

PAC50-DGA
PAC50

**PRESSURE SENSORS** 





## Ordering information

Туре	Part no.
PAC50-DGA	1062983

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 $R_{\text{A}}$	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

Process connection	2 x G ¾ 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 <sup>+</sup> = 24 VDC
Electrical safety	Protection class: III

 $<sup>^{1)}</sup>$  Bottom side: thread G  $\rlap{.}\!\!\!\!\!^{1\!\!\!\!/}$  female, back side: thread G  $\rlap{.}\!\!\!\!\!^{1\!\!\!\!/}$  female, both according to DIN ISO 1630.

<sup>&</sup>lt;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.

	Overvoltage protection: 32 V DC Short-circuit protection: $Q_A$ , $Q_1$ , $Q_2$ towards M and L <sup>+</sup> Reverse polarity protection: L <sup>+</sup> to M
CE-conformity	EMC directive: 2004/108/EC, EN 61326-2-3
Weight sensor	Approx. 40 g
Enclosure rating	IP65 <sup>2)</sup> IP67 <sup>2)</sup>
Protection class III	✓
RoHS certificate	✓
cRUus certificate	✓
MTTF	261.31 years

 $<sup>^{1)}</sup>$  Bottom side: thread G  $^{1\!\!/}\!_4$  female, back side: thread G  $^{1\!\!/}\!_4$  female, both according to DIN ISO 1630.

#### Performance

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

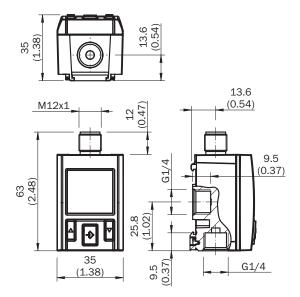
<sup>&</sup>lt;sup>2)</sup> Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

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## Dimensional drawing (Dimensions in mm (inch))

Bottom side: thread G 1/4 female, back side: thread G 1/4 female



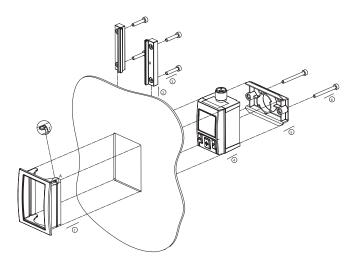
## Connection type

M12 round connector x 1, 4-pin

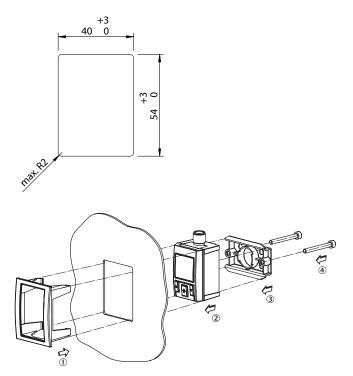


Output signals	Type code	Electrical connection	Pin assignment
2 x digital	PAC50-xxA	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, Q2 = 2
1 x digital + analog	PAC50-xxB	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, QA = 2
1 x IO-Link/digital + digital	PAC50-xxD	M12 x 1, 4 pins	L+ = 1, M = 3, C/Q1 = 4, Q2 = 2

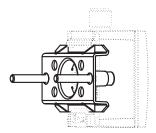
## Instruction for installation



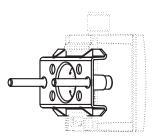
Opening in the switch panel



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				
<b>E</b>	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					
B	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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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:**

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