiGauge to be used as a digital standard test gauge, replacing less accurate, sometimes fragile analogue test gauges. Factory calibration certificates traceable to National Standards are provided and UKAS calibration certificates can be supplied if required.

Covering a wide range of test and measurement applications with pressure ranges available from vacuum to 400 bar, DigiGauge can be supplied with hygienic fittings for food applications or with diaphragm seals for use on corrosive, viscous or crystallising fluids.

All standard DigiGauge's are calibrated in a controlled environment at  $20^{\circ}\text{C} \pm 3^{\circ}\text{C}$ . Temperature compensated sensors are fitted as standard to automatically correct zero and span drift.

All versions of DigiGauge can also be specified with a MAXIMUM and MINIMUM pressure logging option.

## Specifications

### Case

100mm / 4" diameter 304 stainless steel case and bezel

### Process Connection

1/4" NPT or 1/4" BSP - other sizes are available on request

### Protection

IP67 / NEMA 4X

### Display

4 digit LCD with 12.7mm / 1/2" high characters

### Display Update Rate

0.5 seconds or 2 seconds user selectable

### Sensor

Alumina ceramic (Al<sub>2</sub>O<sub>3</sub>) diaphragm strain gauge

### Over pressure

Maximum pressure applied to be < 1.25 x full scale

### Compensated Range

-10 to 60°C (14 to 140°F)

### Wetted Parts

316 stainless steel, Fluorocarbon and ceramic

### Temperature Limits

Storage : -20 to 85°C (-4 to 185°F)

Ambient operating : -20 to 70°C (-4 to 158°F)

Internal Case : -10 to 60°C (14 to 140°F)

Pressure Medium: -20 to 100°C (-4 to 212°F)

### Power Source

(3V DC battery), 2 x 1.5V "AA" alkaline cells

### Battery Life

12 months continuous operation at 2 second update.

Low Power Warning\*

Display will alternate between reading & "BATT"

### Accuracy

See range table below

### Weight

900g

\*Not applicable to DigiGauge TX

## Standard Pressure Ranges

Bar Range	Resolution	PSI Range	Resolution	Accuracy*
-1 to +1 bar	1 mbar	-15 to +15 psi	0.01 psi	$\pm 0.25\%$ fs
0 to 1 bar	1 mbar	0 to 15 psi	0.01 psi	$\pm 0.25\%$ fs
0 to 2 bar	1 mbar	0 to 30 psi	0.01 psi	$\pm 0.2\%$ fs
0 to 2.5 bar	1 mbar	0 to 60 psi	0.01 psi	$\pm 0.2\%$ fs
0 to 6 bar	1 mbar	0 to 90 psi	0.01 psi	$\pm 0.2\%$ fs
0 to 10 bar	10 mbar	0 to 150 psi	0.1 psi	$\pm 0.2\%$ fs
0 to 16 bar	10 mbar	0 to 275 psi	0.1 psi	$\pm 0.2\%$ fs
0 to 20 bar	10 mbar	0 to 300 psi	0.1 psi	$\pm 0.2\%$ fs
0 to 25 bar	10 mbar	0 to 375 psi	0.1 psi	$\pm 0.2\%$ fs
0 to 40 bar	10 mbar	0 to 600 psi	1 psi	$\pm 0.2\%$ fs
0 to 50 bar	10 mbar	0 to 750 psi	1 psi	$\pm 0.2\%$ fs
0 to 60 bar	10 mbar	0 to 900 psi	1 psi	$\pm 0.2\%$ fs
0 to 100 bar	100 mbar	0 to 1500 psi	1 psi	$\pm 0.2\%$ fs
0 to 200 bar	100 mbar	0 to 3000 psi	1 psi	$\pm 0.2\%$ fs
0 to 250 bar	100 mbar	0 to 3750 psi	1 psi	$\pm 0.25\%$ fs
0 to 400 bar	100 mbar	0 to 6000 psi	1 psi	$\pm 0.25\%$ fs

\*Note: Accuracy includes non linearity + hysteresis + repeatability Temperature coefficient of zero and span < 0.02% FS/°C

## DigiGauge Versions

### DigiGauge Tx



For applications that require both local indication and a 4/20mA transmitted signal to a remote control or monitoring system the DigiGauge Tx is the ideal instrument. The DigiGauge Tx operates as a conventional loop-powered 4/20mA two wire transmitter and can accept excitation voltages between 12V and 32V DC. The 4/20mA output can be set to operate across 100% of the instrument span or can be user configured, in set up mode, to operate across a limited range, minimum being 10% of instrument span.

Additionally, custom factory set configurations can be provided. Pressure ranges, accuracy and general specifications are as per the standard Rototherm DigiGauge. DigiGauge Tx is supplied with a 2 metre lead terminating in a 3 pole M8 connector.

### DigiGauge i.s.



For use in hazardous areas, as found in oil and gas processing, chemical and pharmaceutical plants, tankers and storage vessels, an intrinsically safe version of the DigiGauge is available.

Certified as intrinsically safe, by BASEEFA to the very latest ATEX standards, the DigiGauge i.s. is approved to EEx ia IIC T4(-20°C<Ta<60°C) certification and is designated as equipment Group II Category I Intrinsically Safe Apparatus.



The Rototherm DigiGauge i.s. is covered by ATEX certificate BAS99 ATEX 1004X.

Ranges, accuracy and general specifications are as per the standard DigiGauge.

## DigiGauge Ordering Codes

Standard Version	DG1					
Intrinsically Safe	DG1 IS					
Transmitter	DG1 Tx					

<b>Mounting</b>	
Direct vertical	V
Direct back	B
Panel	P
Surface	S

<b>Connection</b>	
1/4" BSP male	B
1/4" NPT male	N
Other (please state requirement)	X

<b>Pressure Range</b>	
Enter pressure range	XXX

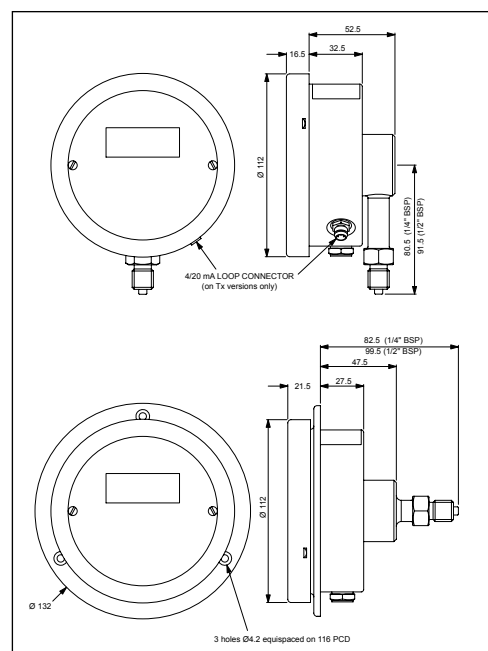
  

<b>MAX and MIN Pressure Readings</b>	
Required	1
Not Required	2

<b>Certification</b>	
Factory Calibration Certificate (supplied as standard)	1
UKAS Calibration Certificate	2

## DigiGauge Dimensions



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