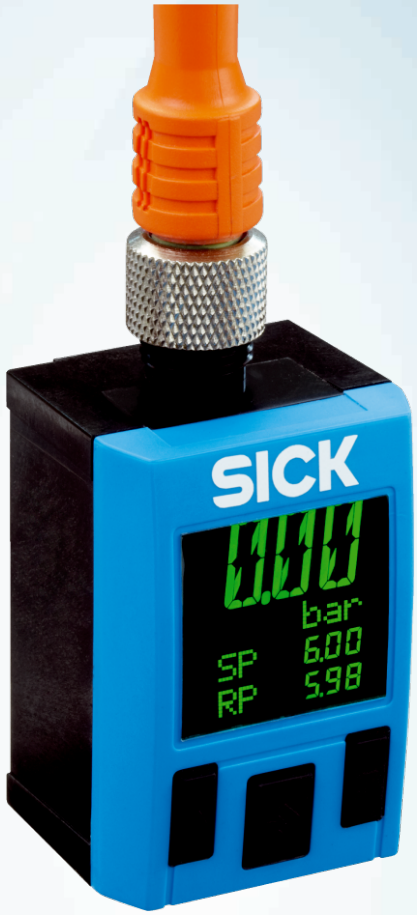
Product overview

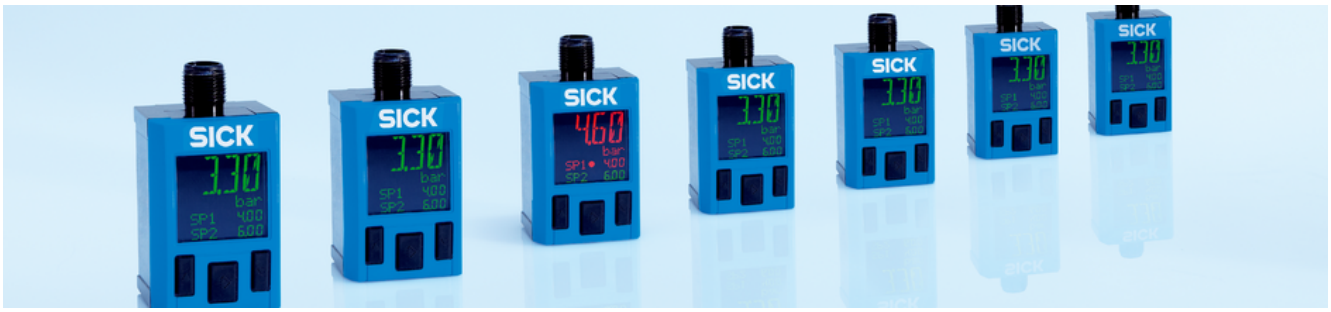


PAC50

Pressure switch for pneumatic applications with traffic light function, analog output and IO-Link

SICK
Sensor Intelligence.

Advantages



Strikingly visible: The PAC50 shines in pneumatics

Optimal monitoring of relevant process parameters is essential for increasing the efficiency of pneumatic processes and conserving resources. That's why SICK offers a wide range of electronic pressure transmitters and pressure switches.

The PAC50 electronic pressure switch is designed for pneumatic applications. Thanks to its three large function buttons and large display, it is easy to use. Processes are very easy to read on the display: The colors of the digits change when the set switching points are reached. This means the respective output state can be recognized even from a distance. The PAC50 can be used flexibly thanks to its measuring ranges for positive and negative pressures. The pressure switch is also produced free- of paint wetting impairment substances (PWIS-free). The PAC50 has a dust- and waterproof housing. In addition, the optional IO-Link interface ensures good networking. – Impressive advantages.

Why the PAC50 offers more at first glance

Due to the large color display, the output state is clearly visible, even from a great distance.

Three large function keys and intuitive menu navigation make operation very easy.

The dust- and waterproof housing is ideal for use in industrial environments.

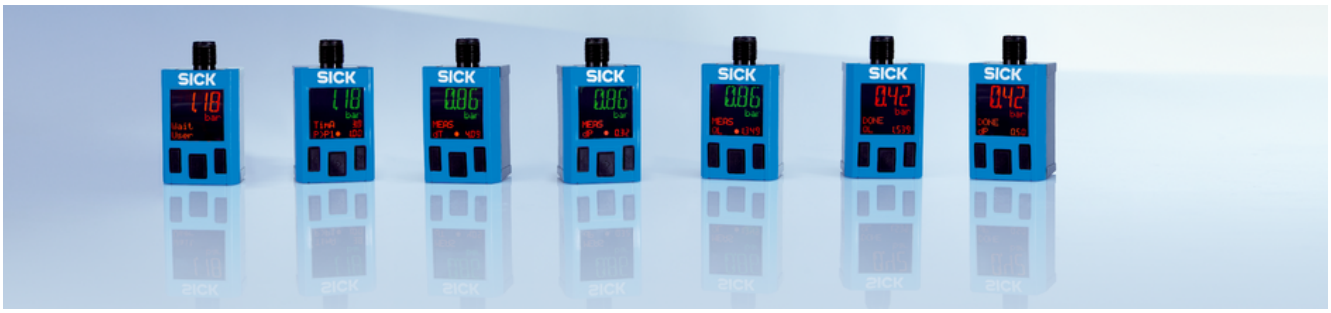
With its positive and negative pressure ranges, the PAC50 is suitable for many different applications: It monitors the compressed air supply of systems, measures the system pressure in pneumatic controls or determines the suction pressure in vacuum grippers.

