



BAROLI 05

Battery Powered Digital Pressure Gauge

Ceramic Sensor

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 unfavourable 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	≤ ± 0.5 % span	
Measuring rate	5/sec	
¹ accuracy according to IEC 60770 (non-linearity, hysteresis, repeatability)		
Thermal effects (Offset and Span)		
Thermal effects	≤ ± 0.2 % span / 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 million load cycles	
CE-conformity	EMC directive: 2014/30/EU pressure equipment directive: 2014/68/EU (Module 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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pressure port	mm:												
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This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.

Ordering code BAROLI 05

9.12.2020

BAROLI 05

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Pressure																					
Gauge	M	0	0																		
Absolute	M	0	1																		
Input [bar]																					
0 ... 0,4				4	0	0	0														
0 ... 0,6				6	0	0	0														
0 ... 1				1	0	0	1														
0 ... 1,6				1	6	0	1														
0 ... 2,5				2	5	0	1														
0 ... 4				4	0	0	1														
0 ... 6				6	0	0	1														
0 ... 10				1	0	0	2														
0 ... 16				1	6	0	2														
0 ... 25				2	5	0	2														
0 ... 40				4	0	0	2														
0 ... 60				6	0	0	2														
0 ... 100				1	0	0	3														
0 ... 160				1	6	0	3														
0 ... 250				2	5	0	3														
0 ... 400				4	0	0	3														
0 ... 600				6	0	0	3														
-1 ... 0			X	1	0	2															
Customer			9	9	9	9															
Customer underpressure		X	X	X	X																
Customer (P _N > 40 bar)		9	9	9	9																
Customer underpressure (P _N > 40 bar)		X	X	X	X																
Accuracy																					
0,5 %				5																	
0,5 % including Calibration Certificate				T																	
1 % (P _N < 0 bar)				8																	
Customer				9																	
Mechanical connection																					
G 1/2" EN 837				2	0	0															
G 1/4" EN 837				4	0	0															
M 20 x 1,5 EN 837				8	0	0															
1/2" NPT				N	0	0															
1/4" NPT				N	4	0															
Customer				9	9	9															
Seals																					
Viton (FKM) (P _N < 100 bar)				1																	
NBR (P _N ≥ 100 bar)				5																	
Customer				9																	
Pressure port																					
Stainless steel 1.4404 (316 L)				1																	
Customer				9																	
Diaphragm																					
Ceramic Al ₂ O ₃ 96 %				2																	
Customer				9																	
Front foil																					
Standard (design BD SENSORS)				1																	
Neutral				N																	
Special version																					
Standard																			0	0	0
Version for oxygen (Viton o-rings, max. 25 bar)																			0	0	7
Customer																			9	9	9
Accessories																					
Battery (order always 2pcs)																					1000377

0,-...without additional charge

On request...in accordance with the producer



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The company BD SENSORS s.r.o. is certified by TÜV SÜD Czech according to the standard ISO 9001.



Surcharges for calibration are not subject to any discounts. Subject to change. □

This document contains the specification for ordering the product; detailed technical parameters of the product and its possible variants are given in the data sheet. BD SENSORS reserves the right to change sensor specifications without further notice.



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