



BAROLI 02

Battery Powered Digital Pressure Gauge

Stainless Steel Sensor

class 0.25

Nominal pressure

from 0 ... 100 mbar up to 0 ... 600 bar

Special characteristics

- ▶ rotatable housing
- ▶ 2-line LC display
4.5-digit 7-segment display
6-digit 14-segment additional display

Functions

- ▶ min / max function with reset function
- ▶ offset and end point calibration
- ▶ setting the pressure unit
(bar, mbar, psi, InHg, cmHg, mmHg,
hPa, kPa, MPa, mH₂O, InH₂O)
- ▶ switch-off automatic

The battery-powered digital pressure gauge BAROLI 02 enables a local displaying of values, satisfying the highest demands for accuracy and long-term stability. The pressure gauge may be applied in all media compatible with the stainless steel used; it shows an excellent robustness and a high overpressure protection.

The BAROLI 02 display housing is rotatable, thus ensuring an easy reading even under unfavourable mounting conditions.

Additional functions:

changing the unit, displaying min / max values, calibrating of offset and the span, configuring the automatic switching-off

Preferred areas of use are



Plant and machine engineering
Pneumatics / hydraulics
Measurement technology
Calibration and test purposes



Laboratory techniques



Environmental engineering
(water – sewage – recycling)



Input pressure ranges											
Nominal pressure gauge [bar]	0.10	0.16	0.25	0.40	0.60	1	1.6	2.5	4	6	
Nominal pressure abs. [bar]	-	-	-	0.40	0.60	1	1.6	2.5	4	6	
Overpressure [bar]	0.5	1	1	2	5	5	10	10	20	40	
Burst pressure [bar]	1.5	1.5	1.5	3	7.5	7.5	15	15	25	50	

Nominal pressure gauge / absolute [bar]	10	16	25	40	60	100	160	250	400	600	
Overpressure [bar]	40	80	80	105	105	210	600	1050	1050	1250	
Burst pressure [bar]	50	120	120	210	210	420	1000	1250	1250	1250	
Vacuum pressure	-1 ... 0 bar, overpressure: 5 bar, burst pressure: 7.5 bar other vacuum ranges on request										
Vacuum resistance	P _N ≥ 1 bar: unlimited vacuum resistance; P _N < 1 bar: on request										

Performance

Accuracy¹
nominal pressure ≥ 0.4 bar: ≤ ± 0.25 % FSO
nominal pressure < 0.4 bar: ≤ ± 0.5 % FSO

Measuring rate
5/sec

Long term stability
≤ ± 0.1 % FSO / year at reference conditions

¹ accuracy according to IEC 61298-2 – limit point adjustment (non-linearity, hysteresis, repeatability)

Thermal effects (offset and span)

Nominal pressure P _N [bar]	-1 ... 0	≤ 0.40	> 0.40
Tolerance band [% FS]	≤ ± 0.75	≤ ± 1	≤ ± 0.75
in compensated range [°C]	-20 ... 85 °C	0 ... 70 °C	-20 ... 85 °C

Permissible temperatures

Permissible temperatures medium: -20 ... 85 °C environment: -20 ... 70 °C storage: -30 ... 80 °C

Mechanical stability

Vibration 5 g RMS / 10 ... 2000 Hz according to DIN EN 60068-2-6
Shock 500 g / 1 msec half sine according to DIN EN 60068-2-27

Materials

Pressure port / Housing	stainless steel 1.4404 (316 L)
Display housing	PA 6.6, polycarbonate
Seals (media wetted)	FKM
Diaphragm	stainless steel 1.4435 (316 L)
Media wetted parts	pressure port, seals, diaphragm

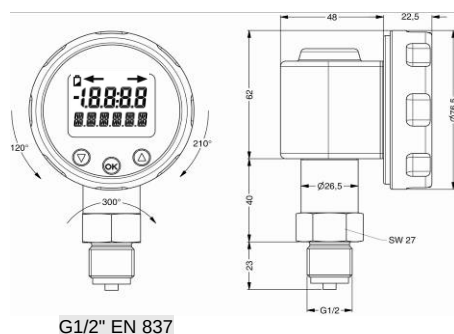
Miscellaneous

Display	LC display, visible range 40 x 30 mm; 4.5-digit 7-segment-display, digit height 11 mm, range of indication ±19999; 6-digit 14-segment additional display, digit height 7.5 mm		
Electromagnetic compatibility	emission and immunity according to EN 61326		
Supply	3.6 V Lithium battery; 2 pieces (type 1/2 AA)		
Data storage	EEPROM (non-volatile)		
Ingress protection	IP 65		
Installation position	any ²		
Weight	approx. 300 g		
AD-converter solution	14 Bit		
Operational life of battery	standby mode: approx. 5 years		
Mech. operational life	100 million load cycles		
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (Modul A) ³		

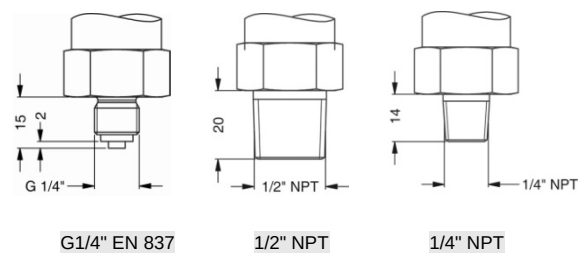
² The digital pressure gauge is calibrated in a vertical position with the pressure connection down. If this position is changed on installation there can be slight deviations in the zero point for devices with stainless steel sensor and pressure range P_N ≤ 1 bar.

³ This directive is only valid for devices with maximum permissible overpressure > 200 bar.

Dimensions (in mm)



G1/2" EN 837



G1/4" EN 837

1/2" NPT

1/4" NPT

⇒ for nominal pressure P_N > 60 bar increases the length of devices by 9 mm!

The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

Ordering code BAROLI 02

BAROLI 02

□□□□ - □□□□ - 0 - □ - 0 K 0 - □□□□ - □ - □ - □ - □ - □□□□

Pressure		M	O	E
	gauge			
	absolute ¹⁾	M	O	F
Input		[bar]		
	0.10 ¹⁾	1	0	0
	0.16 ¹⁾	1	6	0
	0.25 ¹⁾	2	5	0
	0.40	4	0	0
	0.60	6	0	0
	1.0	1	0	1
	1.6	1	6	1
	2.5	2	5	1
	4.0	4	0	1
	6.0	6	0	1
	10	1	0	2
	16	1	6	2
	25	2	5	2
	40	4	0	2
	60	6	0	2
	100	1	0	3
	160	1	6	3
	250	2	5	3
	400	4	0	3
	600	6	0	3
	-1 ... 0	X	1	2
	customer	9	9	9
Accuracy				
standard for p _N ≥ 0.4 bar	0.25 % FSO	2		
standard for p _N < 0.4 bar	0.5 % FSO	5		
	customer	9		
Mechanical connection				
G1/2" EN 837		2	0	0
G1/4" EN 837		4	0	0
1/2" NPT		N	0	0
1/4" NPT		N	4	0
customer		9	9	9
Seal				
FKM		1		
customer		9		
Pressure port				
stainless steel 1.4404 (316L)		1		
customer		9		
Diaphragm				
stainless steel 1.4435 (316L)		1		
customer		9		
Front foil				
standard			1	
neutral			N	
customer			9	
Special version				
standard			0	0
customer			9	9

¹ absolute pressure possible from 0.4 bar