



# PAC50-BGC

PAC50

PRESSURE SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
PAC50-BGC	1062960

Other models and accessories → [www.sick.de/PAC50](http://www.sick.de/PAC50)

### Detailed technical data

#### Features

<b>Medium</b>	Dry compressed air
<b>Pressure type</b>	Gauge pressure
<b>Measuring range</b>	-1 bar ... 1 bar
<b>Process temperature</b>	0 °C ... +60 °C
<b>Analog signal output and ohmic load R<sub>A</sub></b>	Optional, 4 mA ... 20 mA / 0 V... 10 V. Automatic detection depending on connected load or programmable. Output signals can be inverted: 20 mA ... 4 mA / 10 V ... 0 V Load resistance for current output < 600 Ohm Load resistance with current output > 3 kOhm
<b>Zero point adjustment</b>	Max. + 5 % of span
<b>Output signal</b>	2 x PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V
<b>Diagnostics output</b>	Switching output 2 can be set as diagnostics output
<b>Display</b>	LCD with LED backlight (green/red), can be rotated electronically by 180° Pressure display: 4 digits, 16 segments Pressure unit in display can be switched: bar, MPa, kPa, psi and inHg Update: 1,000, 500, 200, 100 ms (adjustable)
<b>Initialization time</b>	300 ms

#### Performance

<b>Non-linearity</b>	≤ ± 0.5 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2
<b>Accuracy</b>	≤ ± 1.5 % of the span including non-linearity, hysteresis, zero point and full scale error (corresponds to error of measurement as per IEC 61298-2)
<b>Setting accuracy of switching outputs</b>	≤ ± 0.2 % of span
<b>Non-repeatability</b>	≤ ± 0.2 % of the span
<b>Rated temperature range</b>	+10 °C ... +60 °C

#### Mechanics/electronics

<b>Process connection</b>	2 x G ¼ <sup>1)</sup>
<b>Housing material</b>	Housing: polycarbonate, Buttons: TPE, DIN rail mounting: POM, seals: NBR

<sup>1)</sup> Bottom side: thread G ¼ female, back side: thread G ¼ female, both according to DIN ISO 1630.

<sup>2)</sup> When plugged in with a suitable mating connector.

<b>Supply voltage</b>	17 V DC ... 30 V DC
<b>Power consumption</b>	Max. 40 mA at L <sup>+</sup> = 24 VDC
<b>Electrical safety</b>	Protection class: III Overvoltage protection: 32 V DC Short-circuit protection: Q <sub>A</sub> , Q <sub>1</sub> , Q <sub>2</sub> towards M and L <sup>+</sup> Reverse polarity protection: L <sup>+</sup> to M
<b>CE-conformity</b>	EMC directive: 2004/108/EC, EN 61326-2-3
<b>Weight sensor</b>	Approx. 40 g
<b>Enclosure rating</b>	IP 65 / IP 67 (according to IEC 60529) <sup>2)</sup>
<b>Protection class III</b>	✓
<b>RoHS certificate</b>	✓
<b>CRUus certificate</b>	✓

<sup>1)</sup> Bottom side: thread G ¼ female, back side: thread G ¼ female, both according to DIN ISO 1630.

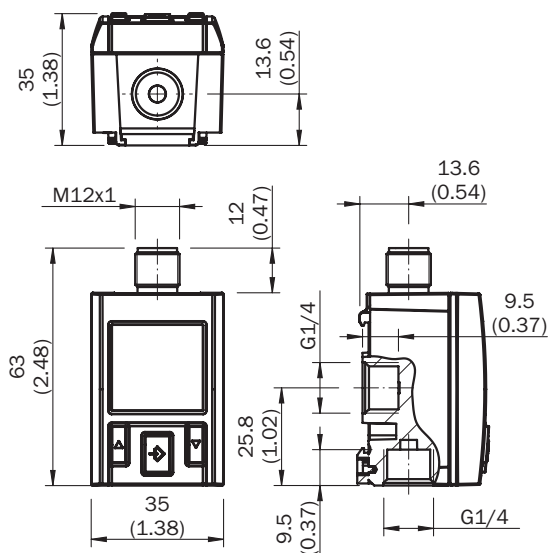
<sup>2)</sup> When plugged in with a suitable mating connector.

