

PBSH-CB010SHGEEBMA0Z

PBS Hygienic

PRESSURE SENSORS





Ordering information

Туре	Part no.
PBSH-CB010SHGEEBMA0Z	6054696

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

Illustration may differ



Detailed technical data

Features

Medium	Liquid, gaseous	
Pressure type	Compound pressure	
Pressure unit	bar	
Measuring range	-1 bar 9 bar	
Overpressure safety	2-fold	
Process temperature	-20 °C +125 °C, +150 °C for max. 1 h	
Maximum ohmic load R _A	\leq 0.5 k Ω , 4 mA 20 mA (R _A \leq 0.5 kOhm) 0 V 10 V (R _A $>$ 10 kOhm)	
Zero point adjustment	Max. + 3 % of span	
Output signal	1 x PNP + 4 mA 20 mA	
Rotatable housing	Display against housing with electrical connection: 330 ° Housing against process connection: 320 °	
Display	14-segment-LED, blue, 4-digits, height 9 mm, electronically turnable by 180° Accuracy: \leq 1 % of span \pm 1 digit Update: 1,000, 500, 200, 100 ms (adjustable)	

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		
Connection type	M12 round connector x 1, 4-pin		
Supply voltage	15 V DC 35 V DC		
Power consumption	Max. 70 mA		
Total current consumption	Max. 320 mA (incl. switching current)		
Electrical safety	Protection class: III Overvoltage protection: 40 V DC Short-circuit protection: Q _A , Q ₁ , Q ₂ towards M		

¹⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

	Reverse polarity protection: L ⁺ to M
Isolation voltage	500 V DC
CE-conformity	EMC directive: 2004/108/EC, EN 61326-2-3
Seal	Wetted parts: EPDM
Enclosure rating	IP65 ¹⁾ IP67 ¹⁾
Protection class III	✓

¹⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

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	
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 $^{1)}$	
Rated temperature range	0 °C +80 °C	

 $^{^{1)}}$ With Tri-Clamp 1 $\frac{1}{2}$ ", Tri-Clamp 2", Conical coupling (DIN 11851) DN 40 with union nut, Conical coupling (DIN 11851) DN 50 with union nut, Clamp (DIN 32676) DN 40, Clamp (DIN 32676) DN 50, G 1 hygienic.

Ambient data

Ambient temperature	-20 °C +80 °C
Storage temperature	-20 °C +80 °C
Relative humidity	45 % 75 %
Shock load	50 g according to IEC 60068-2-27 (mechanical shock)
Vibration load	10 g according to IEC 60068-2-6 (vibration under resonance)

Classifications

ECLASS 5.0	27200620
ECLASS 5.1.4	27200620
ECLASS 6.0	27200620
ECLASS 6.2	27200620
ECLASS 7.0	27200620
ECLASS 8.0	27200620
ECLASS 8.1	27200620
ECLASS 9.0	27200620
ECLASS 10.0	27200620
ECLASS 11.0	27200620
ECLASS 12.0	27200620
ETIM 5.0	EC000243
ETIM 6.0	EC000243
ETIM 7.0	EC000243

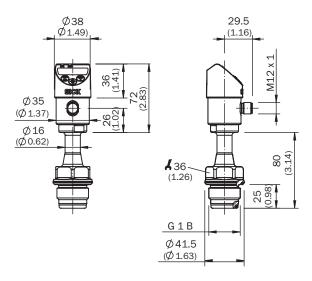
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PRESSURE SENSORS

ETIM 8.0	EC000243
UNSPSC 16.0901	41112409

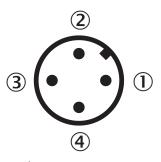
Dimensional drawing (Dimensions in mm (inch))

G 1 hygienic



Connection type

M12 round connector x 1, 4-pin



- ① L⁺: Positive supply connection
- $\ \ \, \textbf{Q}_{\textbf{A}} \textbf{:} \, \textbf{Analog output} \\$
- ③ M: Negative supply connection
- 4 C/Q₁: 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	BEF-FL- 316G10-BHYG	5322453

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