Online data sheet



PHT-RBX25SVF0S0AFT0Z

PHT

PRESSURE SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	Part no.
PHT-RBX25SVF0S0AFT0Z	6039452

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

Features

Medium	Liquid, gaseous
Pressure type	Gauge pressure
Measuring range	0 bar ... 0.25 bar
Process temperature	–20 °C ... +150 °C
Output signal	4 mA ... 20 mA
EHEDG approval	✓

Performance

Non-linearity	≤ ± 0.2 %, of span (Best Fit Straight Line, BFSL) according to IEC 61298-2
Accuracy	≤ ± 0.5 % of the span optional 0.25 % of span (adjusted in vertical mounting position with lower pressure connection)
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: ≤ 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≤ 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
Rated temperature range	0 °C ... +80 °C

Mechanics/electronics

Process connection	Varivent connection type F
Wetted parts	Stainless steel 1.4435
Internal transmission fluid	Synthetic oil, FDA approved
Housing material	Stainless steel 1.4571
Electrical connection	Field housing IP 67
Supply voltage	10 V DC ... 30 V DC 14 V DC ... 30 V DC with output signal 0 V ... 10 V

	11 V DC ... 30 V DC with output signal 4 mA ... 20 mA and field housing
Electrical safety	Overvoltage protection: 36 V DC Short-circuit protection: Q_A towards M Reverse polarity protection: L^+ 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
Enclosure rating	IP67
Protection class III	✓

Ambient data

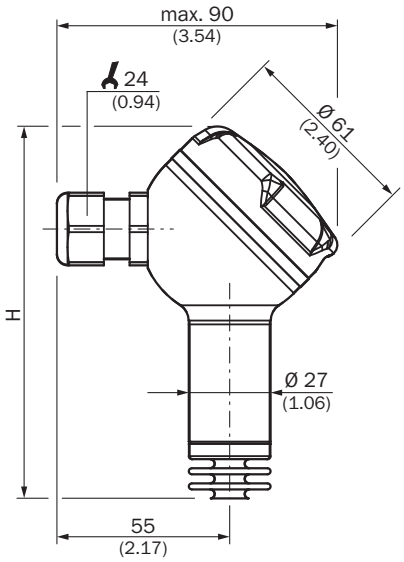
Ambient temperature	–20 °C ... +80 °C
Storage temperature	–40 °C ... +100 °C
Shock load	500 g according to IEC 60068-2-27 (mechanical shock)
Vibration load	15 g according to IEC 60068-2-6 (vibration under resonance)

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
ETIM 5.0	EC002476
ETIM 6.0	EC002476
UNSPSC 16.0901	41112410

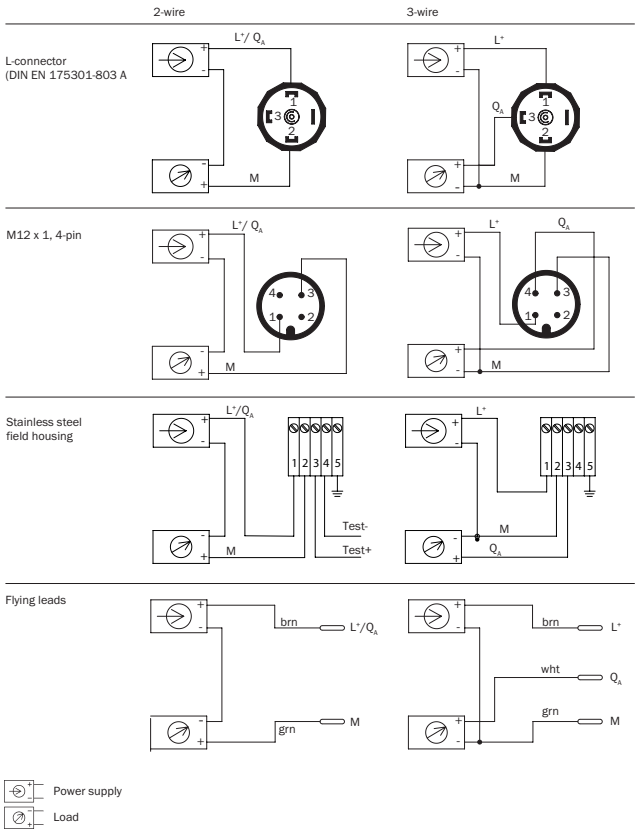
Dimensional drawing (Dimensions in mm (inch))

CrNi steel fieldbus housing, compression fitting nickel-plated copper alloy, IP67



With accuracy	H
0.5 %	123 (4.84)
0.25 %	138.5 (5.45)

Connection type



SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com