

Digital Pressure Gauge Type DG-10

INSTRUMENTS • CONTROLS • VALVES

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ARCO

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Applications

- Mechanical engineering
- Hydraulics and Pneumatics
- Pumps and Compressors
- Service

Special Features

- Pressure ranges: from 0 ... 30 psi up to 0 ... 10,000 psi
- Display accuracy: $\leq \pm 0.25\%$ B.F.S.L.
- Pressure connections: G1/4 DIN 3852-E, 1/4 NPT male, 1/2 NPT male, G1/4B, G1/2B and others
- Case: stainless steel, 3.15" (80 mm) diameter
- Power supply: 2x 1.5 V Type AA cell

Description

Durable, precise local display

A digital display is ideal for precise and fast pressure readings. The DG-10 features a durable stainless steel housing and integral battery power supply making it suitable for a wide range of applications and industries.

The multi-function display features a bar graph with a drag pointer function and a MIN/MAX memory. The MIN/MAX memory feature permits later recall of the minimum and maximum pressure readings.



DG-10-S
Standard Version



DG-10-E
Enhanced Version

Standard and enhanced versions

The DG-10 is available in two versions: standard (DG-10-S) and enhanced (DG-10-E). Both versions allow the user to easily switch between the most widely-accepted international measurement units including bar, psi and MPa.

Additional features of the enhanced version include a back-lit display for use in low light conditions and a housing that can be rotated for optimal viewing. Additional user-programmable functions of the DG-10-E include auto power-off, tare function, and password protection.

Proven pressure measurement technology

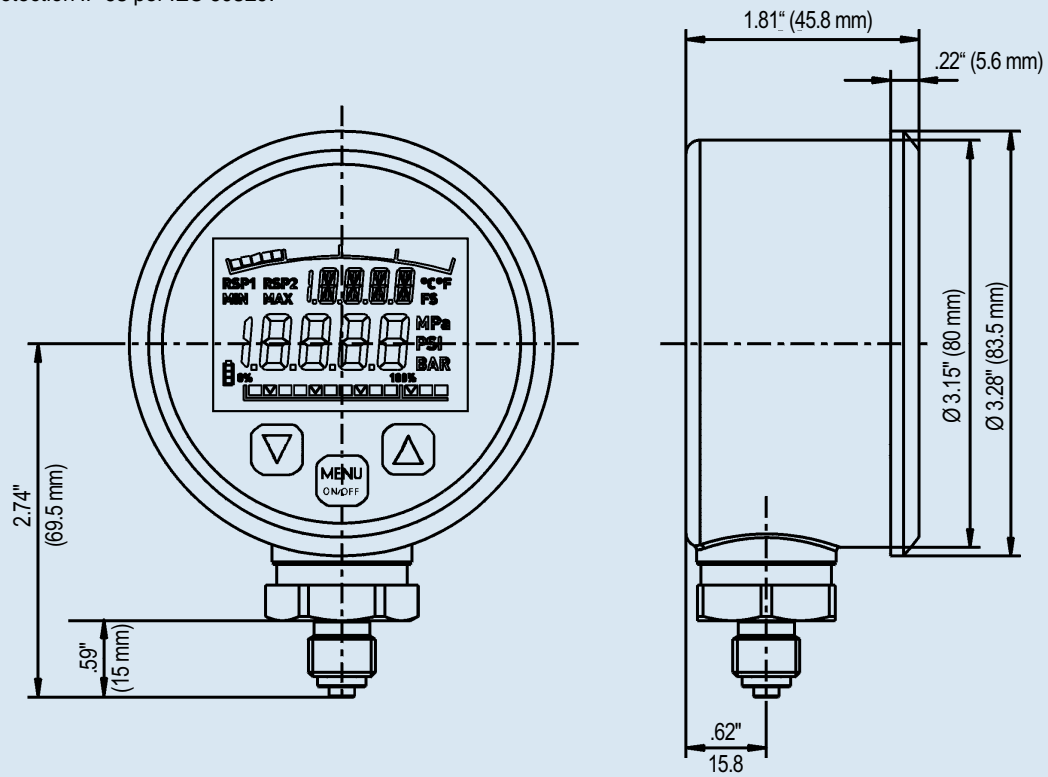
Sensors manufactured by WIKA provide high accuracy, long-term stability and excellent repeatability. For optimal performance, pressure ranges up to 600 psi (50 bar) use the WIKA ceramic sensor. Pressure ranges of 1450 psi (100 bar) and higher utilize WIKA thin film sensor technology.

