



PAC50-FCA

PAC50

PRESSURE SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | part no. |
|-----------|----------|
| PAC50-FCA | 1083765 |

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 ... 10 bar |
| Overpressure safety | 15 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 | 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 |

¹⁾ Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G ¼ 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⁾ Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G ¼ 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.

Performance

| | |
|--|--|
| Non-linearity | ≤ ± 0.5 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2 |
| Accuracy | ≤ ± 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

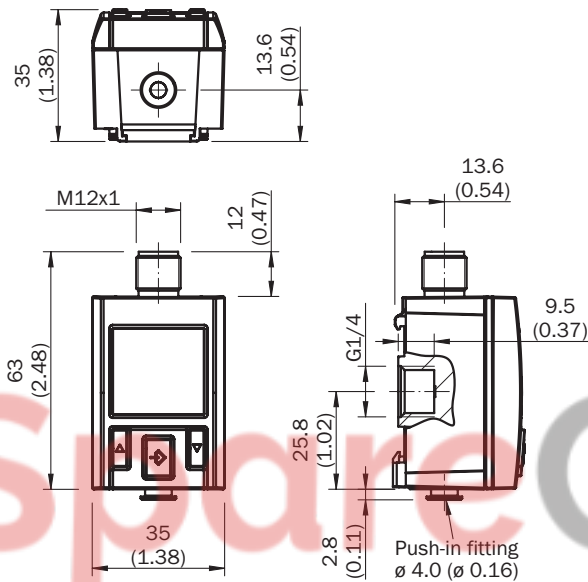
| | |
|---------------------------------------|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| China RoHS | ✓ |

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 |

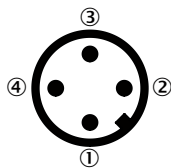
| | |
|-----------------------|----------|
| ECLASS 12.0 | 27200620 |
| ETIM 5.0 | EC000243 |
| ETIM 6.0 | EC000243 |
| ETIM 7.0 | EC000243 |
| ETIM 8.0 | EC000243 |
| UNSPSC 16.0901 | 41112409 |

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



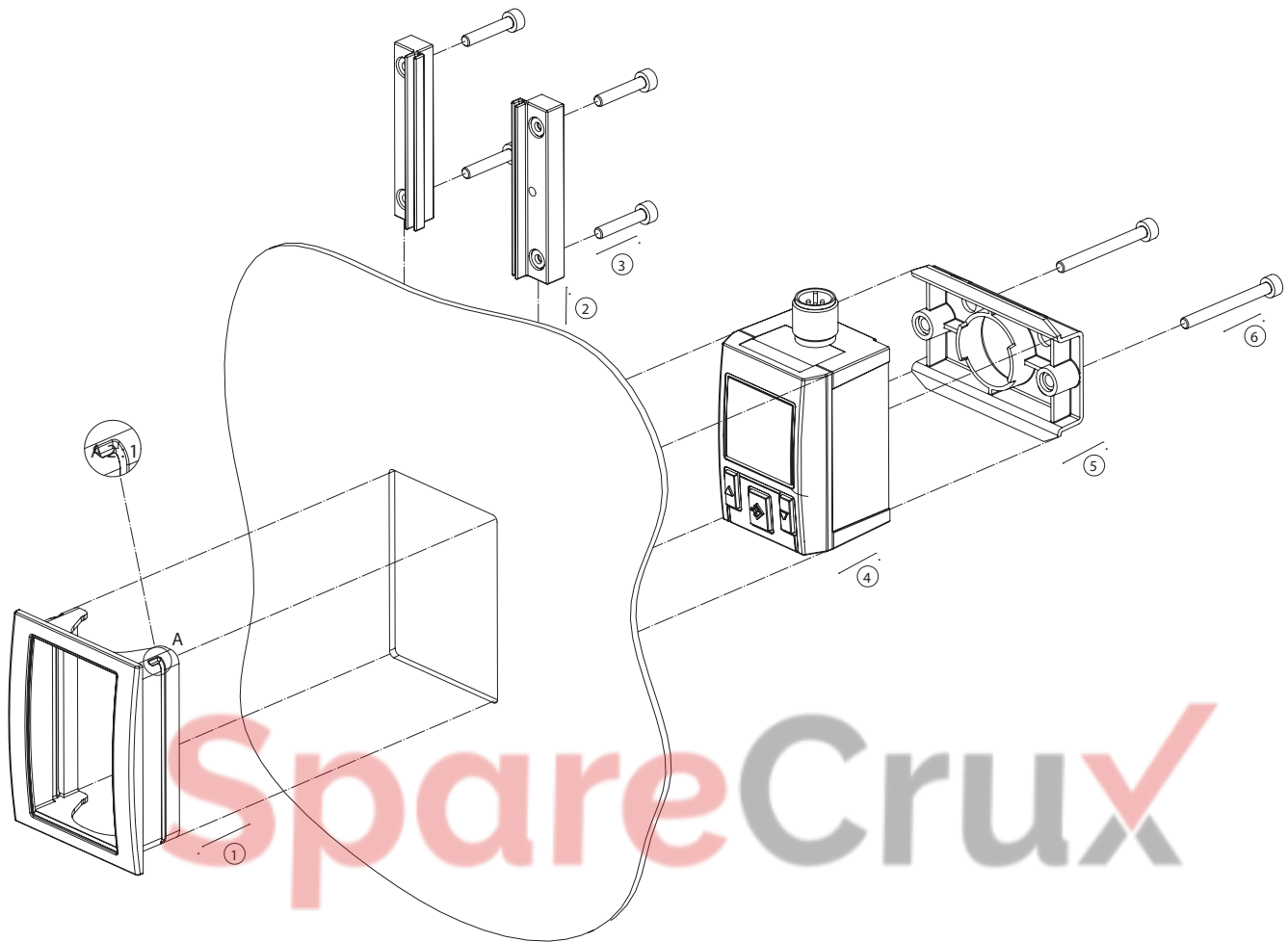
Dimensions in mm (inch)

