WTT2 PowerProx

Subminiature photoelectric proximity sensor for use in confined spaces
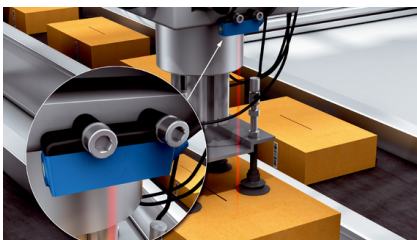
**SICK**
Sensor Intelligence.

## 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.
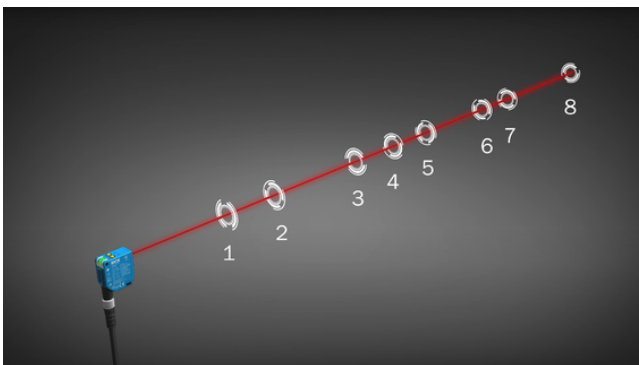

The ideal solution for space-saving use in grippers and robotic elements
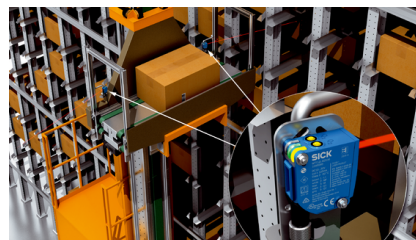
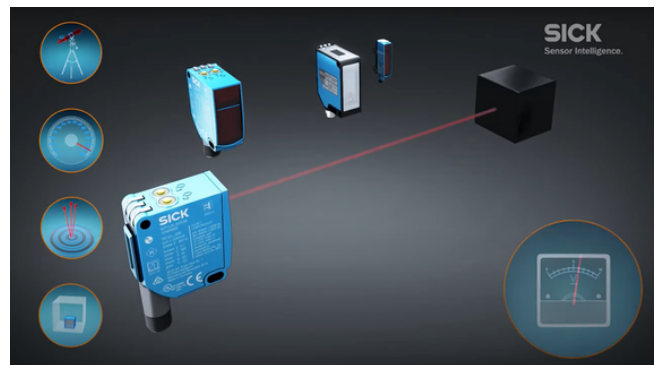Top performance for occupied bay and clearance detection thanks to IO-Link and up to eight switching points
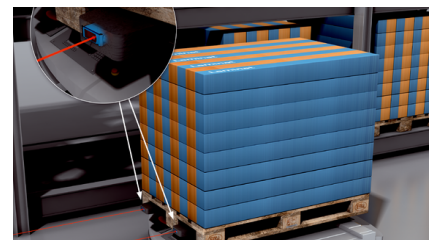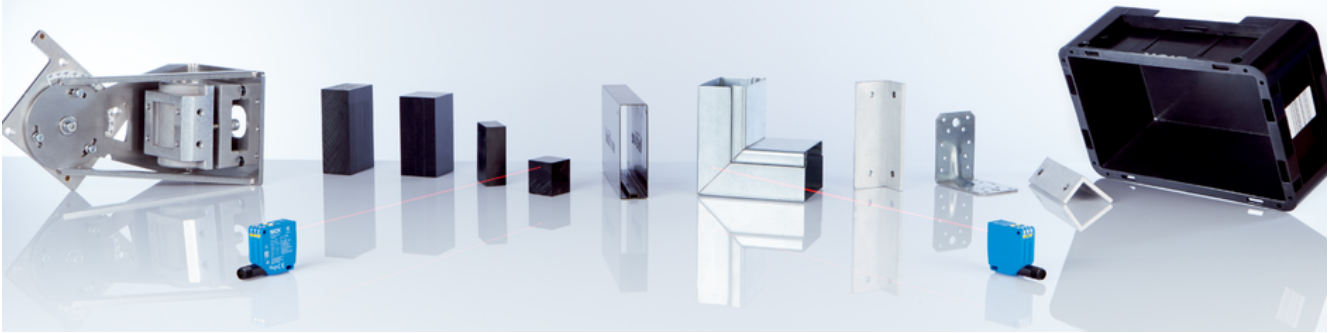

High performance even in tight spaces: Perfect for compact AGV applications

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
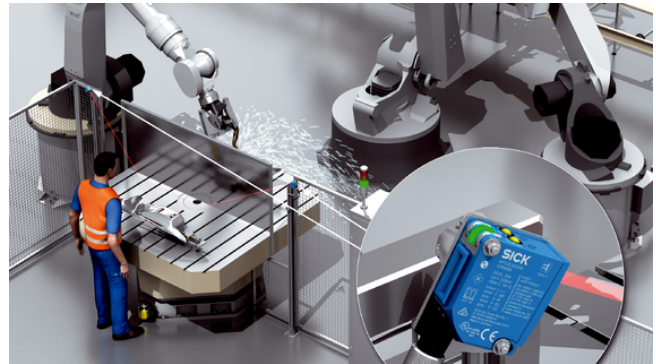
Reliable quality control thanks to high repeatability - even if the surface quality changes