Specifications		Type DG-10				
Pressure ranges	-30 InHg ... 29 psi	-30 InHg ... 72 psi	-30 InHg ... 145 psi	-30 InHg ... 290 psi	-30 InHg ... 145 psi	
Over pressure safety	70 psi	145	290	580	1,450 psi	
Burst pressure	85 psi	170	360	725	1,740 psi	
Pressure ranges	30 psi	60 psi	145 psi	300 psi	600 psi	1,450psi
Over pressure safety	70 psi	145 psi	290 psi	580 psi	1,450 psi	2,900 psi
Burst pressure	85 psi	170 psi	360 psi	725 psi	1,740 psi	11,600 psi
Pressure ranges	2,000 psi	3,000 psi	5,000 psi	7,500 psi	10,000 psi	
Over pressure safety	4,640 psi	7,250 psi	11,600 psi	17,400 psi	21,750 psi	
Burst pressure	14500 psi	17,400 psi	24,650 psi	34,800 psi	43,500 psi	
Materials						
■ Wetted parts						
» Pressure connection	1.4571, 316TI SS					
» Pressure sensor	Ceramic Al ₂ O ₃ 96%, NBR {EPDM } (up to 0 ... 600 psi)					
	XM-13 (1.4534) (≥ 1,450 psi)					
■ Case						
	1.4301, 304 SS					
Power supply	2x 1.5 V Type AA batteries					
Operating time	h	4,000 (AA 2,000 mAh)				
Internal sampling rate	ms	200				
Insulation voltage	VDC	500				
Display accuracy	% of span	≤ ± 0.25% B.F.S.L.				
Zero offset	% of span	≤ 0.1 (Power-up reset)				
Zero adjustability	% of span	≤ 20 (via Tare-Function with model DG-10-E)				
Hysteresis	% of span	≤ 0.1				
Non-repeatability	% of span	≤ 0.1				
Long-term stability per year	% of span	≤ 0.2				
Long-term drift	% of span	≤ 0.1				
Permissible temperature of						
■ Medium						
	-4°F ... +185°F (-20°C ... +85°C) (up to 0 ... 600 psi)					
	-22°F ... +212°F (-30°C ... +100°C) (≥ 1450 psi)					
■ Ambient						
	+14°F ... +140°F (-10°C ... +60°C)					
■ Storage						
	-4°F ... +158°F (-20°C ... +70°C)					
Operating temperature range	+32°F ... +140°F (0°C ... +60°C)					
Temperature coefficients within compensated temp range						
■ Mean TC of zero						
	% of span	≤ 0.15 / 10k				
■ Mean TC of span						
	% of span	≤ 0.15 / 10k				
CE-conformity						
■ Pressure equipment directive						
	97/23/EC					
■ EMC directive						
	89/336/EEC emission (class B) and immunity according to EN 61 326					
Case rotation	°	300 ° (only with model DG-10-E)				
Principle						
		DG-10-S	DG-10-E			
Principle		7 segment LCD 4 digit	7 segment LCD 4½ digit			
			14 segment LCD 4½ digit (2nd display)			
Digit size		.43" (11 mm)	.43 (11 mm) and .28" (7 mm)			
Display		-999 ... 9999	-1999 ... 19999			
Background illumination		No	Included			
Bar graph with trailing pointer function		Included	Included			
Min/Max memory		Included	Included			
Auto On/Off		Optional (ex works)	15/30/60/120 min			
Tare adjustment		No	Included			
Units bar, psi, MPa		Included	Included			
Password protection		No	Included			
Reset factory setting		No	Included			
Weight		Approx. 14oz. (400 g)				

{ } Items in curved brackets are optional extras for additional price.

