

IBAR 05

Battery Powered Digital Pressure Gauge

Ceramic Sensor

class 0.2

Nominal pressure

from 0 ... 400 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
- ▶ 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, InHg, cmHg, mmHg,
hPa, kPa, MPa, mH₂O, InH₂O)
- ▶ switch-off automatic configuration

The battery-powered digital pressure gauge BAROLI 05 has been designed for measuring the pressure (absolute or gauge) of fluids, oils and gases.

The display housing is rotatable, thus ensuring an easy reading even under unfavorable mounting conditions. Additional functions as changing unit, displaying min / max values, calibrating the offset and of span, as well as configuring the automatic switching-off complete the profile.

Preferred areas of use are



Plant and Machine Engineering
Pneumatics / Hydraulics



Laboratory Techniques



Environmental Engineering
(water - sewage - recycling)



Input pressure range																		
Nominal pressure gauge	[bar]	0.4	0.6	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	600
Nominal pressure abs.	[bar]	-	0.6	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	600
Overpressure	[bar]	1	2	2	4	4	10	10	20	40	40	100	100	200	400	400	600	800
Burst pressure	[bar]	2	4	4	5	5	12	12	25	50	50	120	120	250	500	500	650	880
Vacuum pressure		-1 ... 0 bar, overpressure: 4 bar, burst pressure: 7 bar																
Vacuum resistance		P _N ≥ 1 bar: unlimited vacuum resistance P _N < 1 bar: on request																

Performance	
Accuracy ¹	≤ ± 0.25 % FSO BFSL
Measuring rate	5/sec
¹ accuracy according to IEC 60770 – minimum value setting (non-linearity, hysteresis, repeatability)	
Thermal effects (Offset and Span)	
Thermal effects	≤ ± 0.2 % FSO / 10 K in compensated range -25 ... 85 °C
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 (316L)
Display housing	PA 6.6, Polycarbonate
Seals (media wetted)	FKM
Diaphragm	ceramics Al ₂ O ₃ 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Display	LC-Display, visible range 40 x 30 mm; 4.5-digit 7-segment main 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 (1/2 AA)
Data storage	EEPROM (non-volatile)
Ingress protection	IP 65
Installation position	any
Weight	approx. 300 g
AD-converter solution	14 Bit
Operational life of battery	Standby-Modus: approx. 5 years
Mechanical operational life	> 100 x 10 ⁶ pressure cycles
CE-conformity	EMC directive: 2014/30/EU pressure equipment directive: 97/23/EC (Modul A) ²

² This directive is only valid for devices with maximum permissible overpressure > 200 bar.

Dimensions (in mm)													
<table border="1"> <thead> <tr> <th colspan="2">dimensioning value A:</th> </tr> <tr> <th>pressure port</th> <th>mm:</th> </tr> </thead> <tbody> <tr> <td>G1/2" EN 837</td> <td>62.5</td> </tr> <tr> <td>G1/4" EN 837</td> <td>54.5</td> </tr> <tr> <td>1/4" NPT</td> <td>54.5</td> </tr> <tr> <td>1/2" NPT</td> <td>60.5</td> </tr> </tbody> </table>		dimensioning value A:		pressure port	mm:	G1/2" EN 837	62.5	G1/4" EN 837	54.5	1/4" NPT	54.5	1/2" NPT	60.5
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