

PBS-CB010SG1SSND5A0Z







Model Name> PBS-CB010SG1SSND5A0ZPart No.> 6038922

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At a glance

- Compound pressure measurement ranges from -1 ... 0 bar to -1 ... +24 bar
- · No moving parts: No mechanical wear, fatigue-proof, maintenance-free
- Stainless steel membrane
- Various programmable switching functions
- Digital outputs PNP or NPN, Analog output signal 4 ... 20 mA or 0 ... 10 V
- Min/max pressure memory
- · Password protection
- · Selection of different pressure units for the display
- · IO-Link optional

Your benefits

- Quick and easy setup and operation due to three large pushbuttons and clear display
- · Perfect display readability and optimal cable routing due to rotatable housing
- No compromises: Individual solutions through a variety of configurations
- · Universal application due to fully welded, highly durable stainless steel membrane
- Saves space and costs: no adapters required due to broad range of standard process connections
- Highly reliable due to application of proven technologies and high-quality materials, water resistance according to IP 65 and IP 67 as well as excellent overpressure safety
- Ultimate system availability: IO-Link enables fast, reliable parameter setting when changing over products



Illustration may differ

| C | E | |
|---|--------------|--|
| | \mathbf{V} | |

Features

| Pressure type: | Compound pressure |
|------------------------|---|
| Measuring range: | -1 bar 9 bar |
| Process temperature: | -20 °C +85 °C |
| Display: | 14-segment-LED, blue, 4-digits, height 9 mm, electronically turnable by 180°, Update: 1,000, 500, 200, 100 ms (adjustable), Accuracy: ≤ 1 % of span ± 1 digit |
| Output signal: | 2 x PNP + 4 mA 20 mA |
| Rotatable housing: | Display against housing with electrical connection: 330 $^\circ,$ Housing against process connection: 320 $^\circ$ |
| Gauge pressure: | 0 bar 1 bar up to bar 600 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 |
| Zero point adjustment: | Max. + 3 % of span |
| | |

| Performance | |
|-------------|--|
|-------------|--|

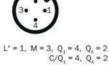
| Performance | |
|---|--|
| Accuracy: | ≤ ± 1 % of span, (Including non-linearity, hysteresis, zero point and full scale error (corresponds to error of measurement according to IEC 61298 2)) |
| Non-linearity: | \leq ± 0.5 % (of span (Best Fit Straight Line, BFSL) according to IEC 61298-2) |
| Setting accuracy of switching outputs: | ≤ ± 0.5 % of span |
| Response time: | 3 ms |
| Long-term drift/one-year stability: | ≤ 0.2 % of span according to IEC 61298-2 |
| Temperature coefficient in rated temperature range: | Mean TC of span \leq 0.2 % of span / 10 K, Mean TC of zero: \leq 0.2% of spar / 10 K |
| Rated temperature range: | 0 °C +80 °C |
| Service life: | Minimum 100 Mio. life cycles |
| Mechanics/electronics | |
| Process connection: | G ¼ A according to DIN 3852-E |
| 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) |
| Seal: | NBR |
| Pressure port: | Standard |
| Housing material: | Display window: PC, Plastic head: PC + ABS, Buttons: TPE-E, Lower body: stainless steel 304 |
| Enclosure rating: | IP 67 |
| Electrical connection: | Round connector M12 x 1, 5-pin, IP 67 |
| Power consumption: | 45 mA (for configurations without analog output signal), 70 mA (for configurations with analog output signal) |
| Electrical safety: | Short-circuit protection: QA, Q1, Q2 towards M, Protection class: III, Overvoltage protection: 40 V DC, Reverse polarity protection: L+ towards M |
| Protection class III: | \checkmark |
| Weight sensor: | Ca. 200 g |
| Internal transmission fluid: | Silicone oil (only with pressure ranges < 0 bar 10 bar and \leq 0 bar abs 25 bar abs) |
| Total current consumption: | Max. 350 mA/570 mA (incl. switching current) |
| Isolation voltage: | 500 V DC |
| CE-conformity: | 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 |
| Ambient data | |
| Storage temperature: | -20 °C +80 °C |

