

PAC50-DGB PAC50

PRESSURE SWITCH





Ordering information

Туре	Part no.
PAC50-DGB	1062984

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	2 x G 1/4 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: thread G $\rlap{.}\!\!\!\!\!^{1\!\!\!\!/}$ female, back side: thread G $\rlap{.}\!\!\!\!\!^{1\!\!\!\!/}$ female, both according to DIN ISO 1630.

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: 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	\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	

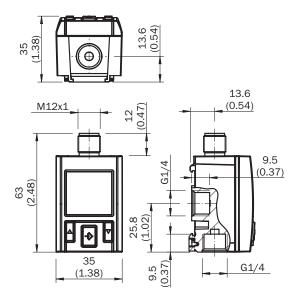
Classifications

eCl@ss 5.0	27200620
eCl@ss 5.1.4	27200620
eCl@ss 6.0	27200620
eCl@ss 6.2	27200620
eCl@ss 7.0	27200620
eCl@ss 8.0	27200620
eCl@ss 8.1	27200620
eCl@ss 9.0	27200620
eCl@ss 10.0	27200620
eCl@ss 11.0	27200620
eCl@ss 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: thread G 1/4 female, back side: thread G 1/4 female



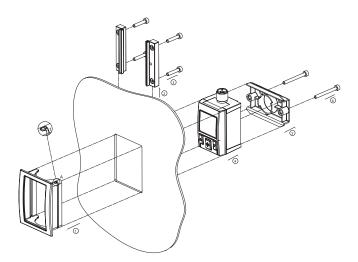
Connection type

M12 round connector x 1, 4-pin

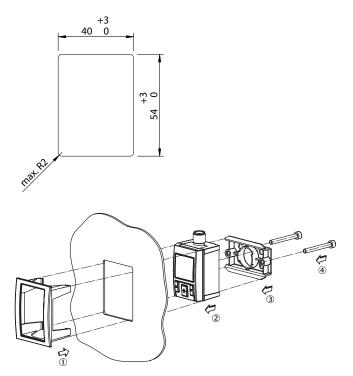


Output signals	Type code	Electrical connection	Pin assignment
2 x digital	PAC50-xxA	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, Q2 = 2
1 x digital + analog	PAC50-xxB	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, QA = 2
1 x IO-Link/digital + digital	PAC50-xxD	M12 x 1, 4 pins	L+ = 1, M = 3, C/Q1 = 4, Q2 = 2

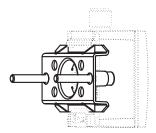
Instruction for installation

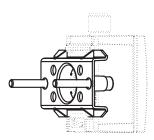


Opening in the switch panel



Mounting bracket





Recommended accessories

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

	Brief description	Туре	Part no.
Mounting brackets and plates			
E	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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