



# PHT-RB1X0S520SEALS0Z

PHT

PRESSURE SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	part no.
PHT-RB1X0S520SEALS0Z	6041196

Other models and accessories → [www.sick.com/PHT](http://www.sick.com/PHT)

### 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 ... 1 bar
<b>Process temperature</b>	-20 °C ... +150 °C
<b>Maximum ohmic load <math>R_A</math></b>	4 mA ... 20 mA, 2-wire ( $R_A \leq (L^+ - 10 V) / 0.02 A$ [Ohm]), The variant with field housing and current output 4 mA ... 20 mA features test terminals that allow metering of the signal current without having to disconnect the device. the signal current without having to disconnect the device., 0 V ... 10 V, 3-wire ( $R_A > 10 k\Omega$ ), 0 V ... 5 V, 3-wire ( $R_A > 5 k\Omega$ )
<b>Output signal</b>	4 mA ... 20 mA, 2-wire

#### Mechanics/electronics

<b>Communication interface</b>	-
<b>Process connection</b>	Conical coupling (DIN 11851) DN 25 with union nut
<b>Wetted parts</b>	Process connection: 316L stainless steel
<b>Internal transmission fluid</b>	Synthetic oil, FDA approved
<b>Housing material</b>	Stainless steel 1.4571
<b>Connection type</b>	L-connector (DIN EN 175301-803 A)
<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Electrical safety</b>	Overvoltage protection: 36 V DC Short-circuit protection: $Q_A$ towards M Reverse polarity protection: $L^+$ to M Protection class: III
<b>Dielectric strength</b>	500 V DC, NEC Class 02 power supply (low voltage and low current max. 100 VA even in the event of a fault)
<b>CE-conformity</b>	EMC directive: 2004/108/EC, EN 61326-2-3
<b>Weight sensor</b>	Approx. 500 g
<b>Seal</b>	EPDM

<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>Enclosure rating</b>	IP65 <sup>1)</sup>
<b>Protection class III</b>	✓
<b>MTTF</b>	403 years

<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>	≤ ± 0.2 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2
<b>Accuracy</b>	≤ ± 0.5 %, of the span (optional 0.25 % of span (adjusted in vertical mounting position with lower pressure connection))
<b>Non-repeatability</b>	≤ ± 0.1 % of the span
<b>Response time (10 % ... 90 %)</b>	≤ 10 ms
<b>Long-term drift/one-year stability</b>	≤ 0.2 % of the span
<b>Temperature coefficient in rated temperature range</b>	Mean TC of zero: ≤ 0.2% of span / 10 K for measuring ranges 0 bar ... 0.6 bar up to 0 bar ... 25 bar Mean TC of zero: ≤ 0.25 % of span/ 10 K with pressure range 0 bar ... 0.4 bar Mean TC of zero: ≤ 0.4% of span / 10 K for measuring range 0 bar ... 0.25 bar Mean TC of span ≤ 0.2 % of span / 10 K
<b>Rated temperature range</b>	0 °C ... +80 °C

### Ambient data

<b>Ambient temperature, operation</b>	-20 °C ... +80 °C
<b>Storage temperature</b>	-40 °C ... +100 °C
<b>Shock load</b>	500 g according to IEC 60068-2-27 (mechanical shock)
<b>Vibration load</b>	15 g according to IEC 60068-2-6 (vibration under resonance)

### Certificates

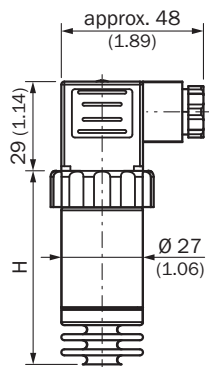
<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>China RoHS</b>	✓
<b>Food contact material manufacturer declaration</b>	✓

### Classifications

<b>ECLASS 5.0</b>	27200614
<b>ECLASS 5.1.4</b>	27200614
<b>ECLASS 6.0</b>	27200614
<b>ECLASS 6.2</b>	27200614
<b>ECLASS 7.0</b>	27200614
<b>ECLASS 8.0</b>	27200614
<b>ECLASS 8.1</b>	27200614
<b>ECLASS 9.0</b>	27200614
<b>ECLASS 10.0</b>	27200614
<b>ECLASS 11.0</b>	27200614
<b>ECLASS 12.0</b>	27200614
<b>ETIM 5.0</b>	EC011478

<b>ETIM 6.0</b>	EC011478
<b>ETIM 7.0</b>	EC011478
<b>ETIM 8.0</b>	EC011478
<b>UNSPSC 16.0901</b>	41112410

### Dimensional drawing Housing with L-connector (DIN 175301-803 A), IP65

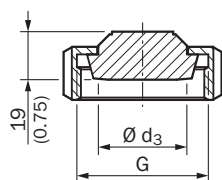


#### With accuracy H

<b>0.5 %</b>	64 (2.52)
<b>0.25 %</b>	84 (3.31)

Dimensions in mm (inch)

### Dimensional drawing Conical coupling (DIN 11851) with union nut



Design	G	Ø d <sub>3</sub>
<b>DIN 11851</b> DN 25	Rd 52 x 1/6	44 (1.73)
DN 40	Rd 65 x 1/6	48 (1.89)
DN 50	Rd 78 x 1/6	61 (2.40)

Dimensions in mm (inch)

Connection type



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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:

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