



# PAC50-DCB

PAC50

PRESSURE SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	part no.
PAC50-DCB	1062990

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

## Detailed technical data

### Features

<b>Medium</b>	Dry compressed air
<b>Pressure type</b>	Gauge pressure
<b>Pressure unit</b>	bar
<b>Measuring range</b>	0 bar ... 10 bar
<b>Overpressure safety</b>	15 bar
<b>Process temperature</b>	0 °C ... +60 °C
<b>Maximum 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>	PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V
<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

### Mechanics/electronics

<b>Communication interface</b>	-
<b>Process connection</b>	PIF 4 mm + G ¼ <sup>1)</sup>
<b>Housing material</b>	Housing: polycarbonate, Buttons: TPE, DIN rail mounting: POM, seals: NBR
<b>Connection type</b>	M12 round connector x 1, 4-pin
<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

<sup>1)</sup> Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G ¼ female according to DIN ISO 16030.

<sup>2)</sup> Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

	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>	IP65 <sup>2)</sup> IP67 <sup>2)</sup>
<b>Protection class III</b>	✓
<b>MTTF</b>	256.55 years

<sup>1)</sup> Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G ¼ female according to DIN ISO 16030.

<sup>2)</sup> Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

## 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

## Ambient data

<b>Ambient temperature, operation</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

## Certificates

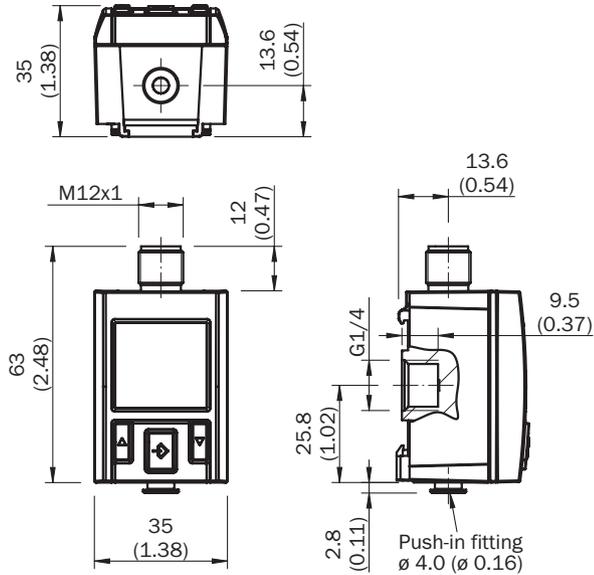
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>China RoHS</b>	✓

## Classifications

<b>ECLASS 5.0</b>	27200620
<b>ECLASS 5.1.4</b>	27200620
<b>ECLASS 6.0</b>	27200620
<b>ECLASS 6.2</b>	27200620
<b>ECLASS 7.0</b>	27200620
<b>ECLASS 8.0</b>	27200620
<b>ECLASS 8.1</b>	27200620
<b>ECLASS 9.0</b>	27200620
<b>ECLASS 10.0</b>	27200620
<b>ECLASS 11.0</b>	27200620
<b>ECLASS 12.0</b>	27200620

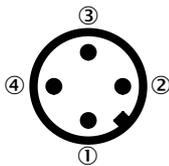
<b>ETIM 5.0</b>	EC000243
<b>ETIM 6.0</b>	EC000243
<b>ETIM 7.0</b>	EC000243
<b>ETIM 8.0</b>	EC000243
<b>UNSPSC 16.0901</b>	41112409

Dimensional drawing Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G ¼ female



