

WTB4S-3P1262H

W4

MINIATURE PHOTOELECTRIC SENSORS





Ordering information

Туре	Part no.
WTB4S-3P1262H	1117988

Other models and accessories → www.sick.com/W4

Illustration may differ





Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Sensing range max.	4 mm 500 mm ¹⁾
Sensing range	10 mm 350 mm ¹⁾
Emitted beam	
Light source	PinPoint LED ²⁾
Type of light	Visible red light
Light spot size (distance)	Ø 6.5 mm (150 mm)
Key LED figures	
Wave length	650 nm
Adjustment	Single teach-in button
Special applications	Hygienic and washdown zones
Housing design	Hygiene

 $^{^{1)}}$ Object with 90% remission (based on standard white, DIN 5033).

Safety-related parameters

y	
MTTF _D	1,186 years
DC _{avg}	0 %
T _M (mission time)	20 years

 $^{^{2)}}$ Average service life: 100,000 h at T_{U} = +25 $^{\circ}\text{C}.$

Electronics

Supply voltage \mathbf{U}_{B}	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	30 mA ³⁾
Protection class	III
Digital output	
Туре	PNP
Switching mode	Light/dark switching
Output current I _{max.}	≤ 100 mA
Response time	< 0.5 ms ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Output function	Complementary
Circuit protection	A, B, C ^{6) 7) 8)}

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

Mechanics

Housing	Rectangular
Design detail	Slim
Dimensions (W x H x D)	15.25 mm x 63.2 mm x 22.15 mm
Connection	Cable, 4-wire, 5 m ¹⁾
Connection detail	
Conductor size	0.14 mm ²
Length of cable (L)	5 m ¹⁾
Material	
Housing	Metal, Stainless steel V4A (1.4404, 316L)
Front screen	Plastic, PMMA
Cable	Plastic, PVC
Weight	80 g

¹⁾ Do not bend below 0 °C.

Ambient data

Enclosure rating	IP66 IP67 IP68 IP69K
Ambient operating temperature	-30 °C +70 °C ¹⁾ -30 °C +60 °C

 $^{^{1)}}$ At UV \leq 24 V and IA < 30 mA.

²⁾ May not fall below or exceed U_V tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

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

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

⁸⁾ C = interference suppression.

Ambient temperature, storage	-30 °C +75 °C
UL File No.	FDA, UL No. NRKH.E181493 & cUL No. NRKH7.E181493

 $^{^{1)}}$ At UV \leq 24 V and IA < 30 mA.

Classifications

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

Connection type



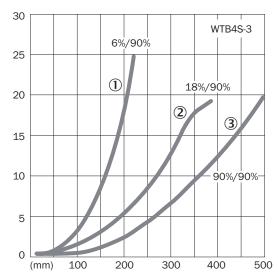
Connection diagram

Cd-094



Characteristic curve

WTB4S-3, 500 mm



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

Sensing range diagram

WTB4S-3, 500 mm



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

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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.

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