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PBT-CB4X0SGESSSAMA0Z PBT

SICK Sensor Intelligence.

PRESSURE TRANSMITTER

PRESSURE TRANSMITTER



Ordering information

Туре	Part no.
PBT-CB4X0SGESSSAMA0Z	6044894

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

Illustration may differ



Detailed technical data

Features		
Medium	Liquid, gaseous	
Pressure type	Compound pressure	
Pressure unit	bar	
Measuring range	-1 bar 3 bar	
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	4 mA 20 mA, 2-wire	
Specialty	Without	
Mechanics/electronics		
Process connection	G 1/2 B according to EN 837	
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	M12 round connector x 1, 4-pin	
Supply voltage	8 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	Stainless steel
Enclosure rating	IP67 ²⁾
Protection class III	\checkmark
Reference conditions	Reference conditions: According to IEC 61298-1
MTTF	815 years

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Performance

Non-linearity	\leq \pm 0.5 %, (Best Fit Straight Line, BFSL) according to IEC 61298-2
Accuracy	$\leq \pm 1$ % 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	≤ 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

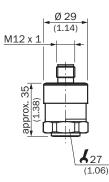
eCl@ss 5.0	27200614
eCl@ss 5.1.4	27200614
eCl@ss 6.0	27200614
eCl@ss 6.2	27200614
eCl@ss 7.0	27200614
eCl@ss 8.0	27200614
eCl@ss 8.1	27200614
eCl@ss 9.0	27200614
eCl@ss 10.0	27200614
eCl@ss 11.0	27200614
eCl@ss 12.0	27200614

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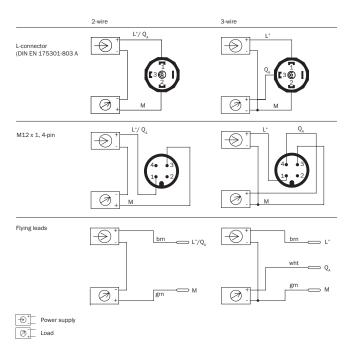
ETIM 5.0	EC011478
ETIM 6.0	EC011478
ETIM 7.0	EC011478
ETIM 8.0	EC011478
UNSPSC 16.0901	41112410

Dimensional drawing (Dimensions in mm (inch))

Housing with circular connector M12 x 1, IP67



Connection type



Recommended accessories

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

Heating and cooling devices Image: Cooling element, extension of the process temperature up to 150 °C. Maximum ambient temperature 30 °C. Max. process pressure 200 bar. Not suitable for pressure measurement in steam. Outer thread G 1/2, inner thread G 1/2. BEF-CE-G12G12-150C Cooling element, extension of the process temperature up to 200 °C. Maximum ambient temperature 30 °C. Max. process pressure 200 bar. Not suitable for pressure measurement in steam. Outer thread G 1/2, inner thread G 1/2. BEF-CE-G12G12-200C Cooling element, extension of the process temperature up to 150 °C. Maximum ambient temperature 30 °C. Max. process pressure 200 bar. Not suitable for pressure measurement in steam. Outer thread G 1/2, inner thread G 1/2. BEF-CE-G12G14-150C Cooling element, extension of the process temperature up to 200 °C. Maximum ambient temperature 30 °C. Max. process pressure 200 bar. Not suitable for pressure measurement in steam. Outer thread G 1/4, inner thread G 1/2. BEF-CE-G12G14-150C Mounting bracket for simple and stable wall mounting of pressure sensors with 27 mm hexagon, Aluminum BEF-FL-ALUPBS-HLDR Plug connectors and cables Used Attended At	5324393 5324394 5332155 5336706 5322501
Image: Series of the series	5324394 5332155 5336706
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Mounting bracket for simple and stable wall mounting of pressure sensors with 27 mm hexagon, Aluminum BEF-FL-ALUPBS-HLDR Plug connectors and cables	5322501
hexagon, Aluminum Plug connectors and cables	5322501
Used A female connector M40, 4 nin angled	
Head A: female connector, M12, 4-pin, angled DOL-1204-W05MD Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	6020399
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 020UB3XLEAXHead B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 mYF2A14- 020UB3XLEAX	2095607
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 020VB3XLEAXHead B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 mO20VB3XLEAX	2096234
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 050VB3XLEAXHead B: Flying leads050VB3XLEAXCable: Sensor/actuator cable, PVC, unshielded, 5 m050VB3XLEAX	2096235
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 100UB3XLEAXHead B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 mYF2A14- 100UB3XLEAX	2095609
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 100VB3XLEAXHead B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 mYF2A14- 100VB3XLEAX	2096236
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 150UB3XLEAXHead B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 15 mYF2A14- 150UB3XLEAX	2095610
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 150VB3XLEAXHead B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 15 mYF2A14- 150VB3XLEAX	2096237
Head A: female connector, M12, 4-pin, straight, A-codedYF2A14- 200UB3XLEAXHead B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 20 mYF2A14- 200UB3XLEAX	2095611
Head A: female connector, M12, 4-pin, straight, A-coded YF2A14- Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 20 m	2096238

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	Brief description	Туре	Part no.
1	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 25 m	YF2A14- 250UB3XLEAX	2095615
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YG2A14- 020UB3XLEAX	2095766
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14- 020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YG2A14- 050UB3XLEAX	2095767
>	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14- 050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m	YG2A14- 100UB3XLEAX	2095768
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YG2A14- 100VB3XLEAX	2095898
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 15 m	YG2A14- 150UB3XLEAX	2095769
>	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 15 m	YG2A14- 150VB3XLEAX	2096213
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 20 m	YG2A14- 200UB3XLEAX	2095770
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 20 m	YG2A14- 200VB3XLEAX	2096214
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 25 m	YG2A14- 250UB3XLEAX	2095771

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



Online data sheet

