



# BAROLI 05P

## Battery Powered Digital Pressure Gauge

Stainless Steel Diaphragm Flush Welded

class 0.2

### 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 unfavorable 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 <sup>1</sup>		$\leq \pm 0.25$ % FSO BFSL				
Measuring rate		5/sec				
<sup>1</sup> accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)						
Thermal effects (Offset and Span)						
Tolerance band	[% FS]	$\leq \pm 0.2$ % FSO / 10 K				
In compensated range	[°C]	0 ... 70				
Permissible temperatures <sup>2</sup>	medium:	-40 ... 125 °C for filling fluid silicon oil				
	environment:	-10 ... 125 °C for filling fluid food compatible oil				
	storage:	-20 ... 70 °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 / Pressure port		stainless steel 1.4404 (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 FDA approval (Mobil DTE FM 32; Category Code: H1; NSF Registration No.: 130662) 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 x 10 <sup>6</sup> pressure cycles				
CE-conformity		EMC directive: 2004/108/EC		pressure equipment directive: 97/23/EC (Modul A) <sup>3</sup>		
<sup>3</sup> This directive is only valid for devices with maximum permissible overpressure > 200 bar.						
Dimensions (in mm)						
<p><b>standard</b></p> <p>G1/2" flush (DIN 3852)</p> <p>flush diaphragm <math>\varnothing 18</math></p>			<p><b>option</b></p> <p>flush diaphragm <math>\varnothing 28</math></p> <p>G1" flush (DIN 3852)</p>			

