Product data sheet

PET-1RP5K0N10SRMR

PET

PRESSURE TRANSMITTER

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	Part no.
PET-1RP5K0N10SRMR	6072413

Other models and accessories ➜ www.sick.com/PET

Detailed technical data

Features

Pressure type	Gauge pressure
Measuring range	0 psi ... 5,000 psi
Process temperature	–30 °C ... +100 °C
Output signal	0.5 V ... 4.5 V, ratiometric, 3-conductor
Pieces per package	50 pieces

Mechanics/electronics

Process connection	¼" NPT
Seal	Without seal
Wetted parts	Stainless steel, stainless steel 13-8 PH
Pressure port	3.5 mm Standard
Housing material	Stainless steel 316L, PBT GF30
Connection type	M12 round connector x 1, 4-pin
Enclosure rating	IP67, for round connector (IEC 60529) [1]
Supply voltage	5 V DC, ± 10 % [2]
Maximum ohmic load R_A	> 4.5 kΩ with ratiometric output signal
Maximum power consumption	5 mA
Initialization time	15 ms
Protection class	III
Isolation voltage	750 V DC
Overvoltage protection	36 V DC
Short-circuit protection	Output Q_A towards M
Reverse polarity protection	L^+ towards M
CE-conformity	2004/108/EC, EN 61326-1 emission (group 1, class B) and interference immunity (industrial application) and pressure equipment directive 97/23/EC

[1] The enclosure rating classes specified only apply while the thermometer is connected with female connectors that provide the corresponding enclosure rating.

[2] 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.

RoHS certificate	✓
Service life	Minimum 10 Mio. load cycles
MTTF	> 100 years

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Performance

Non-linearity	≤ ± 0.5 % of span (best fit straight line, BFSL)
Accuracy	≤ ± 1.2 % of span (at room temperature)
Response time	< 2 ms
Measurement deviation of zero signal	≤ ± 0.5 % of the span
Temperature error	≤ ± 1.5 % of the span
Long-term drift/one-year stability	≤ ± 0.3 % of span (per year)
Rated temperature range	0 °C ... +80 °C
Reference conditions	According to IEC 61298-1

Ambient data

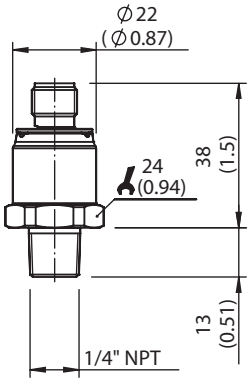
Ambient temperature, operation	–30 °C ... +100 °C
Storage temperature	–30 °C ... +100 °C
Shock load	40 g (6 ms) according to IEC 60068-2-27 (mechanical shock)
Vibration load	20 g (20 Hz ... 2000 Hz, 120 min) according to IEC 60068-2-6 (vibration at resonance)

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

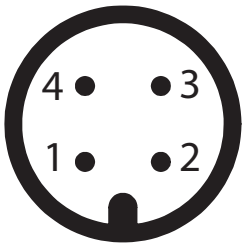
Dimensional drawing (Dimensions in mm (inch))

Process connection ¼" NPT with round connector M12 x 1, 4-pin



Connection type

M12 round connector x 1, 4-pin



Assignment	L +	M	Q_A
2-wire	1	3	-
3-wire	1	3	4

① L^+: Positive supply connection
② M: Negative supply connection
③ Q_A: Analog output

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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:

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