

WTB4S-3P3465V

W4S-3 Inox

MINIATURE PHOTOELECTRIC SENSORS



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Ordering information

Туре	Part no.
WTB4S-3P3465V	1046394

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

Illustration may differ



Detailed technical data

Features

Sensor/ detection principle	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D)	15.25 mm x 48.6 mm x 22.2 mm
Housing design	Washdown
Housing design (light emission)	Rectangular
Sensing range max.	4 mm 500 mm ¹⁾
Sensing range	10 mm 350 mm ¹⁾
Type of light	Visible red light
Light source	PinPoint LED ²⁾
Light spot size (distance)	Ø 6.5 mm (150 mm)
Wave length	650 nm
Adjustment	Cable ³⁾
Special applications	Hygienic and washdown zones

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

 $^{^{2)}}$ Average service life: 100,000 h at TU = +25 °C.

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

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	30 mA ³⁾
Switching output	PNP
Switching mode	Light switching
Output current I _{max.}	≤ 100 mA
Response time	< 0.5 ms ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Connection type	Cable with M12 male connector, 4-pin, 150 mm $^{6)\ 7)}$
Cable material	PVC
Circuit protection	A ⁸⁾ B ⁹⁾ C ¹⁰⁾
Protection class	III
Weight	60 g
Housing material	Stainless steel, Stainless steel
Enclosure rating	IP66, IP67, IP68, IP69K
Ambient operating temperature	-30 °C +70 °C ¹¹⁾ -30 °C +60 °C
Ambient storage temperature	-30 °C +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

 $^{^{1)}}$ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

Classifications

0.0.00000	
ECI@ss 5.0	27270904
ECI@ss 5.1.4	27270904
ECI@ss 6.0	27270904
ECI@ss 6.2	27270904
ECI@ss 7.0	27270904
ECI@ss 8.0	27270904
ECI@ss 8.1	27270904
ECI@ss 9.0	27270904
ECI@ss 10.0	27270904
ECI@ss 11.0	27270904

 $^{^{2)}}$ May not exceed or fall below U_{V} tolerances.

³⁾ Without load.

 $^{^{4)}}$ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ Max. tightening torque: 0.7 Nm.

⁷⁾ Do not bend below 0 °C.

 $^{^{8)}}$ A = V_S connections reverse-polarity protected.

 $^{^{9)}}$ B = inputs and output reverse-polarity protected.

¹⁰⁾ C = interference suppression.

 $^{^{11)}}$ At UV \leq 24 V and IA < 30 mA.

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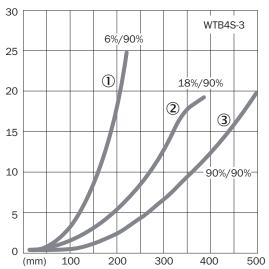
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
UNSPSC 16.0901	39121528

Connection diagram

Cd-092

Characteristic curve

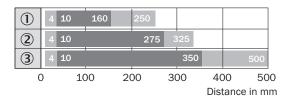
WTB4S-3, 500 mm



- ① Sensing range on black, 6% remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on white, 90% remission

Sensing range diagram

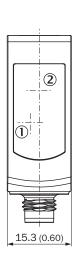
WTB4S-3, 500 mm

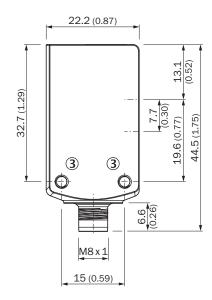


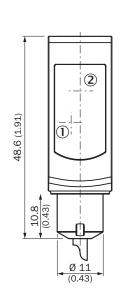
- Sensing range
- Sensing range max.
- ① Sensing range on black, 6% remission
- ② Sensing range on gray, 18 % remission
- 3 Sensing range on white, 90% remission

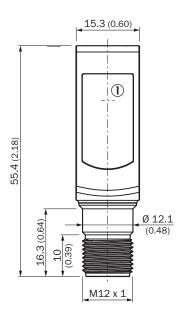
Dimensional drawing (Dimensions in mm (inch))

WTB4S-3V, WTF4S-3V, without single teach-in button











- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- 3 Threaded mounting hole M3
- $\ensuremath{\textcircled{4}}$ LED indicator yellow: Status of received light beam
- ⑤ LED indicator green: Supply voltage active

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Recommended accessories

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

	Brief description	Туре	Part no.	
Mounting brackets and plates				
N. S. W.	Mounting bracket for floor mounting, Stainless steel 1.4571, mounting hardware included	BEF-W4-B	2051630	
Plug connectors and cables				
6	Head A: female connector, M12, 4-pin, straight Head B: Flying leads Cable: PP, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is carried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H2O2)	DOL-1204-G05MRN	6058476	

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