

T4000-1RBB01

T4000 Standard

PRODUCT PORTFOLIO

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
T4000-1RBB01	6022315

Other models and accessories → www.sick.com/T4000_Standard



Detailed technical data

Features

System part	Evaluation unit
ATEX marking	Ex mark II (3) G [Ex nL] IIC

Safety-related parameters

Category	Category 3 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
PFH_D (mean probability of a dangerous failure per hour)	4.3 x 10 ⁻⁸ (EN ISO 13849) ¹⁾ 8.8 x 10 ⁻⁸ (EN ISO 13849) ²⁾
T_M (mission time)	20 years (EN ISO 13849) ¹⁾ 8 years (EN ISO 13849) ²⁾
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

¹⁾ With < 34.600 switching cycles p.a.

²⁾ With < 90.000 switching cycles p.a.

Interfaces

Connection type	Plug-in terminals
Out indication	✓
Error indication	✓
Status display	✓

Electrical data

Protection class	III (EN 50178)
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 ... 8 A
Switching voltage	60 V DC / 30 V AC
Usage category	AC-12/DC-12, AC-14/DC-13 (EN 60947-5-2)
Rated operating current (voltage)	0.3 A (60 V AC) 50 Hz 6 A (30 V AC) 50 Hz

¹⁾ When the operating voltage is switched on, the relay outputs are electrically isolated during the initialisation period, and the door alarm contact set to LOW .

	0.3 A (60 V DC) 6 A (30 V DC) 2 A (30 V AC) 50 Hz 3 A (24 V DC)
Rated insulation voltage U_i	63 V
Rated impulse withstand voltage U_{imp}	1,500 V AC
Supply voltage V_s	24 V DC (21 V DC ... 27 V DC)
Short-circuit protection	6 A gG
Type of output	Relays
Switching voltage	≥ 0.1 V DC
Response time	≤ 180 ms
Switch-on time	3 s ¹⁾
Number of application diagnostic outputs	1 semiconductor, p-switching
Number of safe outputs (N/O)	2

¹⁾ When the operating voltage is switched on, the relay outputs are electrically isolated during the initialisation period, and the door alarm contact set to LOW .

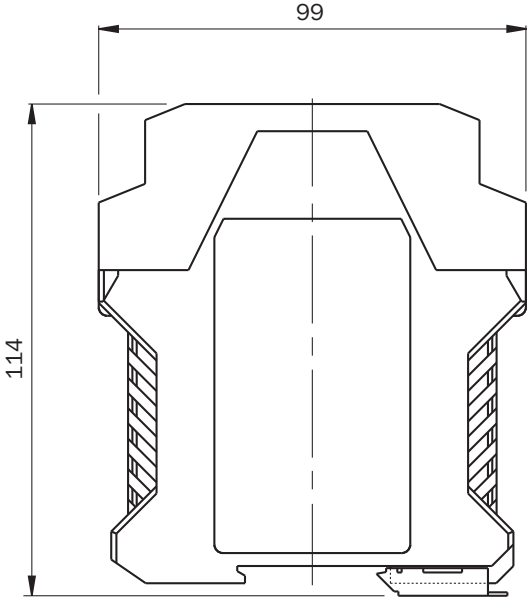
Mechanical data

Design	Rectangular
Dimensions (W x H x D)	22.5 mm x 114 mm x 99 mm
Weight	0.327 kg
Housing material	Plastic PA6.6
Mechanical life	10 x 10 ⁶ switching cycles

