Digital High-pressure Gauge LILLY$_{press}$ PLUS with Large Graphic Display

Pressure ranges 0 – 1000 bar to 0 – 3000 bar, accuracy ≤±0.25 % FS

DPG 1000

Application

The battery-operated digital high-pressure gauge DPG 1000 is suitable for measuring positive overpressures of gaseous and liquid media for pressure ranges from 0 – 1000 bar to 0 – 3000 bar. The electronic processing of the measuring signal opens up various possibilities for the device, which go far beyond those of the mechanical pressure gauges.
In addition to the large, highly legible, 5-digit digital indication for the measurand pressure, the graphic display also indicates a bargraph for orienting indication of the primary measurand pressure, the battery status and the set pressure unit. The device temperature close to the sensor can be displayed or hidden as required. The instrument is equipped with a MIN/MAX value memory, a damping function for suppressing pulsation, an automatic STANDBY function, adjustability of the number of decimal places, adjustability of the measuring rate as well as a TARE function for zero setting of the indication in the unpressurised state.
The device is encased EMC-safe in a proven bayonet ring case made of stainless steel (IP65) with atmospheric pressure compensation.

Construction

- Accuracy ≤±0.25 % FS
- Thin film sensor made of stainless steel, welded
- Bayonet ring case stainless steel, NCS 100 (4"), rotatable approx. 340°
- Large LC graphic display, digit height 14 mm (0.55")
- Temperature indication
- AUTO-STANDBY adjustable
- Number of decimal places adjustable
- Battery Li-SOCl2 3.6 V/2600 mAh
- High burst pressures and high overload

Standard Versions

Process Connection

Material:	stainless steel 1.4404 (1.4542)	
Connection threads:	G½B (½" BSP) (DIN EN 837)	≤2500 bar
	¼" HPF 9/16" – 18 UNF	0 – 3000 bar

Measuring Cell/Sensor
Stainless steel 1.4548 (AISI 630 / 17-4PH)
Hermetically welded, electron beam welding

Case
With bayonet ring polished, stainless steel 304 (1.4301), NCS 100 (4"), degree of protection IP65, rotatable

Pressure Ranges, Overload Capability and Burst Pressure
See page 2

Display

LC graphic display:	400 x 240 dot
Visible area:	58.8 x 35.3 mm (2.31 x 1.39")
Main indication pressure:	5 digits, digit height 14 mm (0.55")
Additional indication unit:	6 digits, digit height 5 mm (0.2")
Additional indication temperature:	–20 / +70 °C (–4 / +158 °F), digit height 3 mm (0.12")
Indicating range:	±99999
Pressure units:	bar, psi, kPa/MPa, kp/cm²
Temperature units:	°C, °F

TARE/ZERO function
MIN/MAX memory
Software low-pass
Measuring rate adjustable
Number of decimal places adjustable
Bargraph and battery status

[1] at +23 °C (73.4 °F), limited temperature range 0 – 50 °C (32 – 122 °F)

Supply Voltage
Battery Li-SOCl2 3.6 V/2600 mAh

Automatic Switchoff
AUTO-STANDBY adjustable in 10 minute steps or
OFF for deactivation of the automatic power save mode

Battery Life
>2400 h (depending on measuring rate and STANDBY time)

Measurement Accuracy
≤±0.25 % FS

Temperature

Operating temperature:	–20 °C to +70 °C (–4 °F to +158 °F)
Medium temperature:	–20 °C to +85 °C (–4 °F to +185 °F)
Storage temperature:	–20 °C to +70 °C (–4 °F to +158 °F)

Temperature Influence
≤0.1 % FS/10 K

Reference Temperature
+25 °C (+77 °F)

Long-term Stability
≤0.08 % FS/a (at reference conditions)

Sample Rate
>2 measurements/s, from 0.5 s adjustable in steps of seconds

Electromagnetic Compatibility
Interference emission and stability according to DIN EN 61 326

Options

- Connection threads: ½" NPT max. 0 – 1600 bar
  ¼" NPT max. 0 – 1600 bar
  M20x1.5 max. 0 – 1600 bar
- High-pressure connection: ¼" HPF 9/16" – 18 UNF 0 – 1000 bar to 0 – 2500 bar (for ¼" high pressure tube)
- Front foil neutral or according to customer request
- Increased measurement accuracy 0.1 % FS[1]

