

# PBSH-RB1X6SHGEENMAOZ

PBS Hygienic

**PRESSURE SENSORS** 





#### Ordering information

Туре	Part no.
PBSH-RB1X6SHGEENMA0Z	6051878

Other models and accessories → www.sick.com/PBS\_Hygienic

Illustration may differ



#### Detailed technical data

#### **Features**

1 Catalos	
Medium	Liquid, gaseous
Pressure type	Gauge pressure
Measuring range	0 bar 1.6 bar
Overpressure safety	2-fold
Process temperature	-20 °C +125 °C, +150 °C for max. 1 h
Maximum ohmic load R <sub>A</sub>	≤ 0.5 kΩ
Zero point adjustment	Max. + 3 % of span
Output signal	IO-Link/PNP + 4 mA 20 mA
Rotatable housing	
Display	

#### Performance

Non-linearity	$\leq \pm~0.5~\%,$ of span (Best Fit Straight Line, BFSL) according to IEC 61298-2	
Accuracy	$\leq$ $\pm$ 1 $\%$ of the span including non-linearity, hysteresis, zero point and full scale error (corresponds to error of measurement as per IEC 61298-2)	
Setting accuracy of switching outputs	≤ ± 0.5 % of span	
Response time	3 ms	
Long-term drift/one-year stability	$\leq$ $\pm$ 0.2 % of the span according to IEC 61298-2	
Temperature coefficient in rated temperature range	Typical TC of the zero point: in temperature range 0 °C 20 °C: 0.7% of the range / 10 K; in temperature range 20 °C 80 °C: 0.2% of span / 10 K. Typical TC of span: in temperature range 0 °C 80 °C: 0.1% of span / 10 K	
Rated temperature range	0 °C +80 °C	

#### Mechanics/electronics

Process connection	G 1 hygienic flush-mounted
Wetted parts	Stainless steel 1.4435 / 316L
Internal transmission fluid	Medical white oil, FDA compliant according to CFR 172.878 and 21 CFR 178.3620(a), compliant to USP, EP, and JP $$
Housing material	Lower body: stainless steel 304, Plastic head: PC + ABS, Buttons: TPE-E, Display window: PC

Electrical connection	M12 round connector x 1, 4-pin
Supply voltage	
Power consumption	
Total current consumption	Max. 170 mA (incl. switching current)
Electrical safety	
Insolation voltage	500 V DC
CE-conformity	EMC directive: 2004/108/EC, EN 61326-2-3
Seal	Wetted parts: EPDM
Enclosure rating	IP 65 / IP 67
Protection class III	<b>√</b>

#### Ambient data

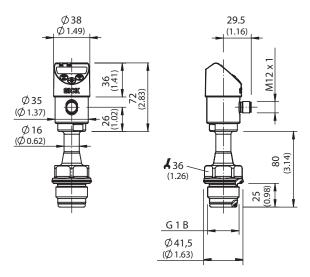
Ambient temperature	-20 °C +80 °C
Storage temperature	-20 °C +80 °C
Relative humidity	45 % 75 %
Shock load	
Vibration load	

#### 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

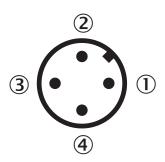
#### Dimensional drawing (Dimensions in mm (inch))

#### G 1 hygienic



#### Connection type

M12 round connector x 1, 4-pin



- ① L<sup>+</sup>: Positive supply connection
- ② Q<sub>A</sub>: Analog output
- 3 M: Negative supply connection
- ④ C/Q<sub>1</sub>: Switching output 1 (with IO-Link: communication / switching output 1)

#### Recommended accessories

Other models and accessories → www.sick.com/PBS\_Hygienic

	Brief description	Туре	Part no.
Flanges			
	Weld-in flange/connector for process connection G 1 hygienic flush-mounted, stainless steel 316L $$	BEF-FL-316G10- BHYG	5322453
Modules and gateways			

# PBSH-RB1X6SHGEENMA0Z | PBS Hygienic PRESSURE SENSORS

Brief description	Туре	Part no.
Number of IO-Link ports: 4; Communication mode: COM1/COM2; IO-Link version: IO-Link V1.0; Switching input: PNP; Supply voltage Vs, IO-Link ports: DC 24 V; Current loading: 800 mA; Data transmission rate: Max. 12 MBaud, Autobaud; Address space occupation: 1 bis 126; Connection type: Connector M12; Connection type, IO-Link ports: Connector M12, 5-pin; Suppyl voltage Vs, module: DC 18 30 V; Power consumption: Typ. 75 mA / max. 100 mA (at UL with DC 24 V), Typ. 25 mA + sensor current / max. 80	IOLSHPB-P3104R01	6039728

### 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

