



W4S-3 Inox Hygiene

Highest reliability, maximum resistance and endless possibilities

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Technical data overview

Dimensions (W x H x D)	15.25 mm x 48.6 mm x 22.15 mm 15.25 mm x 63.2 mm x 22.15 mm 15.3 mm x 48.5 mm x 22.3 mm (depending on type)
Sensing range max.	4 mm ... 500 mm ¹⁾ 4 mm ... 180 mm ¹⁾ 4 mm ... 120 mm ¹⁾ 4 mm ... 280 mm ¹⁾ 20 mm ... 200 mm ¹⁾ 0 m ... 4 m ²⁾ 0 m ... 5 m ²⁾ 0 m ... 5 m 0 m ... 1.5 m (depending on type)
Light source	PinPoint LED
Type of light	Visible red light
Enclosure rating	IP66 IP67 IP68 IP69K (depending on type)
Housing material	Stainless steel Stainless steel V4A (1.4404, 316L)
Adjustment	Cable ³⁾ Single teach-in button Cable IO-Link None (depending on type)

¹⁾ Object with 90 % reflectance (referred to standard white, DIN 5033).

²⁾ Reflector PL80A.

³⁾ External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

Product description

The W4S-3 Inox Hygiene series of photoelectric sensors combines hygienic requirements based on EHEDG with best-in-class performance. These sensors are completely enclosed in a stainless steel housing and can be taught via a stainless steel teach button with a metal membrane. With built in protection for the sensor cable, no additional mounting brackets or mounting holes are required for in-process machine integration. These sensors are designed for a completely hygienic sensor solution that is a necessity for the most hygienic machines.

At a glance

- Smooth stainless steel housing (316L/1.4404)
- Hygienic mounting using M12-adapter thread or D12-adapter shaft
- IP 66, IP 67, IP 68 and IP 69K enclosure rating and Ecolab certified
- Resistant to a variety of common cleaning and disinfection agents
- Highly visible laser-like light spot due to PinPoint LED
- Teach-in via stainless steel pushbutton with a metal membrane
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Smooth hygienic housing and accessories with no grooves or crevices eliminates the potential for bacteria to grow, providing a more hygienic solution.
- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Easy adjustment via a stainless steel metal membrane teach-in pushbutton
- Quick and easy alignment due to highly visible PinPoint emitter LED
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks

Ordering information

Other models and accessories → www.sick.com/W4S-3_Inox_Hygiene

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
4 mm ... 120 mm	NPN	Cable	Cable, 4-wire, 2 m ¹⁾	WTB4S-3N1135H	1048101
	PNP	Cable	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WTB4S-3P3235H	1048100
		Cable, Teach-in button		WTB4S-3P3234H	1048097
				WTB4S-3P3234HS04	1076135
4 mm ... 280 mm	PNP	Cable, Teach-in button		WTB4S-3P3204HS01	1048532
			Male connector M8, 4-pin ²⁾	WTB4S-3P5204HS02	1054865
4 mm ... 500 mm	NPN	Cable	Cable, 4-wire, 2 m ¹⁾	WTB4S-3N1165H	1048107
	PNP	Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ¹⁾	WTB4S-3V3262H	1063207
		Cable	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WTB4S-3P3265H	1048102
			Cable, 4-wire, 2 m ¹⁾	WTB4S-3P1165H	1086062
		Cable, Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WTB4S-3P3264H	1048047

¹⁾ Do not bend below 0 °C.