Ordering Information

Please specify in your order:

Basic model	DPG 1000
Process connection	e.g. G½B
Pressure range	e.g. 0 – 1600 bar
Option	e.g. increased measurement accuracy 0.1 % FS
Example:	**DPG 1000, G½B, 0 – 1600 bar**

www.armano-messtechnik.com

ARMANO
ARMANO Messtechnik GmbH

Location Beierfeld
Am Gewerbepark 9 • 08344 Grünhain-Beierfeld
Tel.: +49 3774 58 – 0 • Fax: +49 3774 58 – 545
mail@armano-beierfeld.com

Location Wesel
Manometerstraße 5 • 46487 Wesel-Ginderich
Tel.: +49 2803 9130 – 0 • Fax: +49 2803 1035
mail@armano-wesel.com

9641
08/20

Measuring Ranges, Overload Capability, Case Configuration, Dimensional Data and Weight

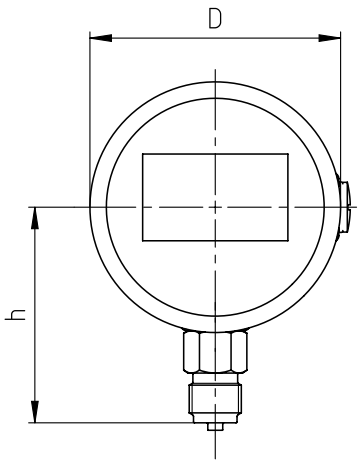
Measuring Ranges/Overload Capability in bar/psi

Measuring range		Overload		Burst pressure	
bar	psi	bar	psi	bar	psi
0 – 1,000	0 – 15,000	1,500	20,000	5,000	72,000
0 – 1,600	0 – 20,000	2,400	30,000	6,000	85,000
0 – 2,000	0 – 30,000	3,000	40,000	4,000	55,000
0 – 2,500	–	3,700	–	5,000	–
0 – 3,000	0 – 40,000	4,000	55,000	6,000	85,000

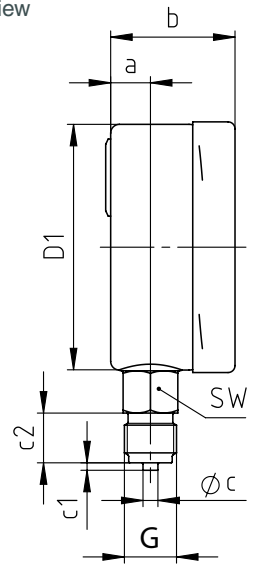
Process Connection

Standard: G½B / optional: M20x1.5

front view

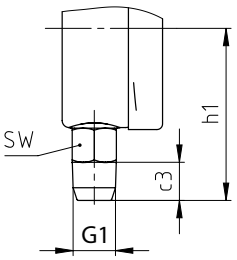


lateral view

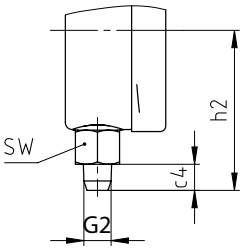


Optional process connections

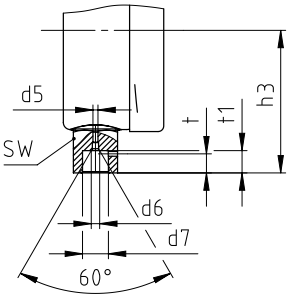
½" NPT



¼" NPT



High-pressure connection ¼" HPF 9/16" – 18 UNF



Dimensional Data (mm/inch) and Weight (kg/lb)

NCS	a	b	c	c1	c2	c3	c4	D	D1	d5	d6	d7	G	G1	G2
100 **4"**	16 **0.63**	50 **1.97**	6 **0.24**	5 **0.2**	20 **0.79**	19 **0.75**	13 **0.51**	101 **3.98**	99 **3.9**	3 **0.12**	4 **0.16**	¼" HPF 9/16" – 18 UNF	G½B **(½" BSP)** M20x1.5	½" NPT	¼" NPT

h±1	h1±1	h2±1	h3±1	t	t1	SW	approx. weight
87 **3.43**	84 **3.31**	80 **3.15**	71 **2.8**	9.5 **0.37**	11 **0.43**	22 **0.87**	0.46 **1.01**