



PBS Hygienic

Pressure switch for hygienic applications with display, analog output and IO-Link

SICK
Sensor Intelligence.



Technical data overview

Measuring ranges	Gauge pressure	0 bar ... 1 bar up to 0 bar ... 25 bar
	Absolute pressure	0 bar ... 1 bar up to 0 bar ... 25 bar
	Compound pressure	-1 bar ... 0 bar up to -1 bar ... +24 bar
Pressure unit		Bar, MPa, psi and kg/cm ²
Accuracy		≤ ± 1 % of the span
Setting accuracy of switching outputs		≤ ± 0.5 % of span
Output signal		Switching outputs PNP or NPN, analog output signal plus optional IO-Link
Electrical connection		Round connector M12 x 1

Product description

The electronic pressure switch PBS Hygienic has been designed for use in the food and beverage industry. The wetted parts are gap-free and have no dead spaces. Their high-quality stainless steel surfaces are smooth and easy to clean. The highly resistant stainless steel membrane is welded to the hygienic process connection without gaps or edges.

The device is designed for CIP and SIP processes. This enables safe hygienic operation in conjunction with optimized system throughput.

The PBS Hygienic is available with up to two switching outputs, an analog output and IO-Link in a single device. Its intuitive configuration via three large pushbuttons and display facilitates operation. The housing can be rotated in two ways, allowing the display and electrical connection to be aligned according to specific installation situation. Available with a variety of measuring ranges and process connections, the PBS Hygienic is suitable for universal use.

At a glance

- Hygienically-graded pressure switch with display for the food and beverage industry
- Wetted parts are made from stainless steel 1.4435
- Individually programmable switching outputs and analog output
- Pressure values are indicated on the display
- Unit of pressure value in the display can be switched
- Output states are indicated separately via large LEDs
- IO-Link

Your benefits

- Safe hygienic operation due to flush-mounted, highly resistant stainless steel membrane and hygienic process connections
- Suitability for CIP and SIP ensures high system availability
- Safe and easy setup with three large pushbuttons and legible, rotatable display
- Rotatable housing for optimum cable routing
- Wide range of available configurations enable customer-specific solutions
- High reliability: Corrosion-resistant design of wetted parts and housing with IP 65 and IP 67 enclosure ratings
- Ultimate system availability: IO-Link enables fast, reliable parameter setting when changing over products