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

WTT2 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.
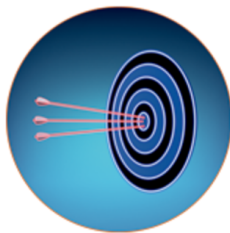
Precisely detects the smallest objects, pockets or recesses

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.
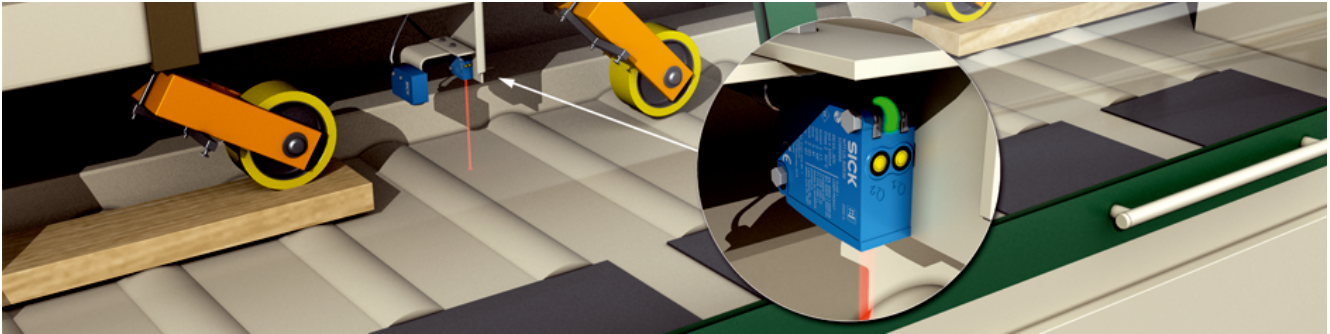
Edge detection in high speed applications due to switching frequencies of up to 1,000 Hz and the high-precision laser beam

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

WTT2 PowerProx

Technical data overview

Response time	90 ms [1]
Switching frequency	5 Hz
-	
IO-Link	✓, COM2 (38,4 kBaud)
Enclosure rating	IP67

[1] Signal transit time with resistive load.

Product description

WTT2 PowerProx multitask photoelectric proximity sensors ensure a reliable object detection in industrial environments. Due to their compact housing, they are especially suitable for use in tight spaces. Thanks to their powerful principle of operation based on optical time-of-flight technology, the sensors also feature a sensing range of up to 800 mm. The integrated teach-in button allows precise and the same time simple adjustment of the sensing range. The profile is rounded off by the soft cable entry and a rugged housing design.

At a glance

- Compact housing design (7.7 x 27.5 x 13.5 mm) with high sensing distance (up to 800 mm)
- Integrated teach-in button
- Durable, soft cable entry and rugged housing
- Time-of-flight technology
- Laser class 1

Your benefits

- High flexibility when designing machines thanks to space-saving mounting possibilities
- High user-friendliness through easy sensor adjustment and precise sensor alignment
- High plant availability
- Strong sensor performance
- No expensive laser protection measures and no specially trained personnel are required

Fields of application

- Quality control in the automotive and parts supply industry
- Handling and assembly technology
- Protecting doors and gates
- Loop control
- Roll winding and unwinding

Ordering information

Other models and accessories ➜ www.sick.com/WTT2_PowerProx

- **Sub product family:** PowerProx Micro
- **Analog output:** -
- **Functional principle:** Photoelectric proximity sensor
- **Functional principle detail:** Background suppression, Optical time-of-flight
- **Sensing range max.:** 50 mm ... 800 mm
- **Type of light:** Infrared light

Switching mode	Switching output	Adjustment	Connection type	Type	Part no.
Dark switching	PNP	Teach-in button	Cable with JST-connector, 350 mm [1]	WTT2SL-2F3092S07	1112129
			Cable with JST-connector, 550 mm [1]	WTT2SL-2F3092S08	1112130
Light/dark switching	NPN	Teach-in button	Cable with M12 male connector, 4-pin [1]	WTT2SL-2N3492S02	1102712
			Cable, 4-wire, 2 m [1]	WTT2SL-2N1192	1085601
	PNP	Teach-in button	Cable with JST-connector, 300 mm [1]	WTT2SLC-2P3092B03	1102568
			Cable with JST-connector, 350 mm [1]	WTT2SL-2F3092S11	1123713
			Cable with M12 male connector, 4-pin, 300 mm [1]	WTT2SL-2P3492S01	1088393
			Cable with M8 male connector, 4-pin, 200 mm [1]	WTT2SL-2P3292	1085602
			Cable with M8 male connector, 4-pin, 90 mm [1]	WTT2SLC-2P3292B02	1101641
			Cable, 4-wire, 2 m [1]	WTT2SL-2P1192	1081626
		Teach-in button, cable	Cable with M8 male connector, 4-pin, 200 mm [1]	WTT2SLC-2P3292A00	1090486

[1] Do not bend below 0 °C.

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**

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