### Ambient data

<b>Ambient temperature</b>	0 °C ... +60 °C
<b>Storage temperature</b>	-20 °C ... +80 °C
<b>Relative humidity</b>	≤ 90 %
<b>Shock load</b>	Max. 30 g, xyz according to IEC 60068-2-27 (11 ms, mechanical shock)
<b>Vibration load</b>	Max. 5 g (10 ... 150 Hz), xyz, to DIN EN 60068-2-6

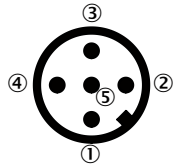
### Dimensional drawing (Dimensions in mm (inch))

Bottom side: thread G ¼ female, back side: thread G ¼ female



### Connection type

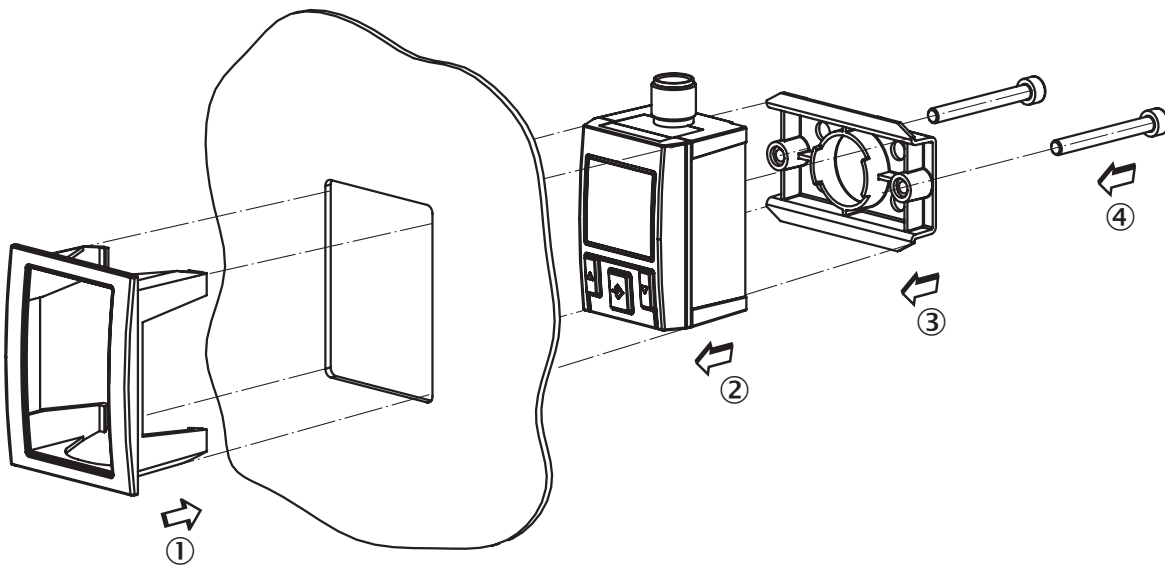
Round connector M12 x 1, 5-pin



Output signals	Type code	Electrical connection	Pin assignment
2 x digital + analog	PAC50-xxC	M12 x 1, 5 pins	L+ = 1, M = 3, Q1 = 4, Q2 = 2, QA = 5

- ① L<sup>+</sup>: Positive supply connection
- ② M: Negative supply connection
- ③ Q<sub>1</sub>: Switching output 1
- ④ C/Q<sub>1</sub>: With IO-Link: Communication/ switching output 1
- ⑤ Q<sub>2</sub>: Switching output 2
- ⑥ Q<sub>A</sub>: Analog output


### Instruction for installation



### Recommended accessories

Other models and accessories → [www.sick.de/PAC50](http://www.sick.de/PAC50)

	Brief description	Type	Part no.
Mounting brackets and mounting plates			
	Wall-mounting kit; mounting element for wall-mounting of pressure switch PAC50, Mounting element: polycarbonate, screws: steel, zinc-coated	BEF-MA-WLM-NTS-PAC5	2069198
Terminal and alignment brackets			

	<b>Brief description</b>	<b>Type</b>	<b>Part no.</b>
	Switch panel installation kit, for installation of the PAC50 pressure switch in a switch panel. Maximum thickness of switch panel 5 mm., Panel-mounting frame and mounting element: polycarbonate, screws: steel, zinc-coated	BEF-MA-CTRLPS-PAC5	2069200

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