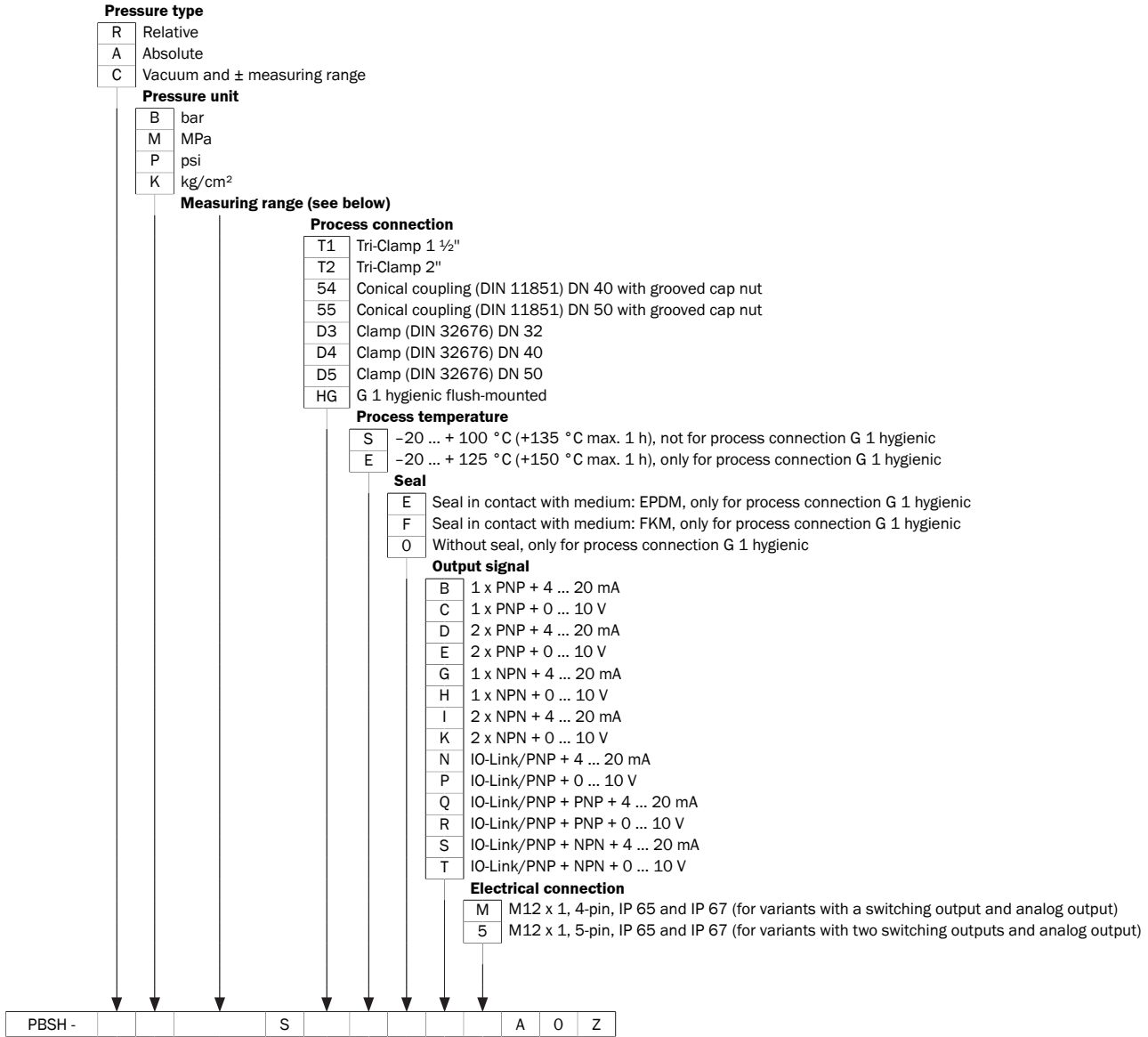
Fields of application

- Hygienic pressure measurement and monitoring in the food and beverage industry
- Bottle filling machines
- Packaging machines
- Hydrostatic level measurement of liquids in tall tanks

Type code

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

Type code



Not all variants of the type code can be combined!

Measuring range

	Gauge pressure measuring range	Absolute pressure measuring range		± measuring range	
1X0	0 ... 1 bar	1X0	0 ... 1 bar abs	1X0	-1 ... 0 bar
1X6	0 ... 1.6 bar	1X6	0 ... 1.6 bar abs	2X5	-1 ... +1.5 bar
2X5	0 ... 2.5 bar	2X5	0 ... 2.5 bar abs	4X0	-1 ... +3 bar
4X0	0 ... 4 bar	4X0	0 ... 4 bar abs	6X0	-1 ... +5 bar
6X0	0 ... 6 bar	6X0	0 ... 6 bar abs	010	-1 ... +9 bar
010	0 ... 10 bar	010	0 ... 10 bar abs	016	-1 ... +15 bar
016	0 ... 16 bar	016	0 ... 16 bar abs	025	-1 ... +24 bar
025	0 ... 25 bar	025	0 ... 25 bar abs		

	Gauge pressure measuring range
015	0 ... 15 psi
025	0 ... 25 psi
030	0 ... 30 psi
050	0 ... 50 psi
060	0 ... 60 psi
100	0 ... 100 psi
160	0 ... 160 psi
200	0 ... 200 psi
250	0 ... 250 psi
300	0 ... 300 psi

	Absolute pressure measuring range
015	0 ... 15 psi abs
025	0 ... 25 psi abs
030	0 ... 30 psi abs
050	0 ... 50 psi abs
60	1 ... 60 psi abs
100	0 ... 100 psi abs
160	0 ... 160 psi abs
200	0 ... 200 psi abs
250	1 ... 250 psi abs
300	0 ... 300 psi abs

	± measuring range
015	-14.5 ... +0 psi
030	-14.5 ... +15 psi
040	-14.5 ... +25 psi
045	-14.5 ... +30 psi
065	-14.5 ... +50 psi
115	-14.5 ... +100 psi
175	-14.5 ... +160 psi
215	-14.5 ... +200 psi
315	-14.5 ... +300 psi

	Gauge pressure measuring range
X10	0 ... 0.1 MPa
X16	0 ... 0.16 MPa
X25	0 ... 0.25 MPa
X40	0 ... 0.4 MPa
X60	0 ... 0.6 MPa
1X0	0 ... 1 MPa
1X6	0 ... 1.6 MPa
2X5	0 ... 2.5 MPa

	Absolute pressure measuring range
X10	0 ... 0.1 MPa abs
X16	0 ... 0.16 MPa abs
X25	0 ... 0.25 MPa abs
X40	0 ... 0.4 MPa abs
X60	0 ... 0.6 MPa abs
1X0	0 ... 1 MPa abs
1X6	0 ... 1.6 MPa abs
2X5	0 ... 2.5 MPa abs

	± measuring range
X10	-0.1 ... +0 MPa
X25	-0.1 ... +0.15 MPa
X40	-0.1 ... +0.3 MPa
X60	-0.1 ... +0.5 MPa
1X0	-0.1 ... +0.9 MPa
1X6	-0.1 ... +1.5 MPa
2X5	-0.1 ... +2.4 MPa

	Gauge pressure measuring range
1X0	0 ... 1 kg/cm ²
1X6	0 ... 1.6 kg/cm ²
2X5	0 ... 2.5 kg/cm ²
4X0	0 ... 4 kg/cm ²
6X0	0 ... 6 kg/cm ²
010	0 ... 10 kg/cm ²
016	0 ... 16 kg/cm ²
025	0 ... 25 kg/cm ²

	Absolute pressure measuring range
1X0	0 ... 1 kg/cm ² abs
1X6	0 ... 1.6 kg/cm ² abs
2X5	0 ... 2.5 kg/cm ² abs
4X0	0 ... 4 kg/cm ² abs
6X0	0 ... 6 kg/cm ² abs
010	0 ... 10 kg/cm ² abs
016	0 ... 16 kg/cm ² abs
025	0 ... 25 kg/cm ² abs

	± measuring range
1X0	-1 ... 0 kg/cm ²
2X5	-1 ... +1.5 kg/cm ²
4X0	-1 ... +3 kg/cm ²
6X0	-1 ... +5 kg/cm ²
010	-1 ... +9 kg/cm ²
016	-1 ... +15 kg/cm ²
025	-1 ... +24 kg/cm ²

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.”

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