

PAC50-ACB
PAC50

PRESSURE SENSORS





Ordering information

| Туре | Part no. |
|-----------|----------|
| PAC50-ACB | 1062952 |

Other models and accessories → www.sick.com/PAC50

Illustration may differ



Detailed technical data

Features

| Medium | Dry compressed air |
|---|---|
| Pressure type | Gauge pressure |
| Pressure unit | bar |
| Measuring range | -1 bar 0 bar |
| Overpressure safety | 5 bar |
| Process temperature | 0 °C +60 °C |
| Analog signal output and ohmic load $\mathbf{R}_{\mathbf{A}}$ | 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 |
| Zero point adjustment | Max. + 5 % of span |
| Output signal | PNP/NPN/Push-Pull + 4 mA 20 mA / 0 V 10 V |
| Display | 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) |
| Initialization time | 300 ms |

Mechanics/electronics

| Process connection | PIF 4 mm + G ¼ ¹⁾ |
|--------------------|---|
| Housing material | Housing: polycarbonate, Buttons: TPE, DIN rail mounting: POM, seals: NBR |
| Connection type | M12 round connector x 1, 4-pin |
| Supply voltage | 17 V DC 30 V DC |
| Power consumption | Max. 40 mA at L^{+} = 24 VDC |
| Electrical safety | Protection class: III Overvoltage protection: 32 V DC Short-circuit protection: Q _A , Q ₁ , Q ₂ towards M and L ⁺ |

 $^{^{1)} \, \}text{Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G} \, \text{1/4 female according to DIN ISO 16030}.$

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

| | Reverse polarity protection: L ⁺ to M | |
|----------------------|--|--|
| CE-conformity | EMC directive: 2004/108/EC, EN 61326-2-3 | |
| Weight sensor | Approx. 40 g | |
| Enclosure rating | IP65 ²⁾ IP67 ²⁾ | |
| Protection class III | ✓ | |
| RoHS certificate | ✓ | |
| cRUus certificate | ✓ | |
| MTTF | 256.55 years | |

 $^{^{1)}}$ Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G $^{1/4}$ female according to DIN ISO 16030.

Performance

| Non-linearity | \leq \pm 0.5 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2 |
|---------------------------------------|---|
| Accuracy | \leq ± 1.5 % of the span |
| Setting accuracy of switching outputs | ≤ ± 0.2 % of span |
| Non-repeatability | ≤ ± 0.2 % of the span |
| Rated temperature range | +10 °C +60 °C |

Ambient data

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

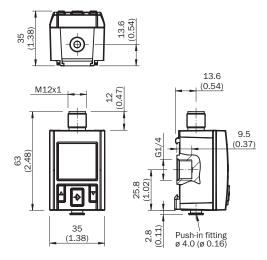
Classifications

| ECLASS 5.0 | 27200620 |
|----------------|----------|
| ECLASS 5.1.4 | 27200620 |
| ECLASS 6.0 | 27200620 |
| ECLASS 6.2 | 27200620 |
| ECLASS 7.0 | 27200620 |
| ECLASS 8.0 | 27200620 |
| ECLASS 8.1 | 27200620 |
| ECLASS 9.0 | 27200620 |
| ECLASS 10.0 | 27200620 |
| ECLASS 11.0 | 27200620 |
| ECLASS 12.0 | 27200620 |
| ETIM 5.0 | EC000243 |
| ETIM 6.0 | EC000243 |
| ETIM 7.0 | EC000243 |
| ETIM 8.0 | EC000243 |
| UNSPSC 16.0901 | 41112409 |

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

Dimensional drawing (Dimensions in mm (inch))

Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G 1/4 female



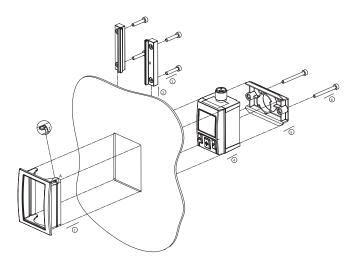
Connection type

M12 round connector x 1, 4-pin

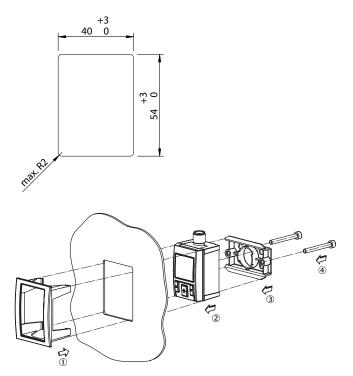


| Output signals | Type code | Electrical connection | Pin assignment |
|----------------------------------|-----------|-----------------------|---------------------------------|
| 2 x digital | PAC50-xxA | M12 x 1, 4 pins | L+ = 1, M = 3, Q1 = 4, Q2 = 2 |
| 1 x digital + analog | PAC50-xxB | M12 x 1,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

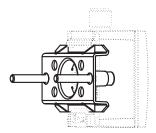
Instruction for installation



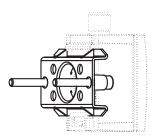
Opening in the switch panel



Mounting bracket



PRESSURE SENSORS



Recommended accessories

Other models and accessories → www.sick.com/PAC50

| | Brief description | Туре | Part no. | |
|---------------------------------|---|-------------------------|----------|--|
| Mounting brad | Mounting brackets and plates | | | |
| 100 | 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 | | | | |
| E | Switch panel installation set for rugged applications (shock, vibration) for installing the PAC50 pressure switch. Maximum switch panel thickness: 5 mm, Stainless steel, aluminum, plastic | BEF-MA- CTRLPX-PAC5 | 2099916 | |

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