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|----------------------|---|
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| 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) |
| Relative humidity: | ≤ 90 % |
| | |

Connection type

M12 x 1, 4-pin

2 switching outputs/ 1 switching output + 1 analog output

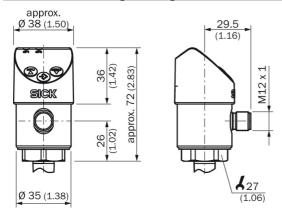


M12 x 1, 5-pin 2 switching outputs + 1 analog output

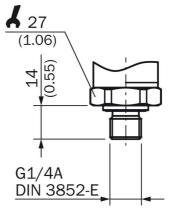


|1| L+: Positive supply connection |2| M: Negative supply connection |3| Q1: Switching output 1 L* = 1, M = 3, $Q_1 = 4$, $Q_2 = 2$, $Q_A = 5$ $C/Q_1 = 4$ [4] C/Q1: With IO-Link: Communication/ switching output 1 [5] Q2: Switching output 2 |6| QA: Analog output

Dimensional drawing housing



Dimensional drawing process connection



Australia

Phone +61 3 9457 0600 1800 33 48 02 - tollfree E-Mail sales@sick.com.au

Belgium/Luxembourg Phone +32 (0)2 466 55 66 E-Mail info@sick.be

Brasil Phone +55 11 3215-4900 E-Mail marketing@sick.com.br

Canada

Phone +1 905 771 14 44 E-Mail information@sick.com

Česká republika Phone +420 2 57 91 18 50 E-Mail sick@sick.cz

China

Phone +86 4000 121 000 E-Mail info.china@sick.net.cn Phone +852-2153 6300 E-Mail ghk@sick.com.hk

Danmark Phone +45 45 82 64 00 E-Mail sick@sick.dk

Deutschland Phone +49 211 5301-301 E-Mail info@sick.de

España Phone +34 93 480 31 00 E-Mail info@sick.es

France Phone +33 1 64 62 35 00 E-Mail info@sick.fr

Great Britain Phone +44 (0)1727 831121 E-Mail info@sick.co.uk

India Phone +91-22-4033 8333 E-Mail info@sick-india.com

Israel Phone +972-4-6881000 E-Mail info@sick-sensors.com Italia

Phone +39 02 27 43 41 E-Mail info@sick.it

Japan Phone +81 (0)3 5309 2112 E-Mail support@sick.jp

Magyarország Phone +36 1 371 2680 E-Mail office@sick.hu

Nederland Phone +31 (0)30 229 25 44 E-Mail info@sick.nl E-Mail sick@sick.no Österreich Phone +43 (0)22 36 62 28 8-0 E-Mail office@sick.at Polska Phone +48 22 837 40 50

Phone +47 67 81 50 00

Norge

E-Mail info@sick.pl România

Phone +40 356 171 120 E-Mail office@sick.ro Russia

Phone +7-495-775-05-30 E-Mail info@sick.ru

Schweiz Phone +41 41 619 29 39 E-Mail contact@sick.ch

Singapore Phone +65 6744 3732 E-Mail sales.gsg@sick.com

Slovenija Phone +386 (0)1-47 69 990 E-Mail office@sick.si

South Africa Phone +27 11 472 3733

E-Mail info@sickautomation.co.za
South Korea

Phone +82 2 786 6321/4 E-Mail info@sickkorea.net

Suomi Phone +358-9-25 15 800 E-Mail sick@sick.fi

Sverige Phone +46 10 110 10 00 E-Mail info@sick.se

Taiwan Phone +886 2 2375-6288 E-Mail sales@sick.com.tw

Türkiye Phone +90 (216) 528 50 00 E-Mail info@sick.com.tr

United Arab Emirates Phone +971 (0) 4 88 65 878 E-Mail info@sick.ae

USA/México Phone +1(952) 941-6780 1 (800) 325-7425 - tollfree E-Mail info@sickusa.com

More representatives and agencies at www.sick.com