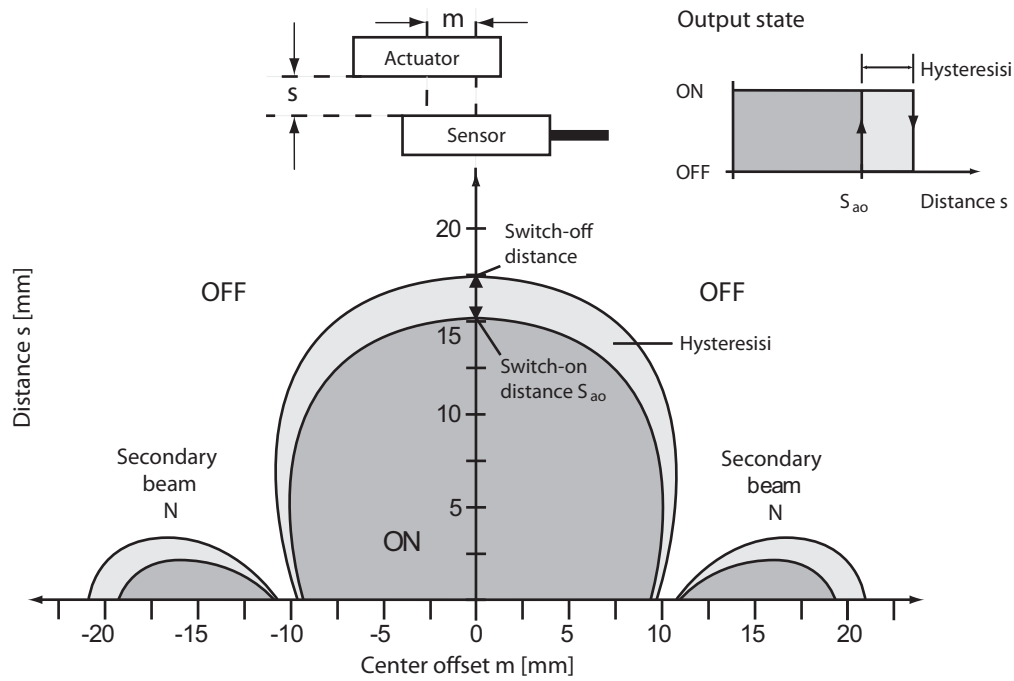
Ambient data

Enclosure rating	IP 20
Ambient operating temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +70 °C
Contamination rating	2
Vibration resistance	10 Hz ... 55 Hz, 0.5 mm (IEC 60068-2-6)
Shock resistance	30 g, 11 ms (IEC 60068-2-27)

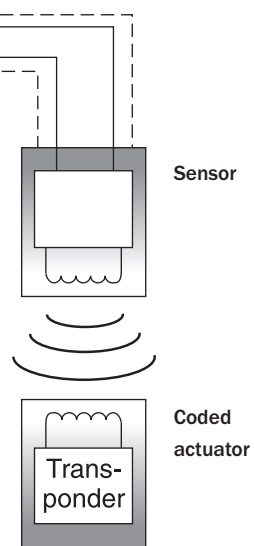
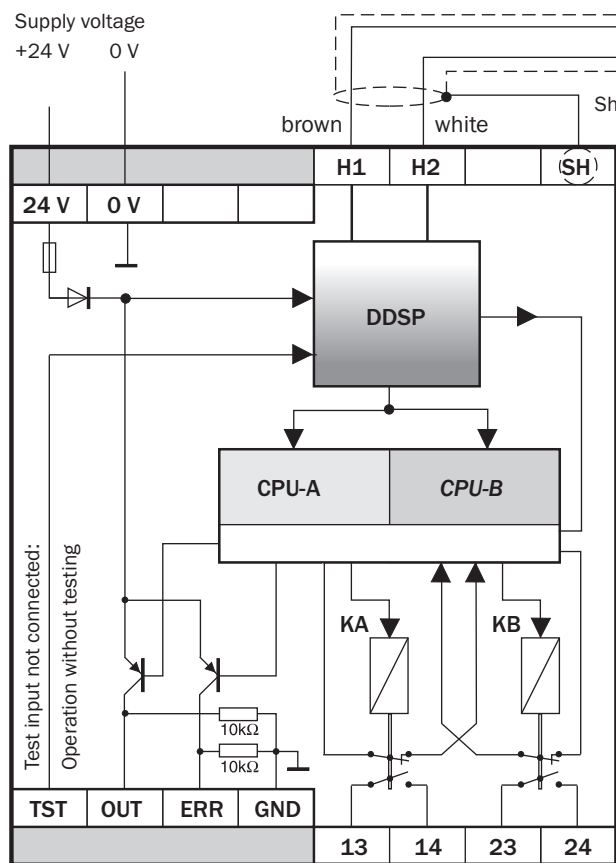
Dimensional drawing (Dimensions in mm (inch))



Response range



Connection diagram



DDSP:
 Double Dynamic Safety-Path
 with error monitoring of the actuator,
 of the sensor and of the cable
 to the sensor

TST Test input (STATE)
 OUT Enable output
 ERR Diagnostic output (ERROR)
 GND 0 V

H1 / H2 Connection, sensor
 13 / 14 Connection, N/O contact 1, enable contact safety relay
 23 / 24 Connection, N/O contact 2, enable contact safety relay

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.”

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