Leak measurement made easy

In factory automation, compressed air is among the most expensive forms of energy. To save costs, you must ensure that leaks in compressed air systems are detected as quickly as possible.

The PAC50-FGG (Leakage Tester) variant provides a cost-effective solution for detecting leak in compressed air systems. Basically, the sensor monitors the pressure drop over a preset period of time. The pressure switch enables a high degree of automation while doing so: The measurements can be started either automatically via a PLC or manually. The PAC50-FGG con-

trols a valve via the output signal, puts the system in a locked state, and shows on the display the pressure drop, the period of measurement and – if the volume of the measured system is known – also a leakage rate in L/min. Depending on the presetting of the pressure switch, a signal regarding the measured time period or the pressure difference can be output via the analog output. At the same time, the sensor also retains its function as a simple pneumatic pressure switch.



Technical data overview

Medium	Dry compressed air
Pressure type	Gauge pressure
Pressure unit	bar
Accuracy	≤ ± 1.5 %
Process connection	2 x G ¼ PIF 4 mm + G ¼ ¼" NPT female (depends on variant)
Connection type	M12 round connector x 1, 4-pin / round connector M12 x 1, 5-pin (depends on variant)
Enclosure rating	IP65 IP67
Process temperature	0 °C ... +60 °C
Communication interface	- / IO-Link (depends on variant)
Output signal	2 x PNP/NPN/Push-Pull PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V 2 x PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V IO-Link/PNP + PNP/NPN/Push-Pull IO-Link/PNP + PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V PNP + PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V (depends on variant)
Supply voltage	17 V DC ... 30 V DC

Product description

For improved monitoring of air pressure, the PAC50 electronic pressure switch from SICK offers more at a glance – the large bi-color display allows you to identify from a distance if the pressure falls within the target range. Three large function keys and intuitive menu navigation make operating the PAC50 easy.
What makes the PAC50 so special? It offers up to two digital switching outputs and an optional analog output in just one device. The output signals can be easily adjusted to the available control system. Thanks to the optional IO-Link, the controller or PLC can quickly and accurately pass the device parameters to the sensor when changing the format or replacing the sensor, which significantly reduces downtime. The PAC50 is ideal for use in industrial environments due to its waterproof housing with an IP 65/ IP 67 enclosure rating.

At a glance

- Large display shows system pressure, output states, and switching points
- Three large function keys, intuitive menu navigation
- Measuring range for gauge pressure (vacuum and overpressure)
- Two independently programmable switching outputs, optional analog output
- Installation on mounting rail, wall or switch panel
- Variant for leakage monitoring
- IO-Link

Your benefits

- Bi-color display (green/red) clearly shows the status of the output signal (within or outside the target range)
- Quick overview of important system parameters due to advanced display functions
- Intuitive operation allows simple and quick commissioning
- Pressure connections on the back and bottom and configurable output signals for a high level of installation flexibility
- High reliability thanks to the rugged design (IP65 and IP67 enclosure rating) and proven technology
- Less variants for different requirements and lower inventory costs
- Convenient, cost-effective solution for leakage measurement

Fields of application

- Compressed-air monitoring and measurement in machines and systems
- Pressure measurement in air and in dry, non-corrosive gases
- Pressure measurement on compressed-air maintenance units
- Vacuum monitoring in handling and robotics applications
- Leakage monitoring in closed compressed air systems

Type code

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

Measuring range / Overload protection

A	–1 ... 0 bar / 5 bar
B	–1 ... +1 bar / 5 bar
C	0 ... +6 bar / 15 bar
D	0 ... +10 bar / 15 bar
F	–1 ... +10 bar / 15 bar

Process connection

G	Underside: G ¼ female thread; rear: G ¼ female thread
C	Underside: Push-in fitting for 4 mm pneumatic hose, rear: G ¼ female thread
N	Bottom: ¼" NPT female thread, pre-installed NPT adapter in G ¼ female thread; rear: G ¼ female thread

Output signals / Electrical connection

	Switching output 1	Switching output 2	Analog output	
A	PNP / NPN / Push-Pull	PNP / NPN / Push-Pull	-	/ M12 x 1, 4-pin
B	PNP / NPN / Push-Pull	-	4 ... 20 mA / 0 ...10 V	/ M12 x 1, 4-pin
C	PNP / NPN / Push-Pull	PNP / NPN / Push-Pull	4 ... 20 mA / 0 ...10 V	/ M12 x 1, 5-pin
D	IO-Link/PNP	PNP / NPN / Push-Pull	-	/ M12 x 1, 4-pin
F	IO-Link/PNP	PNP / NPN / Push-Pull	4 ... 20 mA / 0 ...10 V	/ M12 x 1, 5-pin
G	PNP	PNP / NPN / Push-Pull	4 ... 20 mA / 0 ...10 V	/ M12 x 1, 5-pin, additional function: leakage tester

PAC50 - | | | |

Not all variants of the type code can be combined!

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