





Illustration may differ



### Ordering information

Type	Part no.
PBSH-RB6X0S54S0D5A0Z	6051856

Other models and accessories → [www.sick.com/PBS\\_Hygienic](http://www.sick.com/PBS_Hygienic)

### Detailed technical data

#### Features

<b>Medium</b>	Liquid, gaseous
<b>Pressure type</b>	Gauge pressure
<b>Pressure unit</b>	bar
<b>Measuring range</b>	0 bar ... 6 bar
<b>Overpressure safety</b>	2-fold
<b>Process temperature</b>	-20 °C ... +100 °C, +135 °C for max. 1 h
<b>Maximum ohmic load <math>R_A</math></b>	≤ 0.5 kΩ, 4 mA ... 20 mA ( $R_A$ ≤ 0.5 kOhm) 0 V ... 10 V ( $R_A$ > 10 kOhm)
<b>Zero point adjustment</b>	Max. + 3 % of span
<b>Output signal</b>	2 x PNP + 4 mA ... 20 mA
<b>Rotatable housing</b>	Display against housing with electrical connection: 330 ° Housing against process connection: 320 °
<b>Display</b>	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)
<b>EHEDG approval</b>	✓ <sup>1)</sup>

<sup>1)</sup> EHEDG conformity with connection per DIN 11851 only in combination with ASEPTO-STAR k-flex upgrade, sealing from Kieselmann GmbH.

#### Mechanics/electronics

<b>Process connection</b>	Conical coupling (DIN 11851) DN 40 with union nut
<b>Wetted parts</b>	Stainless steel 1.4435 / 316L
<b>Internal transmission fluid</b>	Medical white oil, FDA compliant according to CFR 172.878 and 21 CFR 178.3620(a), compliant to USP, EP, and JP
<b>Housing material</b>	Lower body: stainless steel 304, Plastic head: PC + ABS, Buttons: TPE-E, Display window: PC
<b>Connection type</b>	Round connector M12 x 1, 5-pin
<b>Supply voltage</b>	15 V DC ... 35 V DC
<b>Power consumption</b>	Max. 70 mA
<b>Total current consumption</b>	Max. 570 mA (incl. switching current)

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

<b>Electrical safety</b>	Protection class: III Overvoltage protection: 40 V DC Short-circuit protection: Q <sub>A</sub> , Q <sub>1</sub> , Q <sub>2</sub> towards M Reverse polarity protection: L <sup>+</sup> to M
<b>Isolation voltage</b>	500 V DC
<b>CE-conformity</b>	EMC directive: 2004/108/EC, EN 61326-2-3
<b>Seal</b>	Without seal
<b>Enclosure rating</b>	IP65 <sup>1)</sup> IP67 <sup>1)</sup>
<b>Protection class III</b>	✓

<sup>1)</sup> 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

<b>Non-linearity</b>	≤ ± 0.5 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2
<b>Accuracy</b>	≤ ± 1 % of the span
<b>Setting accuracy of switching outputs</b>	≤ ± 0.5 % of span
<b>Response time</b>	3 ms
<b>Long-term drift/one-year stability</b>	≤ ± 0.2 % of the span according to IEC 61298-2
<b>Temperature coefficient in rated temperature range</b>	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 <sup>1)</sup>
<b>Rated temperature range</b>	0 °C ... +80 °C

<sup>1)</sup> 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

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

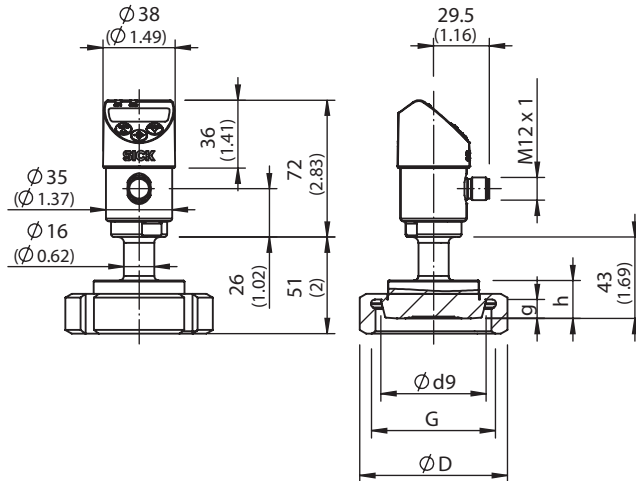
### Classifications

<b>eCl@ss 5.0</b>	27200620
<b>eCl@ss 5.1.4</b>	27200620
<b>eCl@ss 6.0</b>	27200620
<b>eCl@ss 6.2</b>	27200620
<b>eCl@ss 7.0</b>	27200620
<b>eCl@ss 8.0</b>	27200620
<b>eCl@ss 8.1</b>	27200620
<b>eCl@ss 9.0</b>	27200620
<b>eCl@ss 10.0</b>	27200620
<b>eCl@ss 11.0</b>	27200620
<b>eCl@ss 12.0</b>	27200620
<b>ETIM 5.0</b>	EC000243

<b>ETIM 6.0</b>	EC000243
<b>ETIM 7.0</b>	EC000243
<b>ETIM 8.0</b>	EC000243
<b>UNSPSC 16.0901</b>	41112409

### Dimensional drawing (Dimensions in mm (inch))

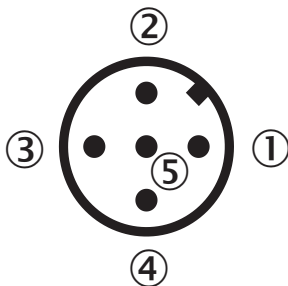
Conical coupling (DIN 11851) with union nut



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

Round connector M12 x 1, 5-pin



- ① L<sup>+</sup>: Positive supply connection
- ② Q<sub>2</sub>: Switching output 2
- ③ M: Negative supply connection
- ④ C/Q<sub>1</sub>: Switching output 1 (with IO-Link: communication / switching output 1)
- ⑤ Q<sub>A</sub>: Analog output

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