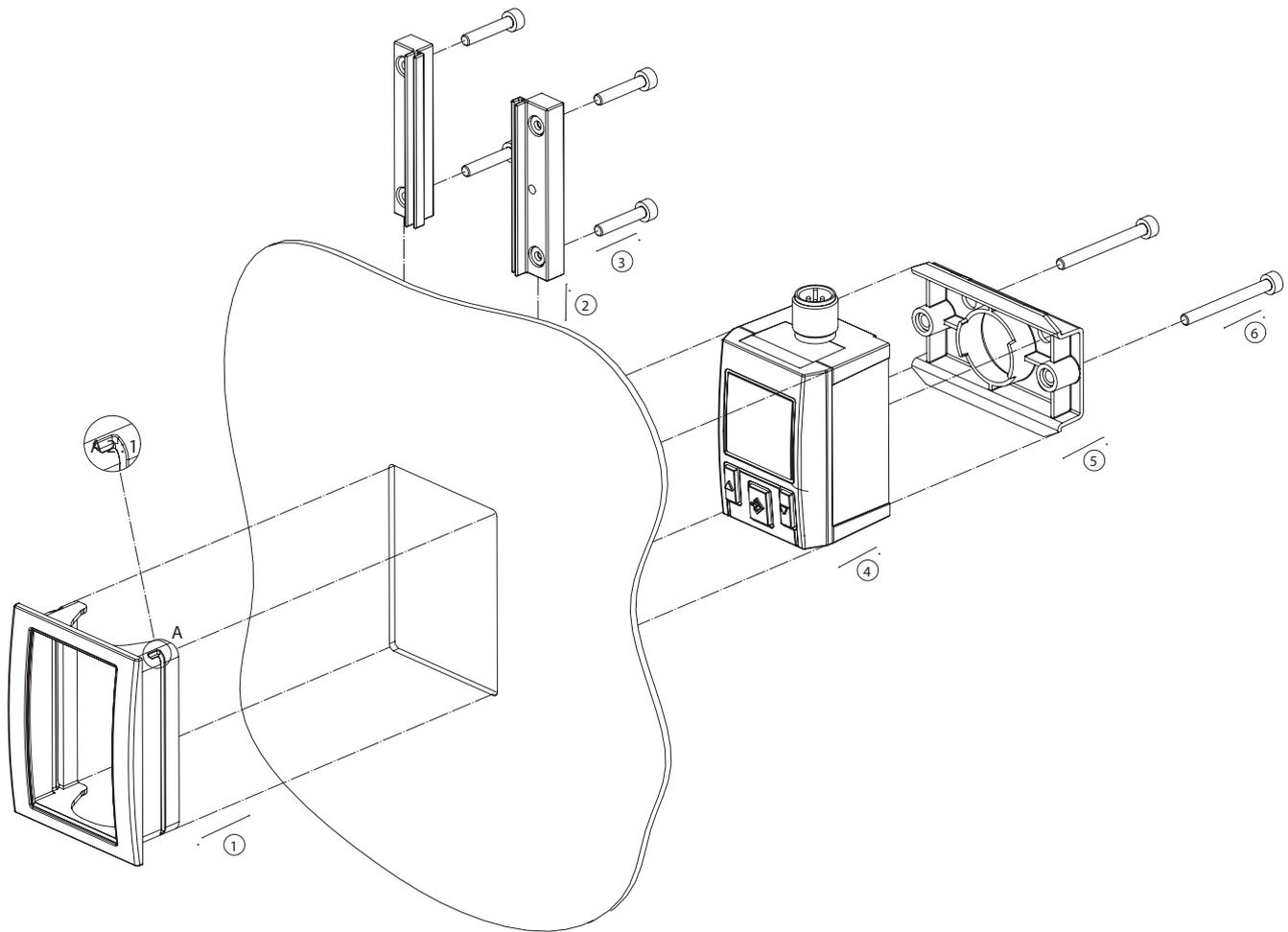
Dimensions in mm (inch)

