# BAROLI 05

## Battery Powered Digital Pressure Gauge

Ceramic Sensor

class 0.5




### Nominal pressure

from 0 ... 400 mbar up to 0 ... 600 bar

### Special characteristics

- rotatable housing
- 2-line LC display
  4.5-digit 7-segment display
  6-digit 14-segment additional display
- different mechanical connections:
  inch, NPT threads

### Functions

- min / max function with reset function
- offset and end point calibration
- setting the pressure unit
  (bar, mbar, psi, InHg, cmHg, mmHg, hPa, kPa, MPa, $mH_2O$, $InH_2O$)
- switch-off automatic configuration

The battery-powered digital pressure gauge BAROLI 05 has been designed for measuring the pressure (absolute or gauge) of fluids, oils and gases.

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

### Preferred areas of use are

- Plant and machine engineering
  Pneumatics / hydraulics
- Laboratory techniques
- Environmental engineering
  (water - sewage - recycling)

BD SENSORS GmbH
BD-Sensors-Straße 1
D - 95199 Thierstein

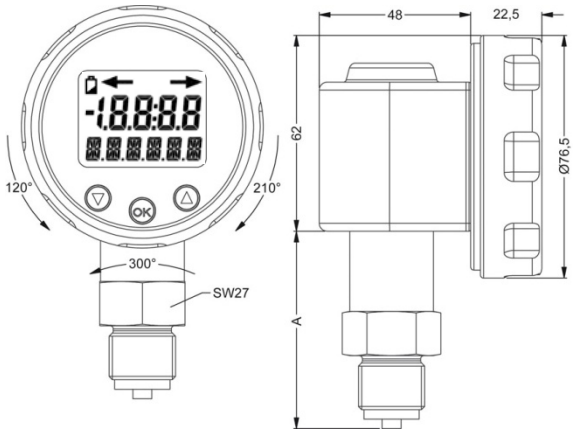
Tel.: +49 (0) 92 35 / 98 11- 0
Fax: +49 (0) 92 35 / 98 11- 11

www.bdsensors.de
info@bdsensors.de

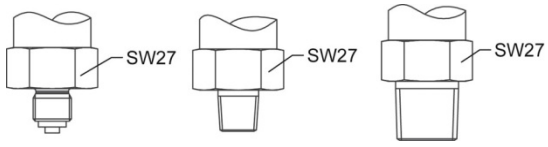
| **Input pressure range** | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal pressure gauge [bar] | 0.4 | 0.6 | 1 | 1.6 | 2.5 | 4 | 6 | 10 | 16 | 25 | 40 | 60 | 100 | 160 | 250 | 400 | 600 |
| Nominal pressure abs. [bar] | - | 0.6 | 1 | 1.6 | 2.5 | 4 | 6 | 10 | 16 | 25 | 40 | 60 | 100 | 160 | 250 | 400 | 600 |
| Overpressure [bar] | 1 | 2 | 2 | 4 | 4 | 10 | 10 | 20 | 40 | 40 | 100 | 100 | 200 | 400 | 400 | 600 | 800 |
| Burst pressure [bar] | 2 | 4 | 4 | 5 | 5 | 12 | 12 | 25 | 50 | 50 | 120 | 120 | 250 | 500 | 500 | 650 | 880 |
| Vacuum pressure | -1 … 0 bar, overpressure: 4 bar, burst pressure: 7 bar | | | | | | | | | | | | | | | | |
| Vacuum resistance | $P_N \geq 1$ bar: unlimited vacuum resistance<br>$P_N < 1$ bar: on request | | | | | | | | | | | | | | | | |

| **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)** | | |
| Thermal effects | ≤ ± 0.2 % FSO / 10 K | in compensated range 0 ... 85 °C |
| **Permissible temperatures** | | |
| Permissible temperatures | medium: -20 ... 85 °C | environment: -20 ... 70 °C storage: -30 ... 80 °C |
| **Mechanical stability** | | |
| Vibration | 5 g RMS / 10 ... 2000 Hz | according to DIN EN 60068-2-6 |
| Shock | 500 g / 1 msec half sine | according to DIN EN 60068-2-27 |
| **Materials** | | |
| Pressure port / housing | stainless steel 1.4404 (316L) | |
| Display housing | PA 6.6, Polycarbonate | |
| Seals (media wetted) | FKM | |
| Diaphragm | ceramics $Al_2O_3$ 96 % | |
| Media wetted parts | pressure port, seals, diaphragm | |
| **Miscellaneous** | | |
| Display | LC-Display, visible range 40 x 30 mm;<br>4.5-digit 7-segment main display, digit height 11 mm, range of indication ±19999;<br>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 | |
| Weight | approx. 300 g | |
| 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: 2014/30/EU | pressure equipment directive: 2014/68/EU (module A) [2] |
| *[2] This directive is only valid for devices with maximum permissible overpressure > 200 bar.* | | |

**Dimensions (in mm)**




G1/2" EN 837




G1/4" EN 837 1/4" NPT 1/2" NPT

| dimensioning value A: | |
|---|---|
| pressure port | mm: |
| G1/2" EN 837 | 62.5 |
| G1/4" EN 837 | 54.5 |
| 1/4" NPT | 54.5 |
| 1/2" NPT | 60.5 |


*© 2026 BD|SENSORS GmbH – The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.*





Tel.: +49 (0) 92 35 / 98 11- 0
Fax: +49 (0) 92 35 / 98 11- 11

www.bdsensors.de
info@bdsensors.de

BD|SENSORS pressure measurement

BD|SENSORS
pressure measurement

# Ordering code BAROLI 05

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

| | Code | |
|---|---|---|
| **Pressure** | | |
| gauge | M 0 0 | |
| absolute | M 0 1 | |
| **Input** [bar] | | |
| 0,4 | 4 0 0 0 | |
| 0,6 | 6 0 0 0 | |
| 1.0 | 1 0 0 1 | |
| 1.6 | 1 6 0 1 | |
| 2.5 | 2 5 0 1 | |
| 4.0 | 4 0 0 1 | |
| 6.0 | 6 0 0 1 | |
| 10 | 1 0 0 2 | |
| 16 | 1 6 0 2 | |
| 25 | 2 5 0 2 | |
| 40 | 4 0 0 2 | |
| 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 | |
| 600 | 6 0 0 3 | |
| -1 … 0 | X 1 0 2 | |
| customer | 9 9 9 9 | consult |
| **Accuracy** | | |
| 0.5 % FSO | 5 | |
| customer | 9 | consult |
| **Mechanical connection** | | |
| G1/2" EN 837 | 2 0 0 | |
| G1/4" EN 837 | 4 0 0 | |
| 1/2" NPT | N 0 0 | |
| 1/4" NPT | N 4 0 | |
| customer | 9 9 9 | consult |
| **Seal** | | |
| FKM | 1 | |
| customer | 9 | consult |
| **Pressure port** | | |
| stainless steel 1.4404 (316L) | 1 | |
| customer | 9 | consult |
| **Diaphragm** | | |
| ceramics $Al_2O_3$ 96% | 2 | |
| customer | 9 | consult |
| **Front foil** | | |
| standard | 1 | |
| neutral | N | |
| customer | 9 | consult |
| **Special version** | | |
| standard | 0 0 0 | |
| customer | 9 9 9 | consult |

© 2025 BD|SENSORS GmbH - The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

19.12.2025