Rototherm™

DG100 Series Digital Pressure Gauges

Description:

High accuracy and a 4 digit display enables the DG100 to be used as a digital standard test gauge, replacing less accurate, sometimes fragile analogue test gauges. The instrument is also capable of highly accurate pressure measurement in critical process areas. For hazardous area applications the ATEX certified intrinsically safe DGX100 can be specified.

All DG100 instruments can be supplied with a factory traceable calibration certificate, UKAS calibration certificates can also be supplied where required.

Covering a wide range of test and measurement applications, with pressure ranges available from vacuum to 1000barg and 0/40bar absolute, the DG100 can be supplied with a range of threaded process connections. Chemical seals can be fitted for particularly corrosive, viscous or crystallising fluids or for hygienic applications.

DG100 digital pressure gauges are calibrated in a controlled environment at 20°C +/- 3°C
Temperature compensated sensors are fitted as standard to automatically correct zero and span drift.

Features:

- High Accuracy +/–0.2% full scale
- Stainless steel IP65 case.
- Stainless steel wetted parts
- Long battery life – 1 year continuous operation from 1 x 3.6V AA battery
- Wide Selection of pressure ranges from vacuum to 1000bar
- Absolute pressure ranges available up to 40Bar
- Selection of pressure units : bar, psi, mbar, kPa, MPa, kg/cm², inHg, Metres Hd
- DGX100 ATEX Certified Intrinsically safe versions available.
- ATEX certified (intrinsically safe): II 1G Ex ia IIC T4 Ga Ta (–20°C to 60°C)

Technical Specification:

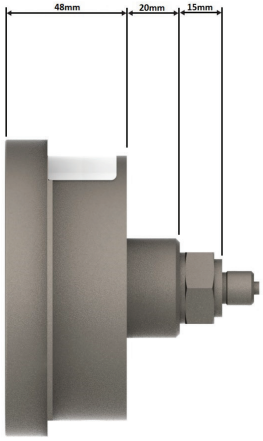
Case:	IP65 / NEMA 4 protected100mm/ 4" diameter 304 stainless steel case and bezel.
Process Connections:	¼" BSP, ¼" NPT, ½"BSP, ½"NPT
Display:	4 digit custom alpha numeric display with 14mm high characters, battery level indicator and pressure units indication.
Available Pressure Units:	Selectable via internal push button, bar, psi, mbar, kPa, MPa, kg/cm², inHg, Metres Hd
Sensor:	The DG100 features a piezoresistive pressure sensor, protected by a 316 Stainless Steel diaphragm with a 304 Stainless Steel housing, making it compatible with a wide range of gases and liquids.
Over Pressure:	Maximum pressure applied to be <1.5 x full scale.
Compensated temperature range:	0 to 50°C (32 to122°F)
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. -30 to 80°C (-22 to 176°F)
Power Source:	DG100. 1 x 3.6V AA battery. DGX100 [Atex Certified] 1 x Saft LS14500 3.6V Lithium Battery life – 12 months continuous operation.
Accuracy:	+/- 0.2% full scale – see range table range options and resolution.
Certification and Compliance:	EMC EN61326-1:2013 Electrical equipment for measurement, control and laboratory use EN IEC 61326-1:2021 Electrical equipment for measurement, control and laboratory use EMC requirements. Part 1: General requirements ATEX certified (intrinsically safe): II 1G Ex ia IIC T4 Ga Ta (-20°C to 60°C)
Weight:	900g

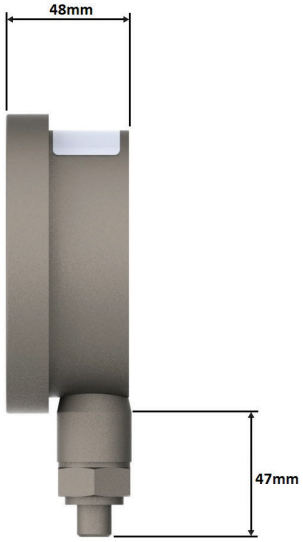
www.rotothermgroup.com
rototherm@rototherm.co.uk
(UK) +44 1656 740551

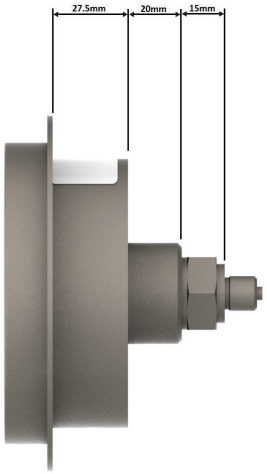
British Rototherm Group
Kenfig Industrial Estate,
Margam, Port Talbot
SA13 2PW United Kingdom

EST. 1847

Dimensions – DG100/ DGX100 Digital Pressure Gauge:







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Range Chart:

Range	Resolution
N1–0 BARG*	1mbar
0–0.2 BARG*	1mbar
0–0.7 BARG*	1mbar
0–1 BARG*	1mbar
0–3.5 BARG*	1mbar
0–7 BARG*	1mbar
0–10 BARG*	10mbar
0–20 BARG*	10mbar
0–40 BARG*	10mbar
0–70 BARG	10mbar
0–150 BARG	100mbar
0–200 BARG	100mbar
0–350 BARG	100mbar
0–700 BARG	100mbar
0–1000 BARG	1 bar

* Gauges up to 40 bar are also available in absolute ranges.

* Accuracy includes non linearity + hysteresis + repeatability. Temperature coefficient of zero and span <0.02%fs/°C.

* For gauge range instruments all ranges will be compound scale with a negative reading of 10% of full scale.

* All gauges can read 10% over stated maximum values.

Order Code DG100 Series:

Model

Standard Model	DG100
Instrinsically Safe	DGX100

Mounting

Direct Vertical (bottom entry	V
Direct Back	B
Panel	P

Connection

1/4"BSP Male	B
1/4"NPT Male	N
Other (please state requirement)	X

Pressure Range

Enter Pressure Range From Table	XXX
Gauge Calibration	G
Absolute Calibration	A

Calibration Certificate

None	N
Tactory Traceable	F
UKAS	U

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