

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		
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	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 1/4 <sup>1)</sup>	
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 <sub>A</sub> , Q <sub>1</sub> , Q <sub>2</sub> towards M and L <sup>+</sup> Reverse polarity protection: L <sup>+</sup> to M	

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

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

CE-conformity	EMC directive: 2004/108/EC, EN 61326-2-3
Weight sensor	Approx. 40 g
Enclosure rating	IP65 / IP67 (according to IEC 60529) <sup>2)</sup>
Protection class III	✓
RoHS certificate	✓
CRUus certificate	✓

 $<sup>^{1)}</sup>$  Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G  $\frac{1}{4}$  female according to DIN ISO 16030.  $^{2)}$  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	≤ ± 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

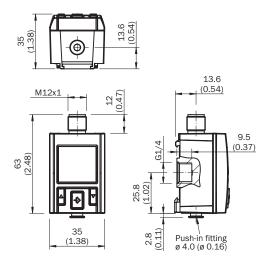
Ambient temperature	0 °C +60 °C	
Storage temperature	-20 °C +80 °C	
Relative humidity	≤ 90 %	
Shock load	Max. 30 g, xyz according to IEC 60068-2-27 (11 ms, mechanical shock)	
Vibration load	Max. 5 g (10 150 Hz), xyz, to DIN EN 60068-2-6	

# Classifications

ECI@ss 5.0	27371814
ECI@ss 5.1.4	27371814
ECI@ss 6.0	27371814
ECI@ss 6.2	27371814
ECI@ss 7.0	27371814
ECI@ss 8.0	27371814
ECI@ss 8.1	27371814
ECI@ss 9.0	27371814
ETIM 5.0	EC000243
ETIM 6.0	EC000243
UNSPSC 16.0901	41112409

# Dimensional drawing (Dimensions in mm (inch))

Bottom side: push-in fitting for 4 mm pneumatic hose, back side: thread G 1/4 female



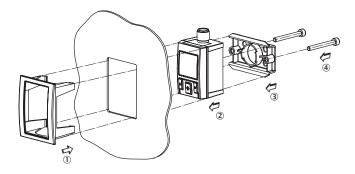
# Connection type

M12 round connector x 1, 4-pin

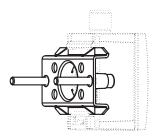


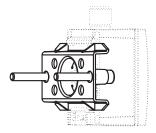
Output signals	Type code	Electrical connection	Pin assignment
2 x digital	PAC50-xxA	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, Q2 = 2
1 x digital + analog	PAC50-xxB	M12 x 1, 4 pins	L+ = 1, M = 3, Q1 = 4, QA = 2
1 x IO-Link/digital + digital	PAC50-xxD	M12 x 1, 4 pins	L+ = 1, M = 3, C/Q1 = 4, Q2 = 2

# Instruction for installation



# Mounting bracket





#### Recommended accessories

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

	Brief description	Туре	Part no.	
Mounting brackets and plates				
<b>O</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				
	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

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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:**

Contacts and other locations -www.sick.com

