

PAC50-ANA PAC50

PRESSURE SENSORS

SICKSensor Intelligence.



Ordering information

| Туре | part no. |
|-----------|----------|
| PAC50-ANA | 1083719 |

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









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 |
| Maximum ohmic load R _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 | 2 x PNP/NPN/Push-Pull |
| Diagnostics output | Switching output 2 can be set as diagnostics output |
| 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

| Communication interface | - |
|-------------------------|--------------------------------------------------------------------------|
| Process connection | 1/4" NPT female 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 |

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

| Electrical safety | Protection class: III Overvoltage protection: 32 V DC Short-circuit protection: Q_A , Q_1 , Q_2 towards M and L ⁺ 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 | ✓ |
| MTTF | 261.31 years |

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

Performance

| Non-linearity | \leq \pm 0.5 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2 |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accuracy | \leq \pm 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)) |
| 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, operation | 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 |

Certificates

| EU declaration of conformity | ✓ |
|--------------------------------|---|
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| China RoHS | ✓ |

Classifications

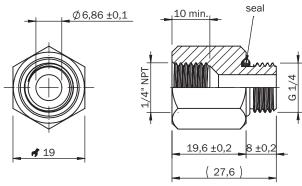
| ECLASS 5.0 | 27200620 |
|--------------|----------|
| ECLASS 5.1.4 | 27200620 |
| ECLASS 6.0 | 27200620 |
| ECLASS 6.2 | 27200620 |
| ECLASS 7.0 | 27200620 |
| ECLASS 8.0 | 27200620 |
| ECLASS 8.1 | 27200620 |
| ECLASS 9.0 | 27200620 |
| ECLASS 10.0 | 27200620 |
| ECLASS 11.0 | 27200620 |

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.

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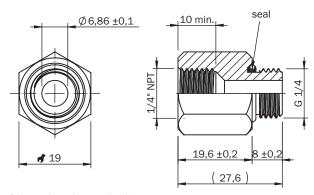
| ECLASS 12.0 | 27200620 |
|----------------|----------|
| ETIM 5.0 | EC000243 |
| ETIM 6.0 | EC000243 |
| ETIM 7.0 | EC000243 |
| ETIM 8.0 | EC000243 |
| UNSPSC 16.0901 | 41112409 |

1/4" NPT female



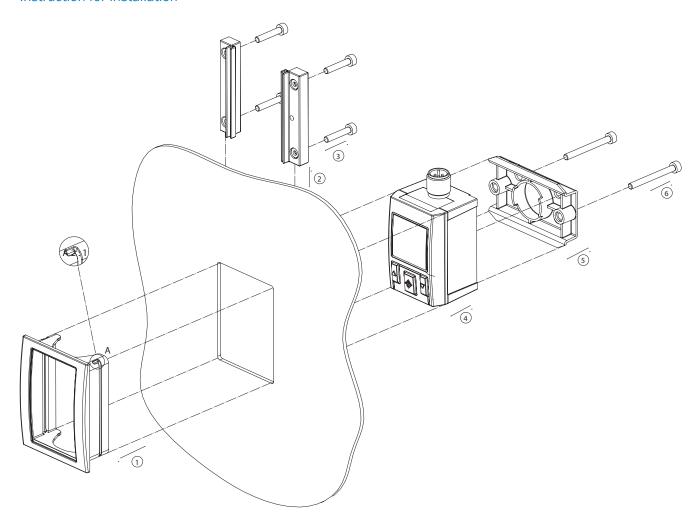
Dimensions in mm (inch)

Dimensional drawing Bottom: $\frac{1}{4}$ " NPT female thread, pre-installed NPT adapter in G $\frac{1}{4}$ female thread; rear: G $\frac{1}{4}$ female thread

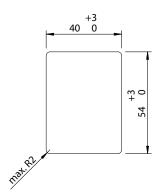


Dimensions in mm (inch)

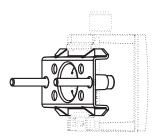
Instruction for installation



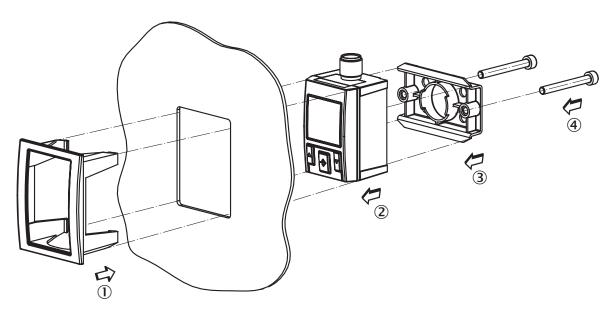
Opening in the switch panel



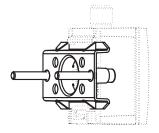
Instruction for installation



Instruction for installation



Instruction for installation Mounting bracket



Recommended accessories

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

| | Brief description | Туре | part no. | |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------|--|
| Mounting syst | Mounting systems | | | |
| 0 | Description: Wall-mounting kit; mounting element for wall-mounting of pressure switch PAC50 Material: Plastic, steel Details: Mounting element: polycarbonate, screws: steel, zinc-coated | BEF-MA-WLM- NTS-PAC5 | 2069198 | |
| E | Description: Switch panel installation set for rugged applications (shock, vibration) for installing the PAC50 pressure switch. Maximum switch panel thickness: 5 mm Material: Stainless steel Details: Stainless steel, aluminum, plastic | BEF-MA- CTRLPX-PAC5 | 2099916 | |

SICK AT A GLANCE

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