

6036116 20308158

de



PRESSURE TRANSMITTER

PRESSURE TRANSMITTER



Ordering information

Туре	Part no.
PBT-RP100SN1SS0V5C0Z	6048103

Other models and accessories -> www.sick.com/PBT



Detailed technical data

Features

Medium	Liquid, gaseous	
Pressure type	Gauge pressure	
Pressure unit	psi	
Measuring range	0 psi 100 psi	
Process temperature	0 °C +80 °C	
Maximum ohmic load R _A	4 mA 20 mA, 2-wire ($R_A \le (L^+ - 8 V) / 0.02 A$ [Ohm]) 0 V 10 V, 3-wire ($R_A > 10$ kOhm) 0 V 5 V, 3-wire ($R_A > 5$ kOhm)	
Output signal	0 V 10 V, 3-wire	
Specialty	Without	
Mechanics/electronics		
Process connection	1⁄4" NPT	
Wetted parts	Pressure Connection: stainless steel 316L Pressure sensor: stainless steel 316L (for measurement ranges from 0 bar 10 bar rel stain- less steel 13-8 PH)	
Internal transmission fluid	Silicone oil (only with pressure ranges < 0 bar 10 bar and \leq 0 bar abs 25 bar abs)	
Pressure port	Standard	
Housing material	Stainless steel	
Connection type	Flying leads, 5 m	
Supply voltage	14 V DC 30 V DC ¹⁾	
Power consumption	Signal current (max. 25 mA) for current output Max. 8 mA for voltage output signal	
Electrical safety	Overvoltage protection: 32 V DC, 36 V DC with 4 mA 20 mA Short-circuit protection: Q_A towards M	
	Reverse polarity protection: L ⁺ to M Protection class: III	
Isolation voltage	500 V DC	

¹⁾ The pressure transmitter must be supplied with power by a limited energy circuit compliant with 9.3 of UL/EN/IEC 601010-1 or LPS to UL/EN/IEC 60950-1 or Class 2 to UL 1310/UL1585 (NEC or CEC). The power supply must be suitable for operation above 2,000 m if the pressure transmitter is used above this altitude.

²⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

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CE-conformity	Pressure equipment directive: 2014/68/EU EMC directive: 2014/30/EU, EN 61 326-2-3
Weight sensor	Approx. 80 g
Seal	Without seal
Enclosure rating	IP67 ²⁾
Protection class III	\checkmark
Reference conditions	Reference conditions: According to IEC 61298-1
MTTF	1,176 years

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Performance

Non-linearity	\leq \pm 0.5 %, (Best Fit Straight Line, BFSL) according to IEC 61298-2
Accuracy	≤ ± 1 % of the span
Adjustment accuracy of zero signal	$\leq 0.5~\%$ of span typ., $\leq 0.8~\%$ of span max. (with non-linerarity 0.5 %)
Hysteresis	\leq 0.16 % of the span
Non-repeatability	\leq 0.1 % of the span
Response time	< 4 ms
Signal noise	\leq 0.3 % of the span
Long-term drift/one-year stability	≤ 0.1 % of span to IEC 61298-2
Rated temperature range	0 °C +80 °C
Service life	Minimum 100 Mio. load cycles

Ambient data

Ambient temperature	0 °C +80 °C
Storage temperature	-40 °C +70 °C
Relative humidity	45 % 75 %
Shock load	500 g according to IEC 60068-2-27 (mechanical shock)
Vibration load	10 g according to IEC 60068-2-6 (vibration under resonance) 20 g optional

Classifications

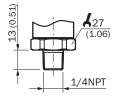
eCl@ss 5.0	27200614
eCl@ss 5.1.4	27200614
eCl@ss 6.0	27200614
eCl@ss 6.2	27200614
eCl@ss 7.0	27200614
eCl@ss 8.0	27200614
eCl@ss 8.1	27200614
eCl@ss 9.0	27200614
eCl@ss 10.0	27200614
eCl@ss 11.0	27200614
eCl@ss 12.0	27200614

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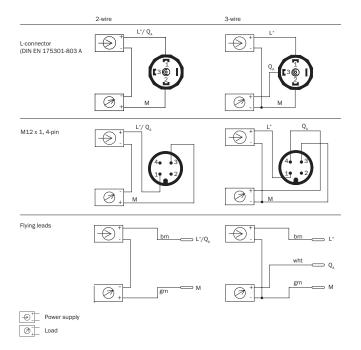
ETIM 5.0	EC011478
ETIM 6.0	EC011478
ETIM 7.0	EC011478
ETIM 8.0	EC011478
UNSPSC 16.0901	41112410

Dimensional drawing (Dimensions in mm (inch))

1⁄4" NPT



Connection type



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Recommended accessories

Other models and accessories -> www.sick.com/PBT

	Brief description	Туре	Part no.
Mounting brac	kets and plates		
Fait	Mounting bracket for simple and stable wall mounting of pressure sensors with 27 mm hexagon, Aluminum	BEF-FL-ALUPBS-HLDR	5322501

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