



# WL4S-3P5230H

W4S-3 Inox Hygiene

MINIATURE PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
WL4S-3P5230H	1057052

Other models and accessories → [www.sick.com/W4S-3\\_Inox\\_Hygiene](http://www.sick.com/W4S-3_Inox_Hygiene)

### Detailed technical data

#### Features

<b>Sensor/ detection principle</b>	Photoelectric retro-reflective sensor, autocollimation
<b>Dimensions (W x H x D)</b>	15.25 mm x 48.6 mm x 22.15 mm
<b>Housing design</b>	Hygiene
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	0 m ... 4 m <sup>1)</sup>
<b>Sensing range</b>	0 m ... 2.5 m <sup>1)</sup>
<b>Type of light</b>	Visible red light
<b>Light source</b>	PinPoint LED <sup>2)</sup>
<b>Light spot size (distance)</b>	Ø 45 mm (1.5 m)
<b>Wave length</b>	650 nm
<b>Adjustment</b>	None
<b>Special applications</b>	Hygienic and washdown zones

<sup>1)</sup> Reflector PL80A.

<sup>2)</sup> Average service life: 100,000 h at T<sub>U</sub> = +25 °C.

## Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	< 5 V <sub>pp</sub> <sup>2)</sup>
<b>Current consumption</b>	30 mA <sup>3)</sup>
<b>Switching output</b>	PNP
<b>Output function</b>	Complementary
<b>Switching mode</b>	Light/dark switching
<b>Output current I<sub>max</sub></b>	≤ 100 mA
<b>Response time</b>	< 0.5 ms <sup>4)</sup>
<b>Switching frequency</b>	1,000 Hz <sup>5)</sup>
<b>Connection type</b>	Male connector M8, 4-pin <sup>6)</sup>
<b>Mechanical connection</b>	D12 adapter shaft
<b>Circuit protection</b>	A <sup>7)</sup> B <sup>8)</sup> C <sup>9)</sup>
<b>Protection class</b>	III
<b>Weight</b>	140 g
<b>Polarisation filter</b>	✓
<b>Housing material</b>	Stainless steel, Stainless steel V4A (1.4404, 316L)
<b>Optics material</b>	Plastic, PMMA
<b>Enclosure rating</b>	IP66 IP67 IP68 IP69K
<b>Special feature</b>	D12 adapter shaft
<b>Ambient operating temperature</b>	-30 °C ... +70 °C <sup>10)</sup> -30 °C ... +60 °C
<b>Ambient temperature, storage</b>	-30 °C ... +75 °C
<b>UL File No.</b>	FDA, UL No. NRKH.E181493 & cUL No. NRKH7.E181493

<sup>1)</sup> Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

<sup>2)</sup> May not exceed or fall below U<sub>v</sub> tolerances.

<sup>3)</sup> Without load.

<sup>4)</sup> Signal transit time with resistive load.

<sup>5)</sup> With light/dark ratio 1:1.

<sup>6)</sup> Max. tightening torque: 0.6 Nm.

<sup>7)</sup> A = V<sub>S</sub> connections reverse-polarity protected.

<sup>8)</sup> B = inputs and output reverse-polarity protected.

<sup>9)</sup> C = interference suppression.

<sup>10)</sup> At UV ≤ 24 V and IA < 30 mA.

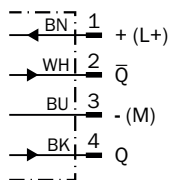
## Classifications

<b>ECI@ss 5.0</b>	27270902
<b>ECI@ss 5.1.4</b>	27270902
<b>ECI@ss 6.0</b>	27270902
<b>ECI@ss 6.2</b>	27270902
<b>ECI@ss 7.0</b>	27270902

<b>ECI@ss 8.0</b>	27270902
<b>ECI@ss 8.1</b>	27270902
<b>ECI@ss 9.0</b>	27270902
<b>ECI@ss 10.0</b>	27270902
<b>ECI@ss 11.0</b>	27270902
<b>ETIM 5.0</b>	EC002717
<b>ETIM 6.0</b>	EC002717
<b>ETIM 7.0</b>	EC002717
<b>ETIM 8.0</b>	EC002717
<b>UNSPSC 16.0901</b>	39121528