²⁾ Max. tightening torque: 0.6 Nm.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light source:** PinPoint LED
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- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
4 mm ... 120 mm	NPN	Teach-in button	Cable, 4-wire, 2 m ¹⁾	WTB4S-3N1132H	1048098
	PNP	Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WTB4S-3P3232H	1048096
			Male connector M8, 4-pin ²⁾	WTB4S-3P5232H	1054864
		Cable, Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WTB4SC-3P3232H	1048099
4 mm ... 180 mm	PNP	Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WTB4SC-3P3262HA00	1097835
			Male connector M8, 4-pin ²⁾	WTB4SC-3P5232HA00	1097836
4 mm ... 500 mm	NPN	Teach-in button	Cable, 4-wire, 2 m ¹⁾	WTB4S-3N1162H	1048095
	PNP	Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WTB4S-3P3262H	1048094
			Cable, 4-wire, 2 m ¹⁾	WTB4S-3P1162H	1051983
			Cable, 4-wire, 5 m ¹⁾	WTB4S-3P1262H	1117988
			Male connector M8, 4-pin ²⁾	WTB4S-3P5262H	1099888

¹⁾ Do not bend below 0 °C.

²⁾ Max. tightening torque: 0.6 Nm.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Foreground suppression
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
20 mm ... 200 mm	PNP	Cable, Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ¹⁾	WTF4S-3P3264H	1048109

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Foreground suppression
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
20 mm ... 200 mm	PNP	Teach-in button	Cable, 4-wire, 5 m ¹⁾	WTF4S-3P3232HS03	1050933

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 4 m	NPN	None	Cable, 4-wire, 2 m ¹⁾	WL4S-3N1130H	1048116
	PNP	None	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WL4S-3P3230H	1048115
			Male connector M8, 4-pin ²⁾	WL4S-3P5230H	1057052
0 m ... 5 m	NPN	Teach-in button	Cable, 4-wire, 2 m ¹⁾	WL4S-3N1132H	1048119
	PNP	Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WL4S-3P3232H	1048117
			Cable, 4-wire, 5 m ¹⁾	WL4S-3P1032HS01	1050684
				WL4S-3P1032HS02	1089545

¹⁾ Do not bend below 0 °C.

²⁾ Max. tightening torque: 0.6 Nm.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 5 m	PNP	Teach-in button	Cable with M8 male connector, 4-pin, 150 mm ^{1) 2)}	WL4S-3V3232H	1048118

¹⁾ Max. tightening torque: 0.6 Nm.

²⁾ Do not bend below 0 °C.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 5 m	NPN	None	Cable with connector M8, 3-pin, 150 mm ¹⁾	WSE4S-3E3130H	1048131
			Cable with connector M8, 3-pin, 150 mm ^{1) 2)}	WSE4S-3E3130H	1052870
			Cable, 3-wire, 2 m ¹⁾	WSE4S-3E1330H	1052868
	PNP	None		WSE4S-3E1330H	1048130
			Cable with connector M8, 3-pin, 150 mm ¹⁾	WSE4S-3F3130H	1048128
			Cable with connector M8, 3-pin, 150 mm ^{1) 2)}	WSE4S-3F3130H	1052882

¹⁾ Do not bend below 0 °C.

²⁾ Max. tightening torque: 0.6 Nm.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 1.5 m	NPN	None	Cable, 3-wire, 2 m ¹⁾	WSE4S-3P1330HS01	1054973
0 m ... 5 m	NPN	None	Cable, 3-wire, 2 m ¹⁾	WSE4S-3N1330H	1052873
				WSE4S-3N1330H	1048129
	PNP	None	Cable with connector M8, 3-pin, 150 mm ¹⁾	WSE4S-3P3130H	1048127
			Cable with connector M8, 3-pin, 150 mm ^{1) 2)}	WSE4S-3P3130H	1052888
			Cable, 3-wire, 2 m ¹⁾	WSE4S-3P1330H	1052886
				WSE4S-3P1330H	1051980

¹⁾ Do not bend below 0 °C.

²⁾ Max. tightening torque: 0.6 Nm.

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 5 m	PNP	None	Male connector M8, 4-pin ^{1) 2)}	WSE4S-3P5230H	1054896

¹⁾ Max. tightening torque: 0.6 Nm.

²⁾ 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