



# 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



# BAROLI 05P

Digital Pressure Gauge

Technical Data

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 <sup>1</sup>		$\leq \pm 0.5\%$ span				
Measuring rate		5/sec				
<sup>1</sup> 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 <sup>2</sup>		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			
<sup>2</sup> 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 $\pm 19999$ ; 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) <sup>3</sup>		
<sup>3</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar.						
Dimensions (in mm)						

This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.

Ordering code BAROLI 05P

23.08.2024

BAROLI 05P

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<b>Pressure</b>										
Gauge	M	0	5							
Absolute	M	0	6							
<b>Input [bar]</b>										
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			
<b>Accuracy</b>										
0,5 %								5		
Customer								9		
<b>Mechanical connection</b>										
G 1/2" DIN with flush welded diaphragm (only for $P_N \geq 1$ bar)								Z	0	0
G 1" DIN 3852 with flush welded diaphragm								Z	3	1
Customer								9	9	9
<b>Seals</b>										
FKM									1	
Customer									9	
<b>Diaphragm</b>										
Stainless steel 1.4435 (316 L)									1	
Customer									9	
<b>Front foil</b>										
Standard (design BD SENSORS)									1	
Neutral									N	
Customer									9	
<b>Filling fluids</b>										
Silicone oil									1	
Food compatible oil									2	
Customer									9	
<b>Special version</b>										
Standard									0	0
Customer									9	9
<b>Accessories</b>										
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 DS  
BD SENSORS reserves the right to change sensor specifications without further notice.

