

Digital pressure gauge

For general industrial applications

Model DG-05

WIKA data sheet PV 35.64

Applications

- Calibration service industry
- Measurement laboratories
- Machine building
- Hydraulics and pneumatics

Special features

- Stainless steel case for outdoor operating conditions
- Measuring ranges from 0 ... 400 bar
- Vacuum measurement until -1 bar
- Accuracy $\pm 0.5\%$ of span
- Battery operation (3 $\times$ 1.5V AA batteries)
- Backlight option for dark environments



Digital pressure gauge, model DG-05

Description

The model DG-05 digital pressure gauge enables the measurement and display of pressure values in a single instrument. The accuracy of digital measurement technology and the simplicity of an analogue gauge are combined in this instrument. DG-05 is built with high accurate piezo-resistive pressure sensor made of SS 316L diaphragm which is suitable for air and other non-corrosive process media. DG-05 offers an accuracy of $\pm 0.5\%$ of span, enables superior operating performance.

Readings can be displayed in one of eight standard units with optimum resolution via a large LCD display and back light option for dark environments. The display value can be zeroed with the simple press of Zero button. The robust stainless steel case encloses the circuit with IP65 protection for outdoor operating conditions.

DG-05 operates with three replaceable batteries of each 1.5V power. Automatic switch-off function features to prolong the battery life.

Measuring ranges

Range	Over pressure limit	Burst pressure
Unit : bar		
-1 ... 0	3	6
0 ... 1	2	5
0 ... 2.5	5	12.5
0 ... 4	8	20
0 ... 10	20	50
0 ... 16	32	80
0 ... 25	50	125
0 ... 40	80	160
0 ... 100	200	400
0 ... 250	375	1,000
0 ... 400	600	1,200

Range	Over pressure limit	Burst pressure
Unit : cmWC		
0 ... 200	600	1200
0 ... 350	1050	2100
0 ... 700	2100	4200

Specifications

Indicator	
Display	Four character numeral with one decimal point and three character for unit
Character size	12 mm [0.47 in]
Measuring rate	200 ms
Backlighting	Yes
Dimensions	50 x 14 mm [1.97 x 0.55 in]

Functions	
Automatic power-off	Adjustable
Zero function	Yes
Pressure Units	bar, psi, Kg/cm ² , kPa, Mpa, cmWC, mmWC, mbar, Torr*

Accuracy	
Accuracy	±0.5 % of span (including non-linearity, hysteresis, repeatability)
Temperature error at 0 ... 60°C	
Mean temperature coefficient of zero point	±0.15 % of span/10 K
Mean temperature coefficient of span	±0.15 % of span/10 K
Long-term stability	±0.2 % of span/year

Voltage supply	
Power supply	3 x 1.5 V AA batteries
Battery life	Approx. 1000 hours

* Torr unit applicable only for vacuum range

Process connection

Thread size	■ 1/4" NPT(M) per ASME B1.20.1
	■ 1/4" BSP(M) per ASME B1.20.1
	■ 1/2" NPT(M) & 1/4" NPT(F) per ASME B1.20.1
	■ 1/2" BSP(M) & 1/4" BSP(F) per ASME B1.20.1
	Others through adaptors refer datasheet AC 10.82

Material

Wetted parts

Process connection	Stainless steel 316
Sealing material	Viton
Sensor element	Stainless steel 316L

Non-wetted parts

Case	Stainless steel 304
Front foil and membrane	Polycarbonate

Operating condition

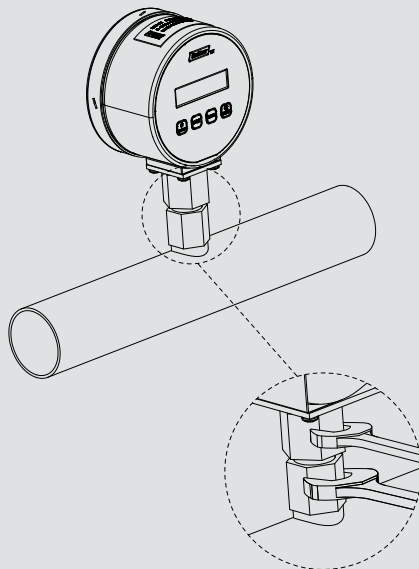
Ambient temperature	0 ... 60°C [32 ... 140 °F]
Medium temperature	0 ... 80°C [32 ... 176 °F]
Storage temperature	0 ... 50°C [32 ... 122 °F]
Relative humidity	< 95% (non-condensing)
Ingress protection	IP65 per IS/IEC 60529
Weight	Approx. 550 grams

Accessories

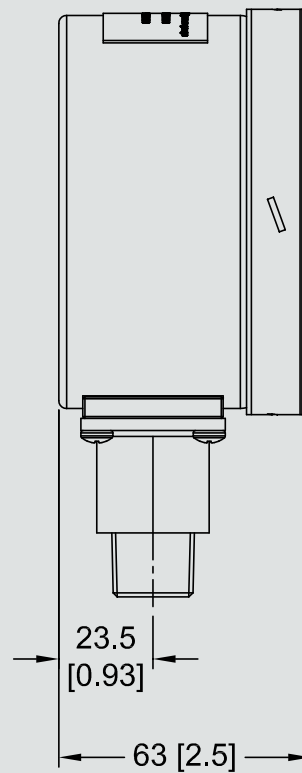
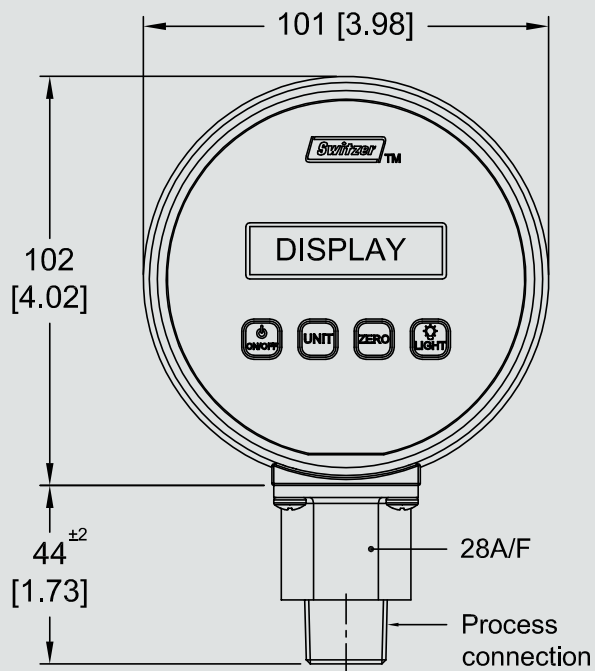
See data sheet AC 10.82

Mounting

Direct mounting



Dimensions in mm [in]



Ordering information

Model / Measuring range / Process connection / Accessories

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