

BAROLI 05P

Battery Powered Digital Pressure Gauge

Stainless Steel Diaphragm Flush Welded

class 0.5

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 is suitable for pressure measurement in viscous and pasty media where a dead space-free process connection is required. 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

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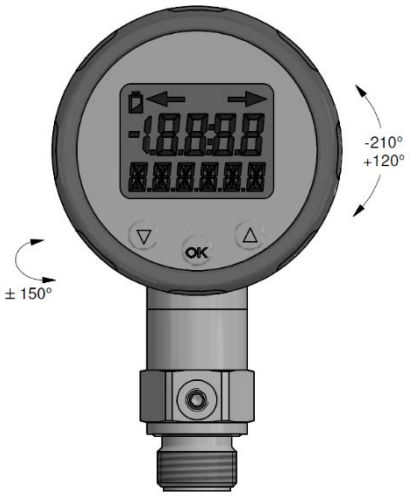
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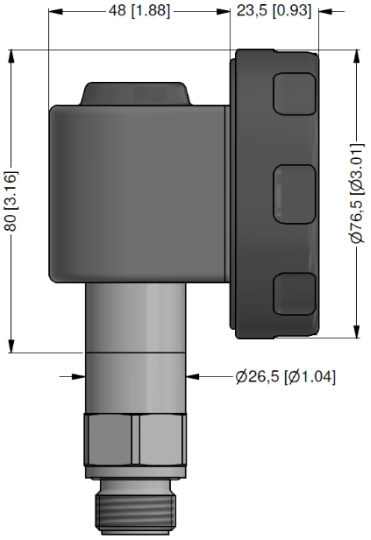
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Input pressure range						
Nominal pressure gauge / absolute	[bar]	60	100	160	250	400
Overpressure	[bar]	100	200	400	400	600
Burst pressure ≥	[bar]	120	250	500	500	650

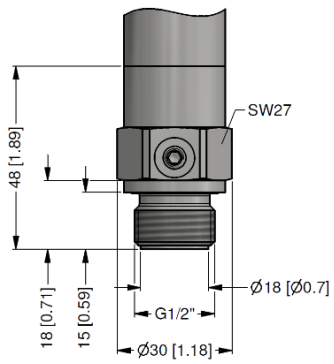
Performance		
Accuracy [1]	≤ ± 0.5 % FSO	
Measuring rate	5/sec	
[1] accuracy according to IEC 61298-2 – limit point adjustment (non-linearity, hysteresis, repeatability)		
Thermal effects (offset and span)		
Tolerance band	≤ ± 0.2 % FSO / 10 K	
in compensated range	0 ... 70 °C	
Permissible temperatures		
Medium [2]	for filling fluid silicon oil : for filling fluid food compatible oil:	-40 ... 125 °C -10 ... 125 °C
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 / 10 ... 2000 Hz	according to IEC 60068-2-6
Shock	500 g / 1 msec half sine	according to IEC 60068-2-27
Filling fluids		
Standard	silicone oil	
Options	food compatible oil with FDA approval (Mobil SCH Cibus 32; Category Code: H1; NSF Registration No.: 141500) others on request	
Materials		
Pressure port / housing	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	
Miscellaneous		
Display	LC-Display, visible range 40 x 30 mm 4.5-digit 7-segment main display, digit height 11 mm, range of indication ±1999 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 pieces (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 mode: approx. 5 years	
Mechanical operational life	100 million load cycles	
CE-conformity	EMC directive: pressure equipment directive:	2014/30/EU 2014/68/EU (module A) [3]
[3] This directive is only valid for devices with maximum permissible overpressure > 200 bar.		

Dimensions (mm / in)

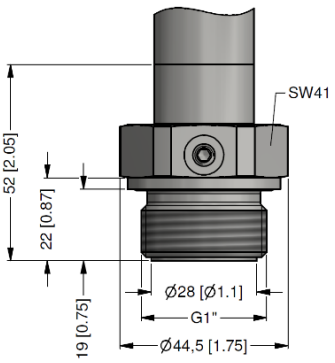




Mechanical connections (dimensions mm / in)



G1/2" flush
(DIN 3852)



G1" flush
(DIN 3852)

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BD|SENSORS pressure measurement

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Ordering code BAROLI 05P

BAROLI 05P ☐☐☐ - ☐☐☐☐ - 0 - ☐ - 0K0 - ☐☐☐ - ☐ - ☐ - ☐ - ☐ - ☐☐☐

	Pressure	Input		Accuracy		Mechanical connection	Seal	Diaphragm	Front foil	Filling fluid	Special version	
Pressure												
gauge	M 0 5											
absolute	M 0 6											consult
Input [bar]												
60		6 0 0 2										
100		1 0 0 3										
160		1 6 0 3										
250		2 5 0 3										
400		4 0 0 3										
customer		9 9 9 9										consult
Accuracy												
0.5 % FSO				5								
customer				9								consult
Mechanical connection												
G1/2" with flush welded diaphragm (DIN 3852)						Z 0 0						
G1" with flush welded diaphragm (DIN 3852)						Z S 1						
customer						9 9 9						consult
Seal												
FKM							1					
customer							9					consult
Diaphragm												
stainless steel 1.4435 (316L)								1				
customer								9				consult
Front foil												
standard									1			
neutral									N			
customer									9			consult
Filling fluid												
silicone oil										1		
food compatible oil										2		
customer										9		consult
Special version												
standard											0 0 0	
customer											9 9 9	consult

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19.12.2025

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