

# PHT-RBX25SD30S0AFT0Z

PHT

PRESSURE TRANSMITTER





#### Ordering information

| Туре                 | Part no. |
|----------------------|----------|
| PHT-RBX25SD30S0AFT0Z | 6039410  |

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 0.25 bar   |
| Process temperature               | -20 °C +150 °C   |
| Maximum ohmic load R <sub>A</sub> | $4~\text{mA}\ldots 20~\text{mA}, 2\text{-wire}~(R_\text{A} \leq (\text{L}^+ - 10~\text{V}) / 0.02~\text{A}~[\text{Ohm}])$ The variant with field housing and current output $4~\text{mA}\ldots 20~\text{mA}$ 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. $0~\text{V}\ldots 10~\text{V}, 3\text{-wire}~(R_\text{A} > 10~\text{kOhm})$ $0~\text{V}\ldots 5~\text{V}, 3\text{-wire}~(R_\text{A} > 5~\text{kOhm})$ |
| Output signal                     | 4 mA 20 mA, 2-wire   |
| EHEDG approval                    | <b>√</b>   |

#### Mechanics/electronics

| Process connection          | Clamp (DIN 32676) DN 32   |
|-----------------------------|---|
| Wetted parts                | Stainless steel 1.4435  |
| Internal transmission fluid | Synthetic oil, FDA approved   |
| Housing material            | Stainless steel 1.4571  |
| Connection type             | Field housing   |
| Supply voltage              | 11 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   |

<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.

| Seal                 | Without seal       |
|----------------------|--------------------|
| 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                                  | $\leq$ ± 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: $\leq 0.2\%$ of span / 10 K for measuring ranges 0 bar 0.6 bar up to 0 bar 25 bar Mean TC of zero: $\leq 0.25\%$ of span/ 10 K with pressure range 0 bar 0.4 bar $\leq 0.25\%$ of span/ 10 K, with pressure range 0 bar 0.4 bar Mean TC of zero: $\leq 0.4\%$ of span / 10 K for measuring range 0 bar 0.25 bar Mean TC of span $\leq 0.2\%$ of span / 10 K |
| Rated temperature range                            | 0 °C +80 °C  |

#### Ambient data

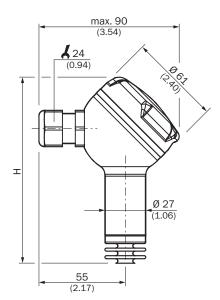
| Ambient temperature | -20 °C +80 °C   |
|---------------------|---|
| Storage temperature | -40 °C +100 °C  |
| Shock load          | 500 g according to IEC 60068-2-27 (mechanical shock)        |
| Vibration load      | 15 g according to IEC 60068-2-6 (vibration under resonance) |

#### Classifications

| eCl@ss 5.0     | 27200614 |
|----------------|----------|
| eCl@ss 5.1.4   | 27200614 |
| eCl@ss 6.0     | 27200614 |
| eCl@ss 6.2     | 27200614 |
| eCl@ss 7.0     | 27200614 |
| eCl@ss 8.0     | 27200614 |
| eCl@ss 8.1     | 27200614 |
| eCl@ss 9.0     | 27200614 |
| eCl@ss 10.0    | 27200614 |
| eCl@ss 11.0    | 27200614 |
| eCl@ss 12.0    | 27200614 |
| ETIM 5.0       | EC011478 |
| ETIM 6.0       | EC011478 |
| ETIM 7.0       | EC011478 |
| ETIM 8.0       | EC011478 |
| UNSPSC 16.0901 | 41112410 |

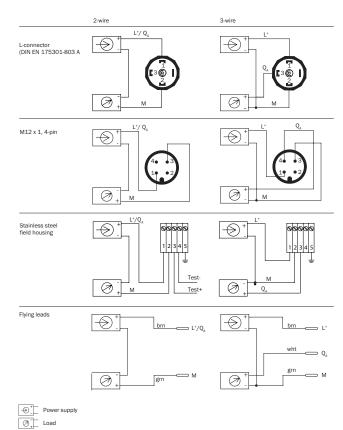
#### Dimensional drawing (Dimensions in mm (inch))

Stainless steel field case, compression fitting copper alloy, nickel plated, IP67



| With accuracy | Н            |
|---------------|--------------|
| 0.5 %         | 123 (4.84)   |
| 0.25 %        | 138.5 (5.45) |

### 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.

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."

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