WTT4 PowerProx

Miniature MultiTask photoelectric proximity sensor with large sensing range for confined spaces

SICK
Sensor Intelligence.

# WTT4 PowerProx

Advantages

## Large sensing range in a small housing

The PowerProx detects large areas at a maximum distance of up to 4 m. The sensors are resistant to background reflections and therefore offer maximum reliability. In addition, the compact housing makes the PowerProx a space-saving detection solution for large distances.
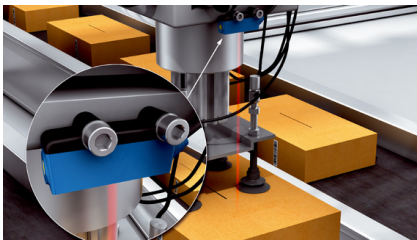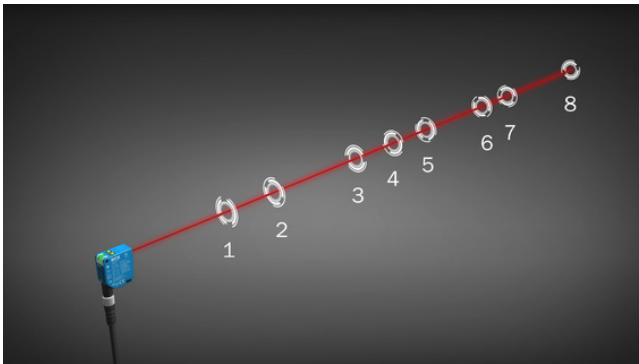

The ideal solution for space-saving use in grippers and robotic elements
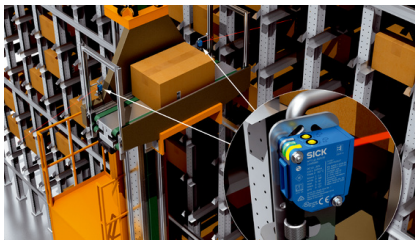
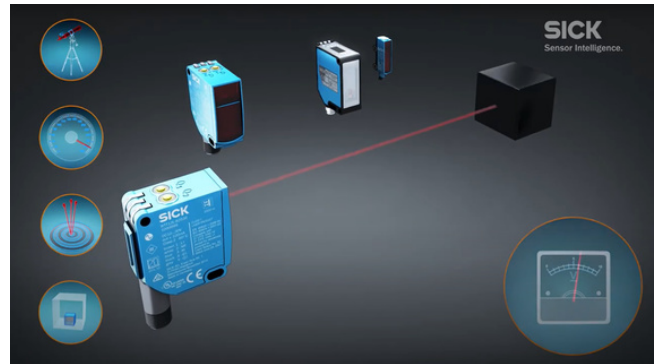Top performance for occupied bay and clearance detection thanks to IO-Link and up to eight switching points
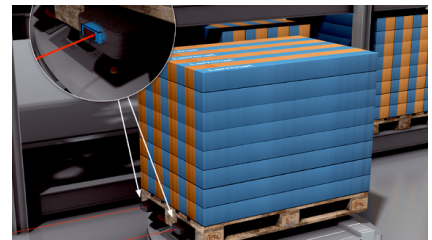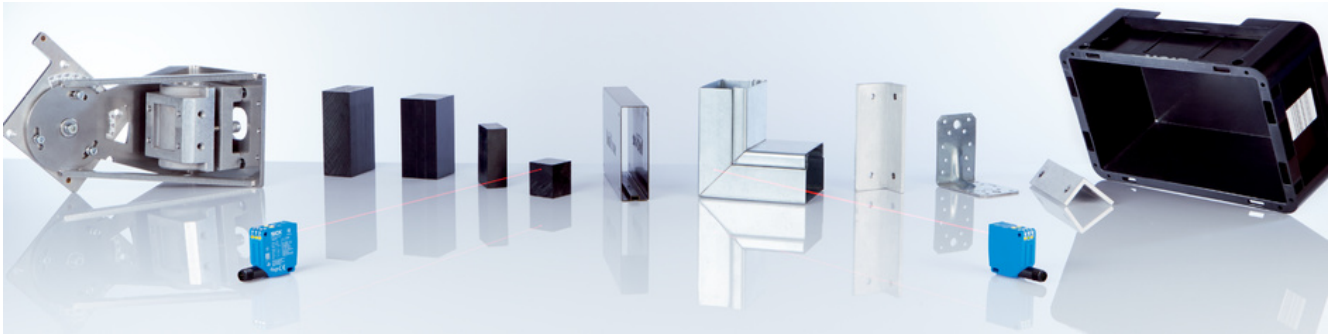