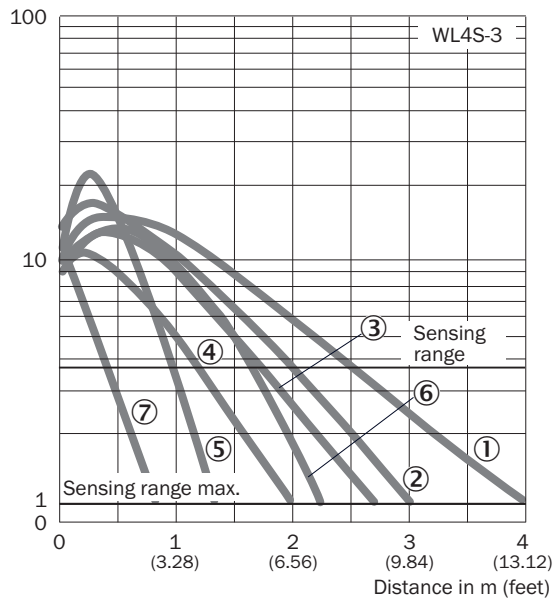
### Connection diagram

Cd-083



### Characteristic curve

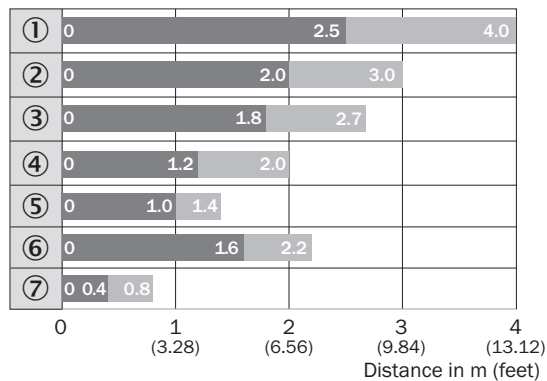
WL4S-3, WLG4S-3, 4 m



- ① Reflector PL80A
- ② Reflector P250F
- ③ Reflector PL40A
- ④ Reflector PL20A
- ⑤ PL10F reflector
- ⑥ Reflector P250 CHEM
- ⑦ Reflective tape REF-IRF-56

### Sensing range diagram

WL4S-3, WLG4S-3, 4 m

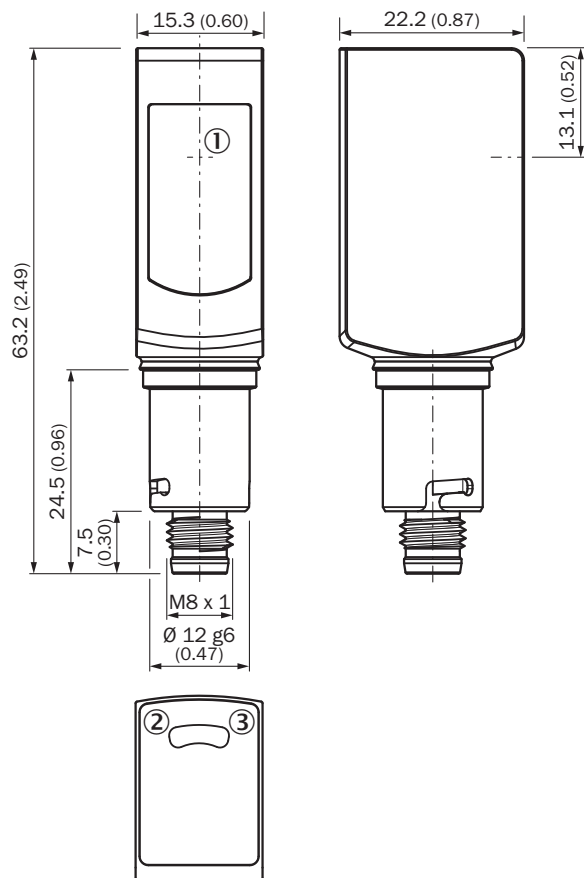


■ Sensing range    ■ Sensing range max.

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### Dimensional drawing (Dimensions in mm (inch))



WL4S-3H, WLG4S-3H, without single teach-in button, D12 adapter shaft, I-adaption




- ① Center of optical axis
- ② LED indicator green: Supply voltage active
- ③ LED indicator yellow: Status of received light beam

### Recommended accessories

Other models and accessories → [www.sick.com/W4S-3\\_Inox\\_Hygiene](http://www.sick.com/W4S-3_Inox_Hygiene)

	Brief description	Type	Part no.
Other mounting accessories			
	Diameter 18 mm x 100 mm for W4S-3 Inox hygiene. Hygienic integration without holes and brackets. Cable run inside tube	BEF-MR18G-NA	4065853
Plug connectors and cables			
	Head A: female connector, M8, 4-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB). Please do not use cleaning agents of any other Kind., Not resistant against lactic acid & hydrogen peroxide (H2O2)	DOL-0804-G05MNI	6059194

	Brief description	Type	Part no.
Reflectors			
	Stainless steel reflector, hygienic design, chemically resistant, Enclosure rating IP 69K, M12-adapter thread, PMMA front screens, 25 mm, Stainless steel V4A (1.4404, 316L), M12-adapter thread	PLH25-M12	2063403

## 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](http://www.sick.com)