

WSE4S-3F1330V

W4S-3 Inox

MINIATURE PHOTOELECTRIC SENSORS



Ordering information

Туре	Part no.
WSE4S-3F1330V	1052880

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

Illustration may differ



Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
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.	0 m 5 m
Sensing range	0 m 4.5 m
Type of light	Visible red light
Light source	PinPoint LED ¹⁾
Light spot size (distance)	Ø 50 mm (2 m)
Wave length	650 nm
Adjustment	None
Special applications	Hygienic and washdown zones

 $^{^{1)}}$ Average service life: 100,000 h at T_{U} = +25 °C.

Mechanics/electronics

Ripple < 5 V _{pp} ²) Switching output PNP Switching mode Dark switching Output current I _{max} . < 100 mA Response time < 0.5 ms ³) Switching frequency 1,000 Hz ⁴) Connection type Cable, 3-wire, 2 m ⁵) Cable material PVC Conductor cross-section 0.14 mm² Circuit protection A S D C B D C D C		
Switching output Switching mode Dark switching Output current I _{max.} Esponse time consection type connection type Cable, 3-wire, 2 m 5) Cable material Circuit protection Circuit pro	Supply voltage	10 V DC 30 V DC ¹⁾
Switching mode Dark switching Output current I _{max} . \$ 100 mA Response time \$ 0.5 ms 3) Switching frequency 1,000 Hz 4) Connection type Cable, 3-wire, 2 m 5) Calle material PVC Conductor cross-section 0.14 mm² Circuit protection A 6) B 7) C 8) B 7) C 8) B 7) C 8) Protection class III Weight 80 g Housing material Stainless steel, Stainless steel V4A (1.4404, 316L) Optics material Plastic, PMMA Enclosure rating IP66 IP67 IP68 IP69 K IF65 Input sender off TE to 0 V Ambient operating temperature -30 °C +70 °C °) Ambient temperature, storage -30 °C +75 °C UL File No. NRKH.E181493 & NRKH7.E181493	Ripple	< 5 V _{pp} ²⁾
Output current I _{max} . ≤ 100 mA Response time < 0.5 ms ³) Switching frequency 1,000 Hz ⁴) Connection type Cable, 3-wire, 2 m ⁵) Cable material PVC Conductor cross-section 0.14 mm² Circuit protection A ⁶)	Switching output	PNP
Response time Switching frequency 1,000 Hz ⁴⁾ Connection type Cable, 3-wire, 2 m ⁵⁾ Conductor cross-section 0.14 mm² Circuit protection A ⁶⁾ B ⁷⁾ C ⁸⁾ Protection class III Weight Housing material Optics material Plastic, PMMA Enclosure rating IP66 IP67 IP68 IP69K IP69	Switching mode	Dark switching
Switching frequency 1,000 Hz 4) Connection type Cable, 3-wire, 2 m 5) Conductor cross-section 0.14 mm² Circuit protection A 6) B 7) C 8) Protection class III Weight Housing material Optics material Plastic, PMMA Enclosure rating IP66 IP67 IP68 IP69K Test input sender off Ambient temperature, storage One Hz 4) Loon Hz 4) Cable, 3-wire, 2 m 5) Cable, 3-wire, 2 m 5) Awire, 2 m 5) Cable, 3-wire, 2 m 5) Awire, 2 m 5) Cable, 3-wire, 2 m 5) Augustion A 6) B 7) C 8) Conductor cross-section O.14 mm² Augustion A 6) B 7) C 8) C 8) C 8) C 8) C 8) C 9) Ambient temperature, storage Out File No. NRKH.E181493 & NRKH7.E181493	Output current I _{max.}	≤ 100 mA
Connection type Cable material PVC Conductor cross-section O.14 mm² Circuit protection A B T C B T B T	Response time	< 0.5 ms ³⁾
Cable material Conductor cross-section Circuit protection A 6 B 7 C 8 Protection class III Weight Housing material Optics material Enclosure rating Pe66 Pe67 Pe68 Pe69 Pe68 Pe69 Pe68 Pe69 Pe68 Test input sender off Ambient operating temperature -30 °C +70 °C 9 Ambient temperature, storage UL File No. PVC A 6 Mean Pe64 Pe7 C 9 Pe8 Pe7 C Period Pe	Switching frequency	1,000 Hz ⁴⁾
Conductor cross-section Circuit protection A 6 B 7 C 8 Protection class III Weight Housing material Optics material Plastic, PMMA Enclosure rating IP66 IP67 IP68 IP69K Test input sender off Ambient operating temperature Ambient temperature, storage UL File No. O.14 mm² Solution B 7 O S S S S S S S S S S S S S S S S S S	Connection type	Cable, 3-wire, 2 m ⁵⁾
Circuit protection A 6 B 7 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C	Cable material	PVC
B 7) C 8) Protection class III Weight 80 g Housing material Optics material Plastic, PMMA Enclosure rating Ple68 IP67 IP68 IP69K Test input sender off Ambient operating temperature -30 °C +70 °C 9) Ambient temperature, storage UL File No.	Conductor cross-section	0.14 mm ²
Weight80 gHousing materialStainless steel, Stainless steel V4A (1.4404, 316L)Optics materialPlastic, PMMAEnclosure ratingIP66 IP67 IP68 IP69KTest input sender offTE to 0 VAmbient operating temperature-30 °C +70 °C °)Ambient temperature, storage-30 °C +75 °CUL File No.NRKH.E181493 & NRKH7.E181493	Circuit protection	B ⁷⁾
Housing material Stainless steel, Stainless steel V4A (1.4404, 316L) Plastic, PMMA Enclosure rating IP66 IP67 IP68 IP69K Test input sender off TE to 0 V Ambient operating temperature -30 °C +70 °C °9) Ambient temperature, storage UL File No. Stainless steel V4A (1.4404, 316L) Plastic, PMMA IP66 IP67 IP68 IP69K TE to 0 V -30 °C +70 °C °9) -30 °C +75 °C NRKH.E181493 & NRKH7.E181493	Protection class	III
Optics material Plastic, PMMA Enclosure rating IP66 IP67 IP68 IP69K Test input sender off TE to 0 V Ambient operating temperature -30 °C +70 °C °) Ambient temperature, storage -30 °C +75 °C UL File No. NRKH.E181493 & NRKH7.E181493	Weight	80 g
Enclosure rating IP66 IP67 IP68 IP69K Test input sender off TE to 0 V Ambient operating temperature -30 °C +70 °C ⁹⁾ -30 °C +75 °C UL File No. IP66 IP67 IP68 IP69K TE to 0 V NRKH.E181493 & NRKH7.E181493	Housing material	Stainless steel, Stainless steel V4A (1.4404, 316L)
IP67 IP68 IP69K Test input sender off TE to 0 V Ambient operating temperature -30 °C +70 °C ⁹⁾ Ambient temperature, storage -30 °C +75 °C UL File No. NRKH.E181493 & NRKH7.E181493	Optics material	Plastic, PMMA
Ambient operating temperature -30 °C +70 °C ⁹⁾ -30 °C +75 °C UL File No. NRKH.E181493 & NRKH7.E181493	Enclosure rating	IP67 IP68
Ambient temperature, storage -30 °C +75 °C UL File No. NRKH.E181493 & NRKH7.E181493	Test input sender off	TE to 0 V
UL File No. NRKH.E181493 & NRKH7.E181493	Ambient operating temperature	-30 °C +70 °C ⁹⁾
	Ambient temperature, storage	-30 °C +75 °C
Part number of individual components 2058460 WS4S-3D1330V 2058687 WE4S-3F1330V	UL File No.	NRKH.E181493 & NRKH7.E181493
	Part number of individual components	2058460 WS4S-3D1330V 2058687 WE4S-3F1330V