High performance even in tight spaces: Perfect for compact AGV applications

Distance values with millimeter precision and up to eight switching points are available for the automation process via IO-Link

The PowerProx also delivers analog distance data for precise control in mounting technology

Exact detection results in any position

More power isn't possible: The PowerProx achieves outstanding detection results thanks to excellent optics and beam paths. Extreme angles and changing object surfaces are also no problem. The receiver elements of the photoelectric sensor are resistant to background reflections and ambient light.

Ideal for use in mounting technology thanks to precise detection and distance measurement
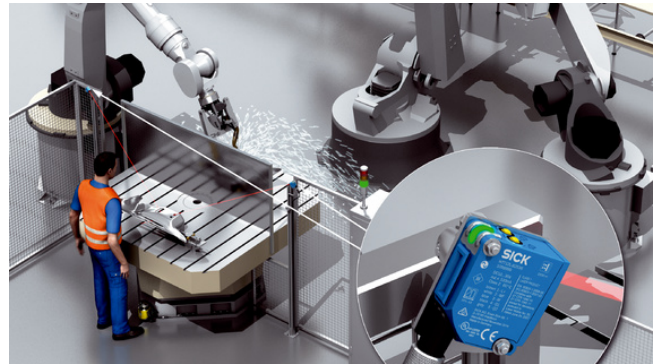
Reliable quality control thanks to high repeatability - even if the surface quality changes

Very high precision: The PowerProx delivers reliable detection results even with jet-black, glossy or changing object surfaces as well as very small and flat objects

WTT4 PowerProx


Adapted specialists for any application

Everything under one "roof": With the PowerProx, high-precision time-of-flight technology is now available for a wide spectrum of applications for the first time. The reliable detection of very small objects, fast processes or detection over large sensing ranges is no problem for the PowerProx. Corresponding variants offer maximum detection reliability for objects with strongly reflective surfaces. And when space is tight, the very compact WTT2SL and WTT4SL variants ensure maximum performance in a miniature format.
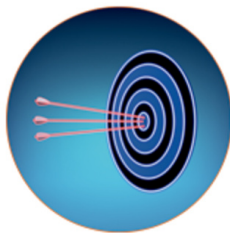
Precisely detects the smallest objects, pockets or recesses

Quick signal processing and high switching frequency for quick processes

With an up to 4 m sensing range, the PowerProx keeps a close eye on even far-away objects

Maximum flexibility: The PowerProx has the right sensor solution for any range of applications, no matter whether very fast, accurate detection or detection at large sensing ranges is required

Reliable detection at high speeds

Processes are getting faster and faster in countless industries. The high switching frequency and quick signal processing of the PowerProx enables powerful detection even at high tempos. In doing so, the photoelectric sensor laser beam detects even high-gloss or jet-black objects at large detection angles.
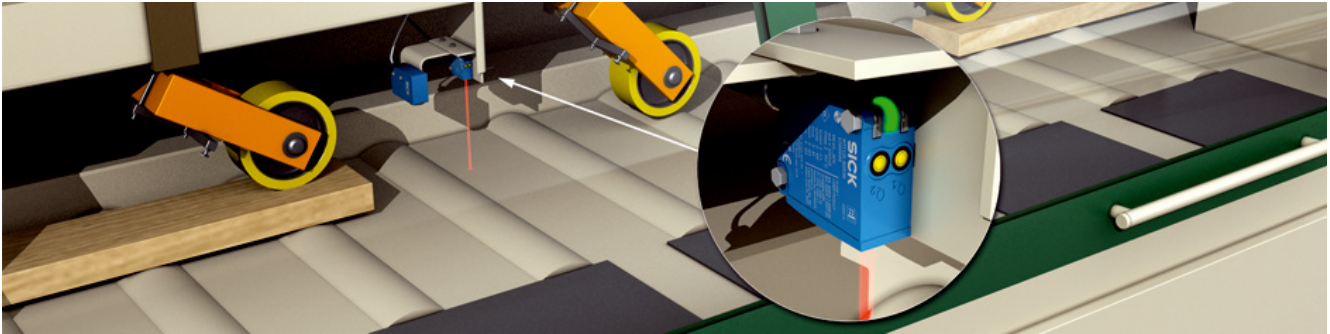
Edge detection in high speed applications due to switching frequencies of up to 1,000 Hz and the high-precision laser beam

