

PET-1RP1KON10SRMR

PET

PRESSURE SENSORS





Ordering information

Туре	Part no.
PET-1RP1K0N10SRMR	6072424

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

Illustration may differ



Detailed technical data

Features

Pressure type	Gauge pressure
Measuring range	0 psi 1,000 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 Enclosure rating IP67, for round connector (according to IEC 60529) ¹¹) Connection type M12 round connector x 1, 4-pin Supply voltage 5 ∨ DC ± 10 % 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 ∨ DC Overvoltage protection 36 ∨ 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 RoHS certificate ✓ Service life Minimum 100 Mio. life cycles		
Wetted parts Stainless steel, stainless steel 13-8 PH Pressure port 3.5 mm Standard Housing material Stainless steel 316L, PBT GF30 Enclosure rating IP67, for round connector (according to IEC 60529) ¹¹) Connection type M12 round connector x 1, 4-pin Supply voltage 5 ∨ DC ± 10 % 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 ∨ DC Overvoltage protection 36 ∨ 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 RoHS certificate ✓	Process connection	1/4" NPT
Pressure port 3.5 mm Standard Housing material Stainless steel 316L, PBT GF30 Enclosure rating IP67, for round connector (according to IEC 60529) ¹¹) Connection type M12 round connector x 1, 4-pin Supply voltage 5 V DC ± 10 % 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 RoHS certificate ✓	Seal	Without seal
Housing material Enclosure rating IP67, for round connector (according to IEC 60529) ¹) Connection type M12 round connector x 1, 4-pin Supply voltage 5 ∨ DC ± 10 % Maximum ohmic load R _A > 4.5 kΩ with ratiometric output signal Maximum power consumption Initialization time 15 ms Protection class III Isolation voltage 750 ∨ DC Overvoltage protection 36 ∨ DC Short-circuit protection CE-conformity CE-conformity Stainless steel 316L, PBT GF30 M12 For round connector (according to IEC 60529) ¹) M12 For round connector (according to IEC 60529) ¹) M2 For round connector x 1, 4-pin 15 W DC 15 W DC 15 MA 15 ms Protection class III CE-conformity CE-conformity 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 RoHS certificate	Wetted parts	Stainless steel, stainless steel 13-8 PH
Enclosure rating IP67, for round connector (according to IEC 60529) ¹) Connection type M12 round connector x 1, 4-pin Supply voltage 5 ∨ DC ± 10 % 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 ∨ DC Overvoltage protection 36 ∨ 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 RoHS certificate	Pressure port	3.5 mm Standard
Connection type M12 round connector x 1, 4-pin Supply voltage 5 V DC ± 10 % Maximum ohmic load R _A > 4.5 kΩ with ratiometric output signal Maximum power consumption Initialization time 15 ms Protection class III Isolation voltage 750 V DC Overvoltage protection 36 V DC 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 RoHS certificate	Housing material	Stainless steel 316L, PBT GF30
	Enclosure rating	IP67, for round connector (according to IEC 60529) 1)
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 RoHS certificate ✓	Connection type	M12 round connector x 1, 4-pin
Maximum power consumption 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 RoHS certificate ✓	Supply voltage	5 V DC ± 10 %
Initialization time Protection class III Isolation voltage 750 V DC Overvoltage protection Short-circuit protection Output Q _A towards M Reverse polarity protection 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 RoHS certificate √	Maximum ohmic load R _A	$>4.5~\text{k}\Omega$ with ratiometric output signal
Protection class III Isolation voltage 750 V DC Overvoltage protection 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 RoHS certificate ✓	Maximum power consumption	5 mA
Isolation voltage 750 V DC Overvoltage protection 36 V DC Short-circuit protection Output QA 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 RoHS certificate ✓	Initialization time	15 ms
Overvoltage protection Short-circuit protection Output Q _A towards M Reverse polarity protection CE-conformity 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 RoHS certificate √	Protection class	III
Short-circuit protection CE-conformity Output Q _A towards M L ⁺ towards M 2004/108/EC, EN 61326-1 emission (group 1, class B) and interference immunity (industrial application) and pressure equipment directive 97/23/EC RoHS certificate ✓	Isolation voltage	750 V DC
Reverse polarity protection L ⁺ towards M 2004/108/EC, EN 61326-1 emission (group 1, class B) and interference immunity (industrial application) and pressure equipment directive 97/23/EC RoHS certificate ✓	Overvoltage protection	36 V DC
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 RoHS certificate ✓	Short-circuit protection	Output Q _A towards M
application) and pressure equipment directive 97/23/EC RoHS certificate ✓	Reverse polarity protection	L ⁺ towards M
	CE-conformity	
Service life Minimum 100 Mio. life cycles	RoHS certificate	✓
	Service life	Minimum 100 Mio. life cycles

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

Performance

Non-linearity	\leq ± 0.5 % of span (best fit straight line, BFSL)	
Accuracy	\leq ± 1.2 % of span (at room temperature)	
Response time	< 2 ms	
Measurement deviation of zero signal	\leq ± 0.5 % of the span	
Temperature error	\leq ± 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

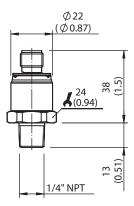
Ambient temperature operation	-30 °C +100 °C
Storage temperature	-30 °C +100 °C
Shock load	40 g (6 ms) according to IEC 60068-2-27 (mechanical shock)
Vibration load	20 g (20 Hz 2000 Hz, 120 min) according to IEC 60068-2-6 (vibration at resonance)

Classifications

ECI@ss 5.0	27200614
ECI@ss 5.1.4	27200614
ECI@ss 6.0	27200614
ECI@ss 6.2	27200614
ECI@ss 7.0	27200614
ECI@ss 8.0	27200614
ECI@ss 8.1	27200614
ECI@ss 9.0	27200614
ECI@ss 10.0	27200614
ECI@ss 11.0	27200614
ETIM 5.0	EC011478
ETIM 6.0	EC011478
ETIM 7.0	EC011478
UNSPSC 16.0901	41112410
UNSPSC 16.0901	41112410

Dimensional drawing (Dimensions in mm (inch))

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



Connection type

M12 round connector x 1, 4-pin



Assignment	L+	М	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."

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