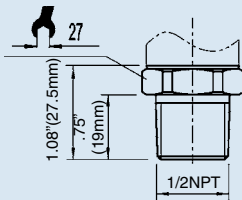
Dimensions in inches (mm)

Ingress protection IP 65 per IEC 60529.

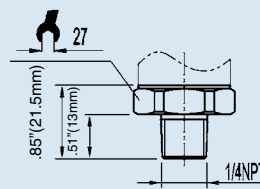


Pressure connections

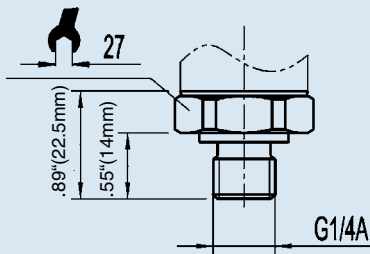
1/2 NPT male
Order code: ND



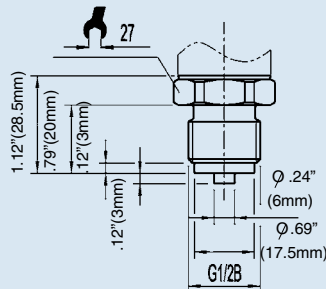
1/4 NPT male
Order code: NB



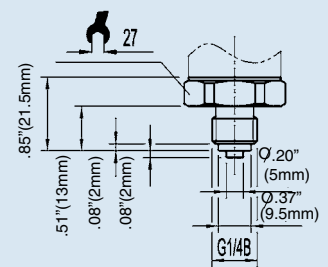
G 1/4 male
DIN 3852-E
Order code: HD



G1/2B
Order code: GD

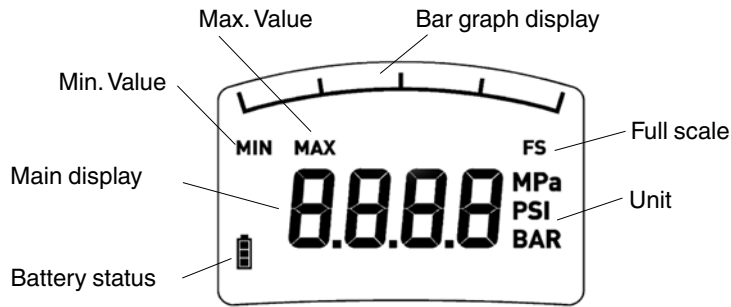


G1/4B
Order code: GB

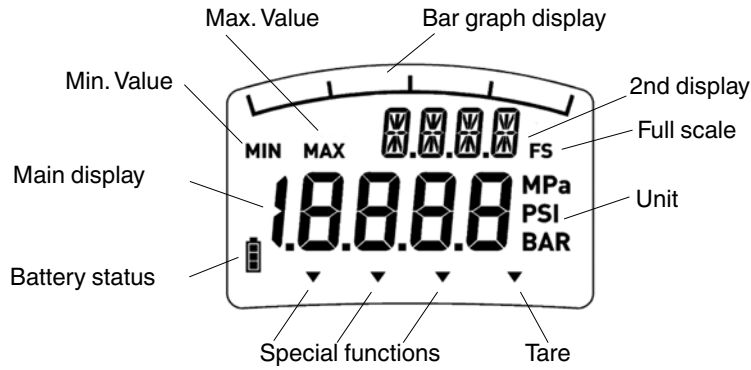


Description of the Display

DG-10-S



DG-10-E

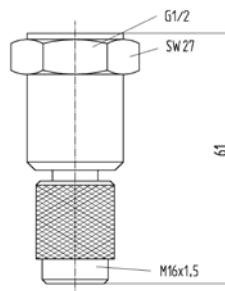


Accessories

**Protective boot
(black, vulcanized rubber)**



Minimess gauge adapter system



Specifications and dimensions given in this data sheet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