➕ Very fast tempo: The PowerProx reliably detects objects and edges with nearly no delay, even at high process speeds in production and logistics.

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Technical data overview

Resolution	≥ 1,000 µm
Response time	0.5 ms 0.5 ms ... 5 ms (depends on variant)
Switching frequency	100 Hz 1,000 Hz
IO-Link	✔, COM3 (230,4 kBaud)
Enclosure rating	IP67

Product description

WTT4SL PowerProx Mini photoelectric proximity sensors are characterized by their wide variety of application possibilities. The PowerProx Mini Distance sensor variant reliably detects objects at a sensing distance of up to 1.3 m. PowerProx Mini Speed, on the other hand, has a quick response time and a high switching frequency and is therefore especially suitable for precise object detection at high speeds. All WTT4SL sensors are based on time-of-flight technology and can be easily and precisely adjusted via a teach-in button.

At a glance

• Miniature housing design (12.2 mm x 41.8 mm x 17.3 mm) with sensing distances up to 1.3 m
• Various sensor variants for specific applications
• Teach-in button and well visible, uniform light spot
• Switching frequency up to 1,000 Hz and time-of-flight technology
• Facilities for connecting via IO-Link interface

Your benefits

• High flexibility when designing machines thanks to space-saving mounting possibilities
• High flexibility thanks to wide variety of application possibilities
• User-friendly thanks to precise and simple sensor adjustment
• Reliable object detection even with shiny or jet-black surfaces and background reflections

Ordering information

Other models and accessories ➜ www.sick.com/WTT4_PowerProx

- **Product version:** PowerProx Mini Distance
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression, Optical time-of-flight, distance value
- **Switching mode:** Light/dark switching
- **Sensing range max.:** 50 mm ... 1,300 mm
- **Switching output:** push-pull: PNP/NPN
- **Type of light:** visible red light
- **Adjustment:** Teach-in button, cable

Connection type	Type	Part no.
Cable with M12 male connector, 4-pin, 1,547 mm	WTT4SLC-3B0062B03	1118144
Cable with M12 male connector, 4-pin, 197 mm	WTT4SLC-3B3462A00	1111828
Cable with M12 male connector, 4-pin, 300 mm	WTT4SLC-3B0062B04	1118244
Cable with M8 male connector, 4-pin, 120 mm	WTT4SLC-3B3262A00	1097220
	WTT4SLC-3B3262B05	1120525
	WTT4SLC-3B3262B08	1143200
Cable with M8 male connector, 4-pin, 65 mm	WTT4SLC-3B0062B02	1111161
Cable, 4-wire, 2 m	WTT4SLC-3B1162A00	1097191
Male connector M8, 4-pin	WTT4SLC-3B2262A00	1097190
	WTT4SLC-3B2262B01	1106949
	WTT4SLC-3B2262B09	1143216

- **Product version:** PowerProx Mini Speed
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression, Optical time-of-flight, distance value
- **Switching mode:** Light/dark switching
- **Sensing range max.:** 50 mm ... 1,000 mm
- **Switching output:** push-pull: PNP/NPN
- **Type of light:** visible red light
- **Adjustment:** Teach-in button, cable

Connection type	Type	Part no.
Cable with M12 male connector, 4-pin, 197 mm	WTT4SLC-3B3432A00	1111829
Cable with M8 male connector, 4-pin, 120 mm	WTT4SLC-3B3232A00	1097222
Cable, 4-wire, 2 m	WTT4SLC-3B1132A00	1096613
Male connector M8, 4-pin	WTT4SLC-3B2232A00	1095755
	WTT4SLC-3B2232B07	1133895

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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