

PBSH-RB1X0SHGEED5A0Z PBS Hygienic



PRESSURE SENSORS

PBSH-RB1X0SHGEED5A0Z | PBS Hygienic

PRESSURE SENSORS



Ordering information

Туре	Part no.
PBSH-RB1X0SHGEED5A0Z	6051859

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

Illustration may differ



Detailed technical data

Features

Medium	Liquid, gaseous
Pressure type	Gauge pressure
Measuring range	0 bar 1 bar
Overpressure safety	2-fold
Process temperature	-20 °C +125 °C, +150 °C for max. 1 h
Maximum ohmic load R _A	≤ 0.5 kΩ
Zero point adjustment	Max. + 3 % of span
Output signal	2 x 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 ± 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	\leq ± 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 tempera- ture 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	

Wetted parts	
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	Round connector M12 x 1, 5-pin

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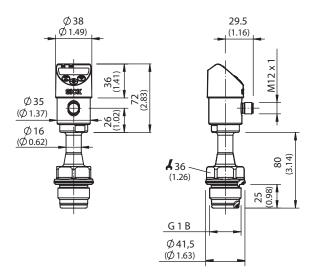
Supply voltage	
Power consumption	
Total current consumption	Max. 570 mA (incl. switching current)
Electrical safety	
Insolation voltage	500 V DC
CE-conformity	EMC directive: 2004/108/EC, EN 61326-2-3
Seal	Wetted parts: EPDM
Enclosure rating	IP 65 / IP 67
Protection class III	✓
Ambient data	
Ambient 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

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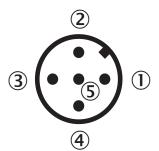
Dimensional drawing (Dimensions in mm (inch))

G 1 hygienic



Connection type

Round connector M12 x 1, 5-pin



- $\textcircled{1} L^+: \text{Positive supply connection}$
- ② Q₂: Switching output 2
- ③ M: Negative supply connection
- ④ C/Q₁: Switching output 1 (with IO-Link: communication / switching output 1)
- ⑤ Q_A: Analog output

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

SICK AT A GLANCE

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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.

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For us, that is "Sensor Intelligence."

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