

T40-E0121K

T4000 Direct

NON-CONTACT SAFETY SWITCHES

SICK
Sensor Intelligence.



actuator not supplied with delivery



Ordering information

Type	part no.
T40-E0121K	6035042

Other models and accessories → www.sick.com/T4000_Direct

Detailed technical data

Features

System part	sensor
Sensor principle	RFID
Number of safe outputs	2
Assured switch on distance S_{ao}	15 mm ¹⁾ 18 mm ²⁾ 19 mm ³⁾
Assured switch off distance S_{ar}	45 mm ¹⁾ 55 mm ²⁾ 55 mm ³⁾
Active sensor surfaces	1
Actuation directions	5
Monitoring time minimum dwell time	≥ 0.5 s
Coding	Uniquely coded

¹⁾ With actuator T4000-1KBA.

²⁾ With actuator T4000-1KBQ.

³⁾ With actuator T4000-1KBR.

Safety-related parameters

Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	2.1×10^{-9}
T_M (mission time)	20 years (EN ISO 13849)
Type	Type 4 (EN ISO 14119)
Actuator coding level	High coding level (EN ISO 14119)
Classification in compliance with IEC/EN 60947-5-3	PDF-M

Functions

Safe series connection	With T-connector (without diagnostics)
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Interfaces

Connection type	Plug connector, M12, 8-pin
Long connecting cable	≤ 200 m
Coupling nut material	Fiber-glass-reinforced polyamide
IO-Link Safety	
WCDT	≤ 290 ms
Display elements	
Error indication	✓
Status display	✓

Electronics

Protection class	III
Classification according to cULus	Class 2
Note on supply voltage U_S	Operation with UL-class 2 power supply only
External fuse	At supply voltage V_S 0.25 A ... 4 A
Usage category	EN 60947-5-2
Rated operating current (voltage)	0.4 A (24 V DC)
Rated insulation voltage U_i	75 V
Rated impulse withstand voltage U_{imp}	1,500 V AC
Supply voltage V_S	24 V DC (20.4 V DC ... 27.6 V DC)
Power consumption	80 mA
Type of output	Self-monitoring semiconductor outputs (OSSDs)
Response time	≤ 290 ms
Switch-on time	10 s ¹⁾

¹⁾ After switching on the operating voltage, the semiconductor outputs are switched off during the ready delay and the alarm outputs are at LOW potential.

Mechanics

Design	Rectangular
Dimensions (W x H x D)	40 mm x 57 mm x 40 mm
Weight	0.4 kg
Housing material	Plastic PTB VO GF30

Ambient data

Enclosure rating	IP67
Ambient operating temperature	-20 °C ... +55 °C
Storage temperature	-20 °C ... +70 °C

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓

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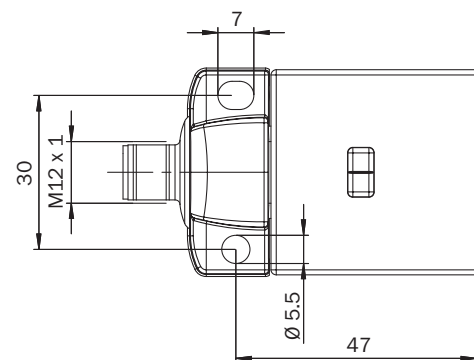
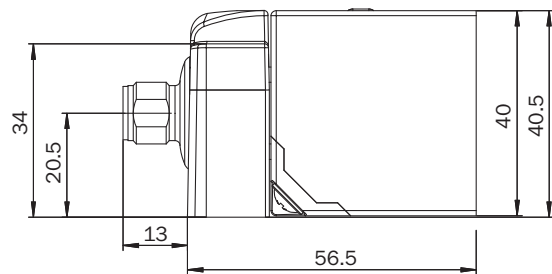
NON-CONTACT SAFETY SWITCHES

China RoHS	✓
cULus certificate	✓

Classifications

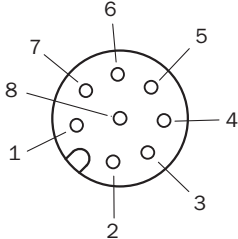
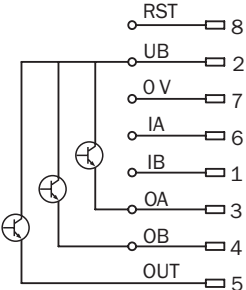
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ECLASS 8.1	27272403
ECLASS 9.0	27272403
ECLASS 10.0	27272403
ECLASS 11.0	27272403
ECLASS 12.0	27274601
ETIM 5.0	EC001829
ETIM 6.0	EC001829
ETIM 7.0	EC001829
ETIM 8.0	EC001829
UNSPSC 16.0901	39122205

Dimensional drawing



Dimensions in mm (inch)

Pinouts



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:

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