Connection type M12 round connector x 1, 4-pin

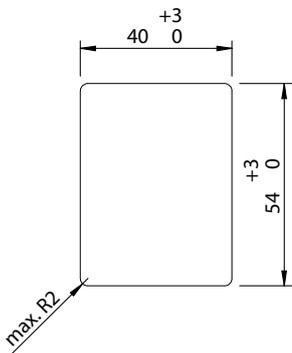


Output signals	Type code	Electrical connection	Pin assignment
2 x digital	PAC50-xxA	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, Q2 = 2
1 x digital + analog	PAC50-xxB	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, QA = 2
1 x IO-Link/digital + digital	PAC50-xxD	M12 x 1, 4 pins	L+ = 1, M = 3, C/Q1 = 4, Q2 = 2

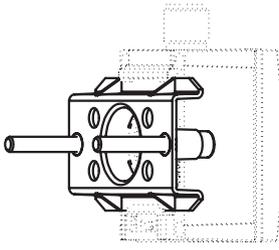
### Instruction for installation



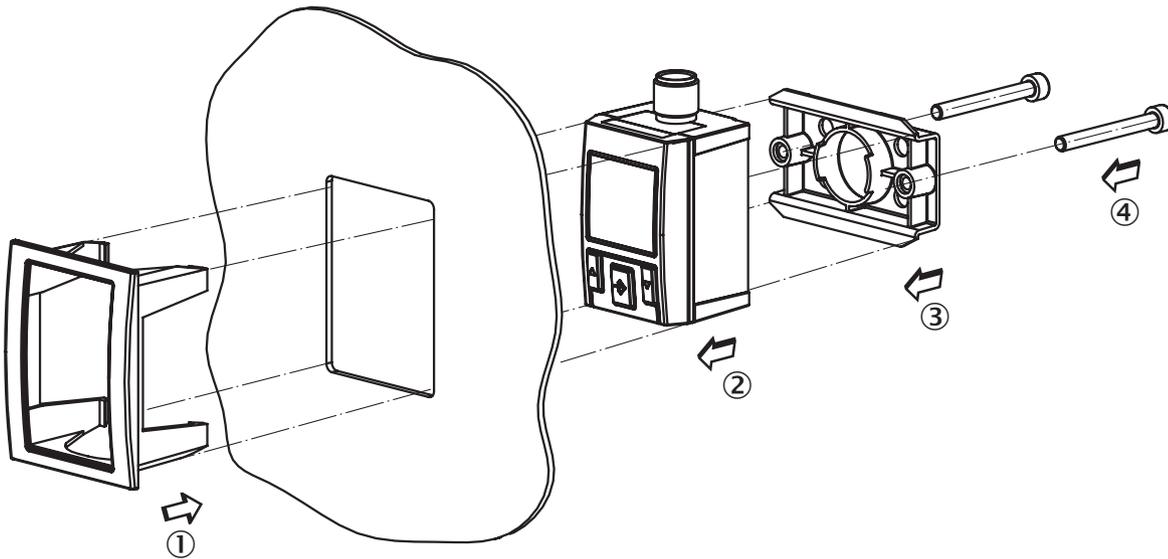
### Opening in the switch panel



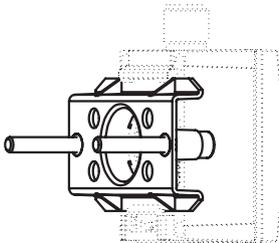
Instruction for installation



Instruction for installation



Instruction for installation Mounting bracket



### Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> <li><b>Description:</b> Wall-mounting kit; mounting element for wall-mounting of pressure switch PAC50</li> <li><b>Material:</b> Plastic, steel</li> <li><b>Details:</b> Mounting element: polycarbonate, screws: steel, zinc-coated</li> </ul>	BEF-MA-WLM-NTS-PAC5	2069198
	<ul style="list-style-type: none"> <li><b>Description:</b> Switch panel installation set for rugged applications (shock, vibration) for installing the PAC50 pressure switch. Maximum switch panel thickness: 5 mm</li> <li><b>Material:</b> Stainless steel</li> <li><b>Details:</b> Stainless steel, aluminum, plastic</li> </ul>	BEF-MA-CTRLPX-PAC5	2099916

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)