



SYS/SGD-W4100010001BX3

Safeguard Detector

SAFETY SYSTEMS FOR AUTOMATING MATERIAL FLOWS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
SYS/SGD-W4100010001BX3	1129652

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



Detailed technical data

Features

Safety task	Natural protection due to the material
Product scope	System
Safeguard Detector variant	Box variant
Detection zone	30 mm ... 100 mm ¹⁾
Safety-related parameters	
Category	Category 3 (EN ISO 13849-1)
Performance level	PL d (EN ISO 13849-1)
Performance class SRS/SRSS	D (IEC TS 62998-1)
PFH _D (mean probability of a dangerous failure per hour)	1.0 * 10 ⁻⁷
DC _{avg} (diagnostic coverage)	80 % (EN ISO 13849-1)
MTTF _D (mean time to dangerous failure)	250 years (EN ISO 13849-1)
Items supplied	1 × UE410-SD safety controller 2 × WTB4F MultiPulse sensor 100 mm Software, operating instructions, connection diagram and SISTEMA file

¹⁾ If no movable physical guard is identified in the detection zone, the safety controller prompts the machine to enter the safe state.

UE410-SD safety controller

Note	The UE410-SD safety evaluation module can be operated with one or two MultiPulse sensor pairs. The actuator can be connected directly to the UE410-SD safety evaluation module. The safety chain can also be expanded with additional logic elements (e.g., a higher-level safety controller).
Configuration method	Hard wired
Number of connectable sensor pairs	1 or 2
Connection type	Screw-type terminals
Pulse rate of the sensors	10 Hz
Supply voltage V_S	24 V DC (19.2 V ... 30 V)
Protection class	III (EN 50178)
Enclosure rating	IP20 (EN 60529)
Ambient operating temperature	-25 °C ... 55 °C

Response time of the overall safety system (sensors and safety evaluation module)	≤ 160 ms
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MultiPulse photoelectric proximity sensor

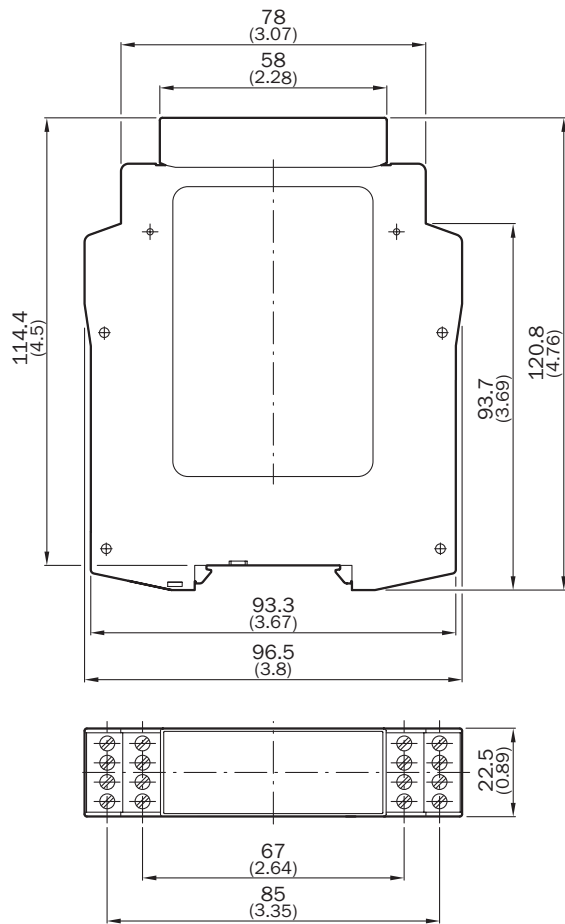
Number of sensors	2 pieces
Detection zone	30 mm ... 100 mm ¹⁾
Remission	6 % ... 90 %
Pulse frequency	10 Hz
Response time	≤ 100 ms
Type of light	Visible red light
Wave length	650 nm
Light spot size (distance)	Ø 7 mm (50 mm)
Connection type	Connector M8, 3-pin
Voltage supply	Via safety controller
Enclosure rating	IP67 (EN 60529)
Ambient operating temperature	-40 °C ... +60 °C

¹⁾ If no movable physical guard is identified in the detection zone, the safety controller prompts the machine to enter the safe state.

Certificates

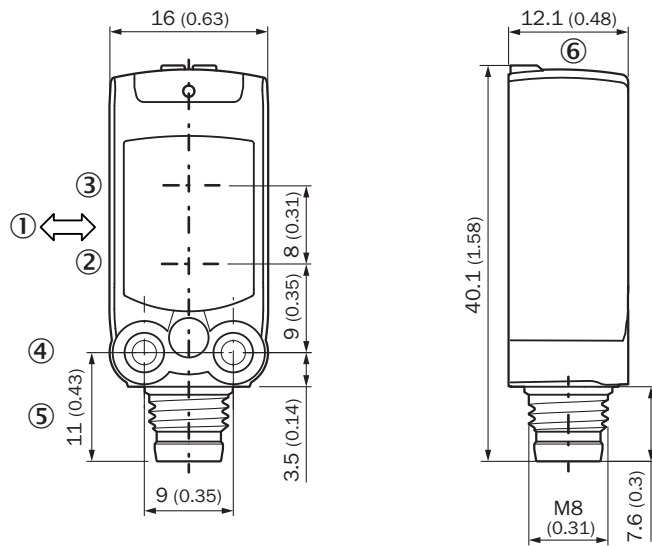
EU declaration of conformity	✓
UK declaration of conformity	✓
China RoHS	✓
UK-Type-Examination approval	✓
TÜV approval	✓
TÜV approval annex	✓
EC-Type-Examination approval	✓

Dimensional drawing



Dimensions in mm (inch)

Dimensional drawing



Dimensions in mm (inch)

① Standard direction of the material being detected

- ② Center of optical axis, sender
- ③ Center of optical axis, receiver
- ④ M3 mounting hole
- ⑤ Connection
- ⑥ display and adjustment elements

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:

Contacts and other locations –www.sick.com