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

Classifications

ECI@ss 5.0	27270901
ECI@ss 5.1.4	27270901
ECI@ss 6.0	27270901
ECI@ss 6.2	27270901
ECI@ss 7.0	27270901
ECI@ss 8.0	27270901
ECI@ss 8.1	27270901

 $^{^{2)}\,\}mbox{May}$ not exceed or fall below $\mbox{U}_{\mbox{\scriptsize V}}$ tolerances.

³⁾ Signal transit time with resistive load.

⁴⁾ With light/dark ratio 1:1.

 $^{^{5)}}$ Do not bend below 0 °C.

 $^{^{6)}}$ A = V_S connections reverse-polarity protected.

 $^{^{7)}}$ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

 $^{^{9)}}$ At UV \leq 24 V and IA < 30 mA.

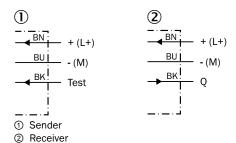
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ECI@ss 9.0	27270901
ECI@ss 10.0	27270901
ECI@ss 11.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

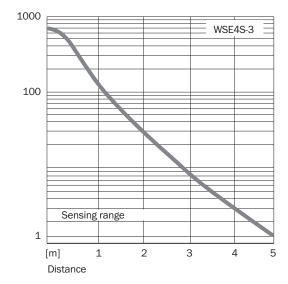
Connection diagram

Cd-061



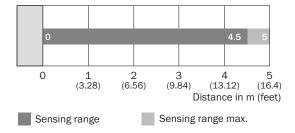
Characteristic curve

WSE4S-3V, WSE4S-3H



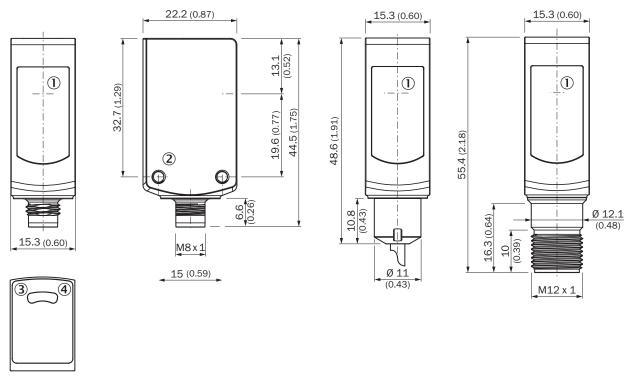
Sensing range diagram

WSE4S-3



Dimensional drawing (Dimensions in mm (inch))

WL4S-3V, WLG4S-3V, without single teach-in button



- ① Center of optical axis
- ② Threaded mounting hole M3
- 3 LED indicator yellow: Status of received light beam
- ④ LED indicator green: Supply voltage active

MINIATURE PHOTOELECTRIC SENSORS

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					
	Head A: male connector, M8, 3-pin, straight Head B: - Cable: unshielded	STE-0803-G	6037322		

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