



BAROLI 05P

Battery Powered Digital Pressure Gauge

Stainless Steel Diaphragm Flush Welded

Nominal pressure

from 0 ... 60 bar up to 0 ... 400 bar

Product characteristics

- ▶ rotatable housing
- ▶ 2-line LC display
4.5-digit 7-segment display
6-digit 14-segment additional display
- ▶ for viscous and pasty media

Functions

- ▶ min / max function with reset function
- ▶ offset and end point calibration
- ▶ setting the pressure unit
- ▶ switch-off automatic configuration

The battery-powered digital pressure gauge BAROLI 05P with flush welded stainless steel diaphragm enables a local displaying of values in applications, where high requirements on hygienic process connections and easy cleaning or sterilisability are requested. The filling medium is food compatible oil with FDA approval.

The BAROLI 05P display housing is rotatable, thus ensuring an easy reading even under unfavourable mounting conditions. Additional functions as changing unit, displaying min / max values, calibrating of offset and span, as well as configuring the automatic switching-off complete the profile.

Preferred areas of use are



Plant and Machine Engineering



Food Industry



Input pressure range						
Nominal pressure gauge / abs.	[bar]	60	100	160	250	400
Overpressure	[bar]	100	200	400	400	600
Burst pressure \geq	[bar]	120	250	500	500	650
Performance						
Accuracy ¹		$\leq \pm 0.5\%$ span				
Measuring rate		5/sec				
¹ accuracy according to EN IEC 62828-2- (non-linearity, hysteresis, repeatability)						
Thermal effects (Offset and Span)						
Tolerance band	[% span]	$\leq \pm 0.2\%$ span / 10 K				
In compensated range	[°C]	0 ... 70				
Permissible temperatures ²		medium:	-40 ... 125 °C for filling fluid silicon oil			
			-10 ... 125 °C for filling fluid food compatible oil			
		environment:	-20 ... 70 °C			
		storage:	-30 ... 80 °C			
² max temperature of the medium for nominal pressure gauge > 0 bar: 150 °C for 60 minutes with a max. environmental temperature of 50 °C						
Mechanical stability						
Vibration		5 g RMS (25 ... 2000 Hz)	according to IEC 60068-2-6			
Shock		100 g / 1 msec	according to IEC 60068-2-27			
Materials / Filling fluids						
Housing		stainless steel 1.4404 (316L)				
Pressure port		stainless steel 1.4435 (316L)				
Display housing		PA 6.6, Polycarbonate				
Seals (media wetted)		FKM				
Diaphragm		stainless steel 1.4435 (316L)				
Media wetted parts		pressure port, seals, diaphragm				
Filling fluids		standard: silicon oil option: food compatible oil with 21CFR178.3570 certificate (Mobil SCH Cibus 32; Category Code: H1; NSF Registration No.: 141500) others on request				
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 (standard calibrating in a vertical position with the pressure connection down)				
Weight		min. 350 g (depending on pressure port)				
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) ³		
³ This directive is only valid for devices with maximum permissible overpressure > 200 bar.						
Dimensions (in mm)						
standard					option	
G1/2" flush (DIN 3852)		flush diaphragm $\varnothing 18$			G1" flush (DIN 3852)	

Ordering code BAROLI 05P

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BAROLI 05P

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Pressure										
Gauge	M	0	5							
Absolute	M	0	6							
Input [bar]										
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			
Customer				9	9	9	9			
Accuracy										
0,5 %									5	
Customer									9	
Mechanical connection										
G 1/2" DIN with flush welded diaphragm (only for P _N ≥ 1 bar)								Z	0	0
G 1" DIN 3852 with flush welded diaphragm								Z	3	1
Customer								9	9	9
Seals										
FKM									1	
Customer									9	
Diaphragm										
Stainless steel 1.4435 (316 L)									1	
Customer									9	
Front foil										
Standard (design BD SENSORS)									1	
Neutral									N	
Customer									9	
Filling fluids										
Silicone oil									1	
Food compatible oil									2	
Customer									9	
Special version										
Standard									0	0
Customer									9	9
Accessories										
Battery (2 pcs needed)										1000377

On request...in accordance with the producer

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.



BD SENSORS s.r.o.
Hradištská 817
CZ – 687 08 Buchlovice

Tel.: +420 572 411 011
Fax: +420 572 411 497

www.bdsensors.cz
info@bdsensors.cz

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

