WTT12-S

Safety sensor for muting and fall edge detection up to SIL 1 and PL c
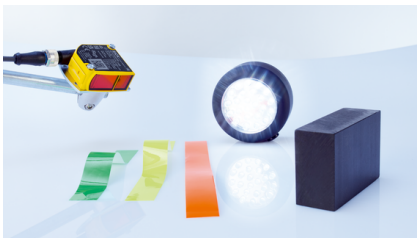
SICK
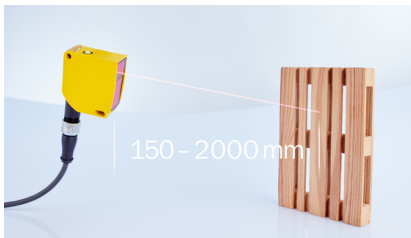Sensor Intelligence.

Advantages

Safe object detection

The WTT12-S safety distance sensors with performance level c and SIL1 reliably detect objects in different detection directions. Even with fast movements of machines or machine parts, the WTT12-S sensors with their high switching frequency ensure a continuous machine availability.

WTT12-S sensors are especially impervious to ambient light. The sensors remain continuously available even with background reflections, changing surfaces, or jet-black objects.

The WTT12-S sensors offer a large scanning range of up to 2,000 mm. Their high switching frequency allows fast signal processing – for safe and efficient processes.

WTT12-S sensors detect objects, drop-off edges and depressions. With their precise laser beam, they quickly and reliably detect objects from different viewing angles.

Reliability: high safety and availability even in challenging ambient conditions

The right fit for your application

Whether as a muting sensor in intralogistics processes or as a solution for the secondary protection of mobile robots – WTT12-S sensors are versatile and space saving. The sensors reliably detect objects and drop-off edges in the room and transmit this information to the safety controller.

WTT12-S sensors provide flexible mounting options and are easy to parameterize. They are easy to connect thanks to the standard M12 male connector.

With their compact design, the WTT12-S sensors can be integrated into almost every machine design in a space-saving manner. Thanks to their rugged VISTAL® housing, they resist even the most challenging ambient conditions.

➕ Flexibility: can be used for a variety of application

WTT12-S

Technical data overview

Dimensions (W x H x D)	20 mm x 49.6 mm x 44.2 mm
Light source	Laser
Type of light	Visible red light
Enclosure rating	IP67
Housing material	Plastic
Adjustment	Teach-in button
Functional principle detail	Absence of reference object or reference surface / Object between sensor and reference object or reference surface (depending on type)

Product description

The WTT12-S safety sensor is well-suited for simple reliable detection of objects in mobile and stationary applications. The sensor reliable detects fall edges by means of optical time-of-flight measurement. This is how the WTT12-S allows your automated guided vehicle or service robot to travel safely. The sensor also safely detects incoming machine parts and workpieces thanks to muting. Quick parameterization and standard M12 plug connectors make the WTT12-S easy to put into operation. And thanks to its rugged housing, the sensor can be used in countless applications, even in harsh environments. This ensures efficient, safe and productive processes in intralogistics.

At a glance

• Safe detection: Meets requirements of SIL 1 and PL c
• Long sensing ranges: 150 mm to 2,000 mm
• Color-insensitive sensor with time-of-flight technology
• Pushbutton for quick teach-in of the configuration
• Standard M12 plug connector
• Compact VISTAL® housing in enclosure rating IP67

Your benefits

• Protect people and capital goods thanks to reliable object detection
• Certify your machine without workarounds
• Detect moving objects and fall edges even over long distances
• Master adverse ambient conditions thanks to the rugged housing and ambient light immunity
• Parameterize sensors using a teach-in button and connect them to the safety controller via M12 plug connectors

Fields of application

• Safe edge detection in intralogistics
• Access protection with muting for safe material flow
• Safe fall edge detection for service robots

Ordering information

Other models and accessories ➜ www.sick.com/WTT12-S

- **Analog output:** -
- **Functional principle:** Photoelectric proximity sensor
- **Switching mode:** Light switching
- **Switching output:** push-pull: PNP/NPN
- **Type of light:** visible red light
- **Adjustment:** Teach-in button
- **Connection type:** male connector M12, 5-pin

Functional principle detail	Type	Part no.
Absence of reference object or reference surface	WTT12S-C2569	1136898
Object between sensor and reference object or reference surface	WTT12S-M2569	1136647

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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