



BAROLI 02

Battery Powered Digital Pressure Gauge

Stainless Steel Diaphragm

class 0.1

BAROLI 02
Digital Pressure Gauge

Product characteristics

- ▶ nominal pressure ranges from 0 ... 100 mbar up to 0 ... 600 bar
- ▶ rotatable housing
- ▶ 2-line LC display 4.5-digit 7-segment display 6-digit 14-segment additional display
- ▶ different mechanical connections: inch, NPT threads

Functions

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

CE

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 unfavorable mounting conditions.

Additional functions as switching the unit, displaying min / max values, calibrating the offset and the span, as well as configuring the automatic switching-off complete the profile.

Preferred areas of use are



Plant and Machine Engineering
Pneumatics / Hydraulics
Measurement Technology
Calibration and Test Purposes



Laboratory Techniques



Environmental Engineering

Input pressure ranges																					
Nominal pressure gauge / abs.	[bar]	0.10	0.16	0.25	0.40	0.60	1	1.6	2.5	4	6										
Overpressure	[bar]	1	1	1	1	3	3	6	10	10	20										
Burst pressure	[bar]	1.5	1.5	1.5	1.5	5	5	10	15	15	35										
Nominal pressure gauge / abs.	[bar]	10	16	25	40	60	100	160	250	400	600										
Overpressure	[bar]	60	60	60	100	210	210	550	900	900	1100										
Burst pressure	[bar]	100	100	100	175	350	350	600	1000	1000	1200										
Low pressure	-	-1 ... 0 bar, overpressure: 3 bar, burst pressure: 5 bar				other low pressure ranges on request															
Performance																					
Accuracy ¹		$\leq \pm 0.125\% \text{ FSO BFSL}$																			
Measuring rate		5/sec																			
Long term stability		$\leq \pm 0.1\% \text{ FSO / year}$																			
¹ accuracy according to IEC 60770 – 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	[% FSI]	$\leq \pm 0.75$		$\leq \pm 1$		$\leq \pm 0.75$															
in compensated range	°C	0 ... 70																			
Permissible temperatures																					
Permissible temperatures		medium: -20 ... 85 °C		environment: -20 ... 70 °C		storage: -30 ... 80 °C															
Mechanical stability																					
Vibration		5 g RMS (25 ... 2000 Hz)		according to DIN EN 60068-2-6																	
Shock		100 g / 1 msec		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 piece (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		$> 100 \times 10^6$ pressure cycles																			
CE-conformity		EMC Directive: 2004/108/EG		Pressure Equipment Directive: 97/23/EG (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)																					
																					

