





PRESSURE SENSORS

PAC50-DCB | PAC50

PRESSURE SENSORS



Ordering information

| Туре | Part no. |
|-----------|----------|
| PAC50-DCB | 1062990 |

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 | 0 bar 10 bar |
| Overpressure safety | 15 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 ⁺ |

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

²⁾ When plugged in with a suitable mating connector.

| | 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 / IP67 (according to IEC 60529) $^{2)}$ | |
| Protection class III | \checkmark | |
| RoHS certificate | \checkmark | |
| CRUus certificate | \checkmark | |
| 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.

 $^{\rm 2)}$ When plugged in with a suitable mating connector.

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 | \leq ± 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

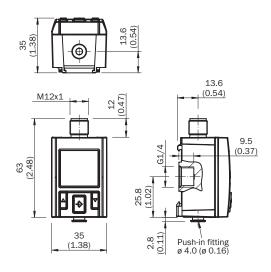
| ECI@ss 5.0 | 27200620 |
|----------------|----------|
| ECI@ss 5.1.4 | 27200620 |
| ECI@ss 6.0 | 27200620 |
| ECI@ss 6.2 | 27200620 |
| ECI@ss 7.0 | 27200620 |
| ECI@ss 8.0 | 27200620 |
| ECI@ss 8.1 | 27200620 |
| ECI@ss 9.0 | 27200620 |
| ECI@ss 10.0 | 27200620 |
| ECI@ss 11.0 | 27200620 |
| ETIM 5.0 | EC000243 |
| ETIM 6.0 | EC000243 |
| ETIM 7.0 | EC000243 |
| ETIM 8.0 | EC000243 |
| UNSPSC 16.0901 | 41112409 |

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Dimensional drawing (Dimensions in mm (inch))

Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G $\frac{1}{4}$ female



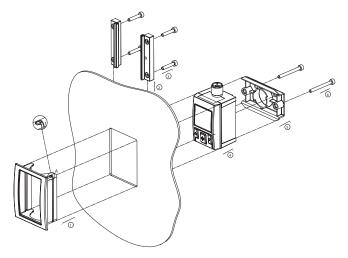
Connection type

M12 round connector x 1, 4-pin

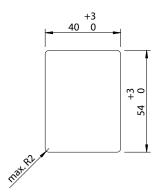


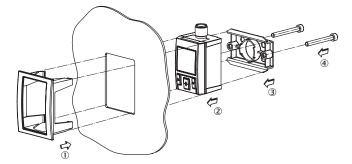
| Output signals | Type code | Electrical connection | Pin assignment |
|----------------------------------|-----------|-----------------------|---------------------------------|
| 2 x digital | PAC50-xxA | M12 x 1, 4 pins | L+ = 1, M = 3, Q1 = 4, Q2 = 2 |
| 1 x digital + analog | PAC50-xxB | M12 x 1,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

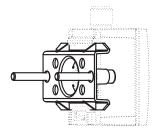


Opening in the switch panel



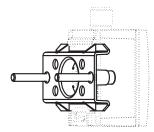


Mounting bracket



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Recommended accessories

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

| | Brief description | Туре | Part no. |
|---------------------------------|---|-------------------------|----------|
| Mounting brackets and plates | | | |
| Ø | 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 | | | |
| P | 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 |

SICK AT A GLANCE

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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."

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Online data sheet

