

# PHT-RB010S540S0AMS0Z

PHT

**PRESSURE SENSORS** 





### Ordering information

Туре	Part no.
PHT-RB010S540S0AMS0Z	6039317

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

Illustration may differ



#### Detailed technical data

#### **Features**

Medium	Liquid, gaseous		
Pressure type	Gauge pressure		
Pressure unit	bar		
Measuring range	0 bar 10 bar		
Process temperature	-20 °C +150 °C		
Maximum ohmic load R <sub>A</sub>	4 mA 20 mA, 2-wire ( $R_A \le (L^+ - 10 \text{ V}) / 0.02 \text{ A [Ohm]}$ ) 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 ( $R_A > 10 \text{ kOhm}$ ) 0 V 5 V, 3-wire ( $R_A > 5 \text{ kOhm}$ )		
Output signal	4 mA 20 mA, 2-wire		

#### Mechanics/electronics

Process connection	Conical coupling (DIN 11851) DN 40 with union nut	
Wetted parts	Stainless steel 1.4435	
Internal transmission fluid	Synthetic oil, FDA approved	
Housing material	Stainless steel 1.4571	
Connection type	M12 round connector x 1, 4-pin	
Supply voltage	10 V DC 30 V DC	
Electrical safety	Overvoltage protection: 36 V DC Short-circuit protection: Q <sub>A</sub> towards M Reverse polarity protection: L <sup>+</sup> to M Protection class: III	
Dielectric strength	$500\ V$ DC, NEC Class $02$ power supply (low voltage and low current max. $100\ VA$ even in the event of a fault)	
CE-conformity	EMC directive: 2004/108/EC, EN 61326-2-3	
Weight sensor	Approx. 500 g	
Seal	Without seal	

<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.

Enclosure rating	IP67 <sup>1)</sup>
Protection class III	✓
MTTF	403 years

<sup>&</sup>lt;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

Non-linearity	$\leq$ $\pm$ 0.2 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2		
Accuracy	$\leq$ ± 0.5 % of the span		
Non-repeatability	≤ ± 0.1 % of the span		
Response time (10 % 90 %)	≤ 10 ms		
Long-term drift/one-year stability	≤ 0.2 % of the span		
Temperature coefficient in rated temperature range	Mean TC of zero: $\le 0.2\%$ of span / 10 K for measuring ranges 0 bar 0.6 bar up to 0 bar 25 bar Mean TC of zero: $\le 0.25\%$ of span/ 10 K with pressure range 0 bar 0.4 bar $\le 0.25\%$ of span/ 10 K, with pressure range 0 bar 0.4 bar Mean TC of zero: $\le 0.4\%$ of span / 10 K for measuring range 0 bar 0.25 bar Mean TC of span $\le 0.2\%$ of span / 10 K		
Rated temperature range	0 °C +80 °C		

#### Ambient data

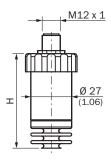
Ambient temperature	-20 °C +80 °C
Storage temperature	-40 °C +100 °C
Shock load	500 g according to IEC 60068-2-27 (mechanical shock)
Vibration load	15 g according to IEC 60068-2-6 (vibration under resonance)

#### Classifications

ECLASS 5.0	27200614
ECLASS 5.1.4	27200614
ECLASS 6.0	27200614
ECLASS 6.2	27200614
ECLASS 7.0	27200614
ECLASS 8.0	27200614
ECLASS 8.1	27200614
ECLASS 9.0	27200614
ECLASS 10.0	27200614
ECLASS 11.0	27200614
ECLASS 12.0	27200614
ETIM 5.0	EC011478
ETIM 6.0	EC011478
ETIM 7.0	EC011478
ETIM 8.0	EC011478
UNSPSC 16.0901	41112410

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

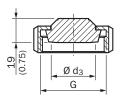
Housing with circular connector M12 x 1, IP67



#### With accuracy H

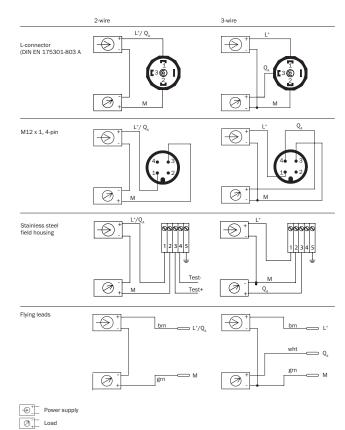
0.5 %	64 (2.52)	
0.25 %	84 (3.31)	

Conical coupling (DIN 11851) with union nut



Design		G	Ø d <sub>3</sub>
DIN 11851	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)

## Connection type



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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.

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