



WTF4S-3P3264H

W4

MINIATURE PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

Type	Part no.
WTF4S-3P3264H	1048109

Other models and accessories → [www.sick.com/W4](http://www.sick.com/W4)

## Detailed technical data

### Features

<b>Functional principle</b>	Photoelectric proximity sensor
<b>Functional principle detail</b>	Foreground suppression
<b>Sensing range max.</b>	20 mm ... 200 mm <sup>1)</sup>
<b>Emitted beam</b>	
Light source	PinPoint LED <sup>2)</sup>
Type of light	Visible red light
Light spot size (distance)	Ø 6.5 mm (150 mm)
<b>Key LED figures</b>	
Wave length	650 nm
<b>Adjustment</b>	Cable, Single teach-in button <sup>3)</sup>
<b>Special applications</b>	Hygienic and washdown zones
<b>Housing design</b>	Hygiene

<sup>1)</sup> Object with 90% remission (based on standard white, DIN 5033).

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

<sup>3)</sup> External teach-in: pulse > 2 s with voltage U<sub>v</sub> with PNP and M with NPN.

### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,211 years
<b>DC<sub>avg</sub></b>	0 %
<b>T<sub>M</sub> (mission time)</b>	20 years

## Electrical data

<b>Supply voltage <math>U_B</math></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>Protection class</b>	III
<b>Digital output</b>	
Type	PNP
Switching mode	Light switching
Output current $I_{max}$	≤ 100 mA
Response time	< 0,5 ms <sup>4)</sup>
Switching frequency	1,000 Hz <sup>5)</sup>
<b>Circuit protection</b>	A, B, C <sup>6) 7) 8)</sup>

<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  $U_V$  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> A =  $V_S$  connections reverse-polarity protected.

<sup>7)</sup> B = inputs and output reverse-polarity protected.

<sup>8)</sup> C = interference suppression.

## Mechanical data

<b>Housing</b>	Rectangular
<b>Design detail</b>	Slim
<b>Dimensions (W x H x D)</b>	15.25 mm x 63.2 mm x 22.15 mm
<b>Connection</b>	Cable with M8 male connector, 4-pin <sup>1)</sup>
<b>Connection detail</b>	
Length of cable (L)	150 mm <sup>1)</sup>
<b>Material</b>	
Housing	Stainless steel, Stainless steel V4A (1.4404, 316L)
Front screen	Plastic, PMMA
Cable	PVC
<b>Weight</b>	50 g

<sup>1)</sup> Do not bend below 0 °C.

## Ambient data

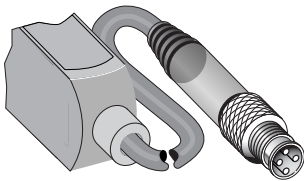
<b>Enclosure rating</b>	IP66 IP67 IP68 IP69K
<b>Ambient operating temperature</b>	-30 °C ... +70 °C <sup>1)</sup> -30 °C ... +60 °C
<b>Ambient temperature, storage</b>	-30 °C ... +75 °C
<b>UL File No.</b>	FDA, UL No. NRKH.E181493 & cUL No. NRKH7.E181493

<sup>1)</sup> At  $U_V \leq 24$  V and  $I_A < 30$  mA.

### Classifications

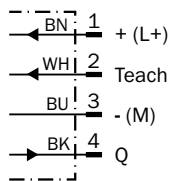
<b>ECLASS 5.0</b>	27270904
<b>ECLASS 5.1.4</b>	27270904
<b>ECLASS 6.0</b>	27270904
<b>ECLASS 6.2</b>	27270904
<b>ECLASS 7.0</b>	27270904
<b>ECLASS 8.0</b>	27270904
<b>ECLASS 8.1</b>	27270904
<b>ECLASS 9.0</b>	27270904
<b>ECLASS 10.0</b>	27270904
<b>ECLASS 11.0</b>	27270904
<b>ECLASS 12.0</b>	27270903
<b>ETIM 5.0</b>	EC002719
<b>ETIM 6.0</b>	EC002719
<b>ETIM 7.0</b>	EC002719
<b>ETIM 8.0</b>	EC002719
<b>UNSPSC 16.0901</b>	39121528

### Connection type



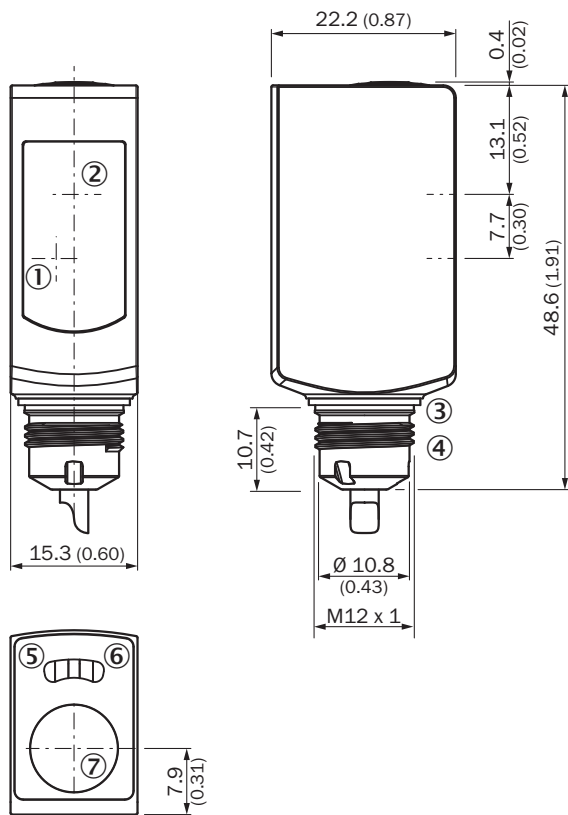
### Connection diagram

Cd-092



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


WTB4S-3H, WTF4S-3H, with single teach-in button




- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- ③ Sealing ring (tightening torque 6 Nm)
- ④ Connector M12
- ⑤ LED indicator yellow: Status of received light beam
- ⑥ LED indicator green: Supply voltage active
- ⑦ Teach-in button

**Recommended accessories**

Other models and accessories → [www.sick.com/W4](http://www.sick.com/W4)

	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

	Brief description	Type	Part no.
Others			
	<ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Female connector, M8, 4-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Signal type:</b> Sensor/actuator cable</li> <li>• <b>Cable:</b> 5 m, 4-wire, PVC</li> <li>• <b>Description:</b> Sensor/actuator cable, unshielded</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Note:</b> 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 &amp; hydrogen peroxide (H2O2)</li> <li>• <b>Application:</b> Hygienic and washdown zones</li> </ul>	DOL-0804-G05MNI	6059194

## 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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