



# PBS-CP015SN1SS0AMA0Z

PBS

**PRESSURE SENSORS** 





### Ordering information

Туре	Part no.
PBS-CP015SN1SS0AMA0Z	6042106

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

Illustration may differ



#### Detailed technical data

#### Features

Medium	Liquid, gaseous
Pressure type	Compound pressure
Measuring range	-14.5 psi 0 psi
Process temperature	-20 °C +85 °C
Zero point adjustment	Max. + 3 % of span
Output signal	2 x PNP
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	$\leq 0.2~\%$ of the span according to IEC 61298-2
Temperature coefficient in rated temperature range	Mean TC of zero point: $\leq 0.2\%$ of span / 10 K, Mean TC of span $\leq 0.2~\%$ of span / 10 K
Rated temperature range	0 °C +80 °C
Service life	Minimum 100 Mio. life cycles

#### Mechanics/electronics

Process connection	1⁄4" NPT
Wetted parts	Pressure connection: stainless steel 316L Pressure sensor: stainless steel 316L (for measurement ranges from 0 bar 10 bar rel stainless steel 13-8 PH)
Internal transmission fluid	Silicone oil (only with pressure ranges < 0 bar 10 bar and $\leq$ 0 bar abs 25 bar abs)
Pressure port	Standard

Housing material	Lower body: stainless steel 304, Plastic head: PC + ABS, Buttons: TPE-E, Display window: PC
Electrical connection	Round connector M12 x 1, 4-pin, IP 67
Supply voltage	
Power consumption	
Total current consumption	Max. 350 mA / 570 mA (incl. switching current)
Electrical safety	
Insolation voltage	500 V DC
<b>CE-conformity</b>	Pressure equipment directive: This instrument is a pressure accessory as defined by the directive $97/23/EC$ , EMC directive: $2004/108/EC$ , EN $61326-2-3$
Weight sensor	Approx. 200 g
Seal	Without seal
Enclosure rating	IP 67
Protection class III	<b>√</b>

#### Ambient data

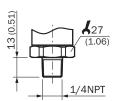
Ambient temperature	-20 °C +80 °C
Storage temperature	-20 °C +80 °C
Relative humidity	≤ 90 %
Shock load	
Vibration load	

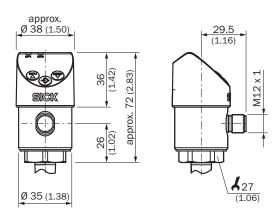
#### Classifications

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))

1/4" NPT





#### Connection type

2 switching outputs/ 1 switching output + 1 analog output

M12 x 1, 5-pin 2 switching outputs + 1 analog output







 $L^+ = 1$ , M = 3,  $Q_1 = 4$ ,  $Q_2 = 2$ ,  $Q_A = 5$  $C/Q_1 = 4$ 

- ① L<sup>+</sup>: Positive supply connection
- ② M: Negative supply connection
- ③ Q<sub>1</sub>: Switching output 1
- 4 C/Q<sub>1</sub>: With IO-Link: Communication/ switching output 1
- 6 Q<sub>A</sub>: Analog output

#### Recommended accessories

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

	Brief description	Туре	Part no.
Mounting brackets and mounting plates			
To To	Mounting bracket for simple and stable wall mounting of pressure sensors with 27 mm hexagon, Aluminum	BEF-FL-ALUPBS-HLDR	5322501
Plug connectors and cables			
No.	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
-	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: drag chain use, PUR, halogen-free, unshielded, 2 m	DOL-1204-G02MC	6025900
-	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866

	Brief description	Туре	Part no.
-	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: drag chain use, PUR, halogen-free, unshielded, 5 m	DOL-1204-G05MC	6025901
No.	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 10 m	DOL-1204-G10M	6010543
-	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: drag chain use, PUR, halogen-free, unshielded, 10 m	DOL-1204-G10MC	6025902
100	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 15 m	DOL-1204-G15M	6010753
100	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 20 m	DOL-1204-G20M	6034401
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
0	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: drag chain use, PUR, halogen-free, unshielded, 2 m	DOL-1204-W02MC	6025903
-	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-W05M	6009867
0	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: drag chain use, PUR, halogen-free, unshielded, 5 m	DOL-1204-W05MC	6025904
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: drag chain use, Welding spark resistant, PUR, halogen-free, unshielded, 5 m	DOL-1204-W05MD	6020399
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 10 m	DOL-1204-W10M	6010541
0	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: drag chain use, PUR, halogen-free, unshielded, 10 m	DOL-1204-W10MC	6025905
-	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 15 m	DOL-1204-W15M	6036474
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 20 m	DOL-1204-W20M	6033559

# 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

