



Illustration may differ



Ordering information

| Type | Part no. |
|----------------------|----------|
| PBSH-CB2X5S54S0BMA0Z | 6054654 |

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

Detailed technical data

Features

| | |
|--|--|
| Medium | Liquid, gaseous |
| Pressure type | Compound pressure |
| Pressure unit | bar |
| Measuring range | -1 bar ... 1.5 bar |
| Overpressure safety | 2-fold |
| Process temperature | -20 °C ... +100 °C, +135 °C for max. 1 h |
| Maximum ohmic load R_A | ≤ 0.5 kΩ, 4 mA ... 20 mA (R_A ≤ 0.5 kΩhm) 0 V ... 10 V (R_A > 10 kΩhm) |
| 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: ≤ 1 % of span ± 1 digit Update: 1,000, 500, 200, 100 ms (adjustable) |

Mechanics/electronics

| | |
|------------------------------------|---|
| Process connection | Conical coupling (DIN 11851) DN 40 with union nut |
| 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 | Without seal |
| 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 | ≤ ± 0.5 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2 |
| Accuracy | ≤ ± 1 % of the span |
| Setting accuracy of switching outputs | ≤ ± 0.5 % of span |
| Response time | 3 ms |
| Long-term drift/one-year stability | ≤ ± 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 ½", 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) |

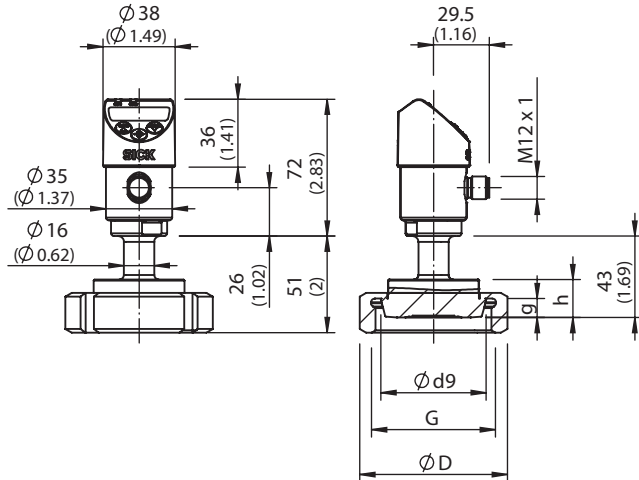
Classifications

| | |
|---------------------|----------|
| 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 |

| | |
|-----------------------|----------|
| ETIM 8.0 | EC000243 |
| UNSPSC 16.0901 | 41112409 |

Dimensional drawing (Dimensions in mm (inch))

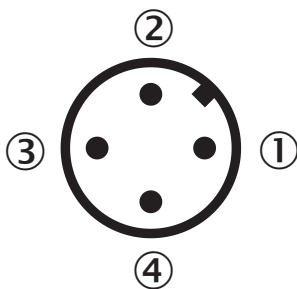
Conical coupling (DIN 11851) with union nut



| DIN 11851 | ø d9 | G | ø D | g | h |
|-----------|----------------|-------------|--------------|--------------|--------------|
| DN 40 | 56.0 (2.20) | Rd 65 x 1/6 | 78 (3.07) | 10 (0.39) | 20 (0.78) |
| DN 50 | 68.5 (2.69) | Rd 78 x 1/6 | 92 (3.62) | 11 (0.43) | 20 (0.78) |

Connection type

M12 round connector x 1, 4-pin



- ① L⁺: Positive supply connection
- ② Q_A: Analog output
- ③ M: Negative supply connection
- ④ C/Q₁: Switching output 1 (with IO-Link: communication / switching output 1)

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