



# PET-1RP5K0N10SRMR

PET

PRESSURE SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	part no.
PET-1RP5K0N10SRMR	6072413

Other models and accessories → [www.sick.com/PET](http://www.sick.com/PET)

### Detailed technical data

#### Features

<b>Medium</b>	Fluids
<b>Pressure type</b>	Gauge pressure
<b>Pressure unit</b>	psi
<b>Measuring range</b>	0 psi ... 5,000 psi
<b>Overpressure safety</b>	2-fold (3-fold upon request)
<b>Process temperature</b>	-30 °C ... +100 °C
<b>Maximum ohmic load R<sub>A</sub></b>	> 4.5 kΩ, with ratiometric output signal
<b>Output signal</b>	0.5 V ... 4.5 V, ratiometric, 3-conductor
<b>Initialization time</b>	15 ms
<b>Pieces per package</b>	50 pieces

#### Mechanics/electronics

<b>Communication interface</b>	-
<b>Process connection</b>	¼" NPT
<b>Wetted parts</b>	Stainless steel Stainless steel 13-8 PH
<b>Pressure port</b>	Standard
<b>Housing material</b>	Stainless steel 316L, PBT GF30
<b>Connection type</b>	M12 round connector x 1, 4-pin
<b>Supply voltage</b>	4.5 V DC ... 5.5 V DC <sup>1) 2)</sup>
<b>Power consumption</b>	5 mA
<b>Seal</b>	Without seal
<b>Enclosure rating</b>	IP67 (IEC 60529) <sup>3)</sup>
<b>MTTF</b>	> 100 years

<sup>1)</sup> 5 V DC ± 10 %.

<sup>2)</sup> 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.

<sup>3)</sup> The enclosure rating classes specified only apply while the thermometer is connected with female connectors that provide the corresponding enclosure rating.

<sup>4)</sup> Available upon request for process connections G ¼ A according to DIN 3852-E, ¼ " NPT, R ¼ according to ISO 7, and 7/16"-20 UNF.

Pressure peak dampening	Through integrated pressure port 0.6 mm or 0.3 mm <sup>4)</sup>
Protection class	III
Isolation voltage	750 V DC
Overvoltage protection	36 V DC
Short-circuit protection	Output Q <sub>A</sub> towards M
Reverse polarity protection	L <sup>+</sup> towards M

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3) The enclosure rating classes specified only apply while the thermometer is connected with female connectors that provide the corresponding enclosure rating.

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Performance

Non-linearity	≤ ± 0.5 %, of span (best fit straight line, BFSL)
Accuracy	≤ ± 1.2 %, of span (at room temperature)
Adjustment accuracy of zero signal	≤ ± 0.5 % of the span
Response time	< 2 ms
Long-term drift/one-year stability	≤ ± 0.3 % of span (per year)
Rated temperature range	0 °C ... +80 °C
Service life	Minimum 10 Mio. load cycles
Temperature error	≤ ± 1.5 % of the span
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

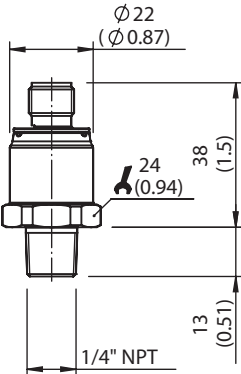
ECLASS 5.0	27200614
ECLASS 5.1.4	27200614
ECLASS 6.0	27200614
ECLASS 6.2	27200614
ECLASS 7.0	27200614
ECLASS 8.0	27200614
ECLASS 8.1	27200614
ECLASS 9.0	27200614
ECLASS 10.0	27200614
ECLASS 11.0	27200614
ECLASS 12.0	27200614
ETIM 5.0	EC011478
ETIM 6.0	EC011478
ETIM 7.0	EC011478

ETIM 8.0	EC011478
UNSPSC 16.0901	41112410

Certificates

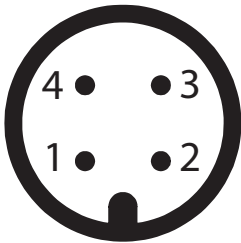
EU declaration of conformity	✓
UK declaration of conformity	✓
China-RoHS	✓

Dimensional drawing Process connection 1/4" NPT with round connector M12 x 1, 4-pin



Dimensions in mm (inch)

Connection type M12 round connector x 1, 4-pin



Assignment	L <sup>+</sup>	M	Q <sub>A</sub>
2-wire	1	3	-
3-wire	1	3	4

- ① L<sup>+</sup>: Positive supply connection  
② M: Negative supply connection  
③ Q<sub>A</sub>: 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.”

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