Connection type M12 round connector x 1, 4-pin

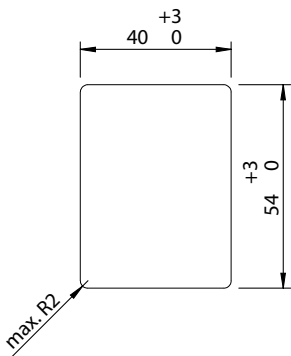


| Output signals | Type code | Electrical connection | Pin assignment |
|-------------------------------|-----------|-----------------------|---------------------------------|
| 2 x digital | PAC50-xxA | M12 x 1, 4 pins | L+ = 1, M = 3, Q1 = 4, Q2 = 2 |
| 1 x digital + analog | PAC50-xxB | M12 x 1, 4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

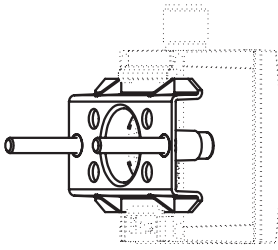
Instruction for installation



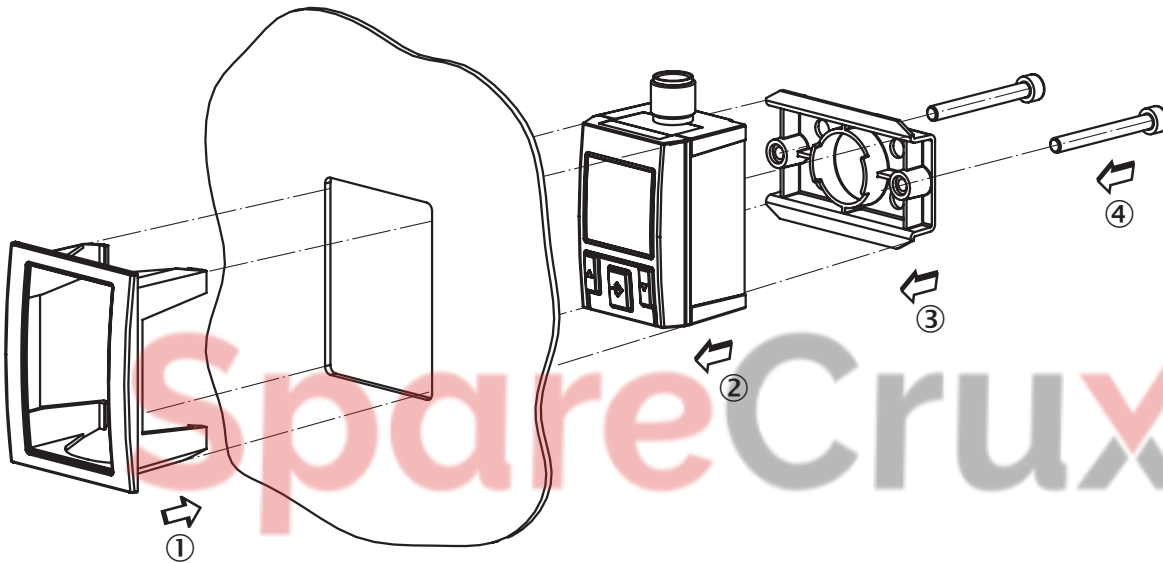
Opening in the switch panel



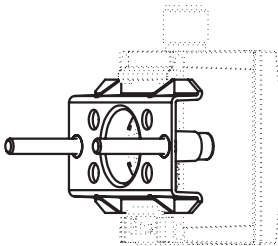
Instruction for installation



Instruction for installation





Instruction for installation Mounting bracket



Recommended accessories

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

| | Brief description | Type | part no. |
|---|---|---------------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> 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 |
|  | <ul style="list-style-type: none"> 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 |



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