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

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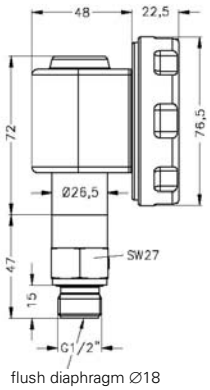
Input pressure range						
Nominal pressure gauge / abs.	[bar]	60	100	160	250	400
Overpressure	[bar]	100	200	400	400	600
Burst pressure ≥	[bar]	120	250	500	500	650

Performance	
Accuracy [1]	≦ ± 0.25 % FSO BFSL
Measuring rate	5/sec
[1] accuracy according to IEC 60770 – minimum value setting (non-linearity, hysteresis, repeatability)	
Thermal effects (Offset and Span)	
Tolerance band [% FS]	≦ ± 0.2 % FSO / 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: silicone oil option: food compatible oil with FDA approval (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 ±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 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 10^6 pressure cycles
CE-conformity	EMC directive: 2014/30/EU pressure equipment directive: 2014/68/EU (Modul A) [3]
[3] This directive is only valid for devices with maximum permissible overpressure > 200 bar.	

Dimensions (in mm)

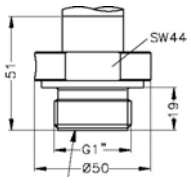
standard



flush diaphragm Ø18

G1/2" flush
(DIN 3852)

option



flush diaphragm Ø28

G1" flush
(DIN 3852)

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BD|SENSORS pressure measurement

Ordering code BAROLI 05P

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

Option	Code	
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 [BFSL]		
0.25 %	B 5	
customer	9 9	consult
Mechanical connection		
G1/2" with flush welded diaphragm (DIN 3852)	Z 0 0	
G1" with flush welded diaphragm (DIN 3852)	Z 3 1	
customer	9 9 9	consult
Seals		
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 fluids		
Silicone oil	1	
food compatible oil	2	
customer	9	
Special version		
standard	0 0 0	
customer	9 9 9	consult

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