



DATA SHEET

WTB4-3P3241S74

W4
Photoelectric sensors

SICK Sensor Intelligence



Illustration may differ

PHOTOELECTRIC SENSORS

WTB4-3P3241S74

ORDERING INFORMATION

Type	part no.
WTB4-3P3241S74	1057156

Further device versions and accessories at www.sick.com/W4

DETAILED TECHNICAL DATA

FEATURES

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Sensing range max.	≤ 150 mm
Emitted beam	
Light source	LED ¹⁾
Type of light	Infrared light
Light spot size (distance)	5 mm x 28 mm (50 mm)
Key LED figures	
Wave length	880 nm
Adjustment	None
Special applications	Detecting small objects

¹⁾ Average service life: 100,000 h at T_U = +25 °C.

ELECTRONICS

Supply voltage U _B	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{PP} ²⁾

¹⁾ Limit values.
²⁾ May not fall below or exceed U_I tolerances.
³⁾ Without load.
⁴⁾ Signal transit time with resistive load.
⁵⁾ With light/dark ratio 1:1.
⁶⁾ A = V_g connections reverse-polarity protected.
⁷⁾ C = interference suppression.
⁸⁾ D = outputs overcurrent and short-circuit protected.

Current consumption	20 mA ³⁾
Protection class	III
Digital output	Type PNP Switching mode Light switching Output current I_{max.} ≤ 100 mA Response time < 0.5 ms ⁴⁾ Switching frequency 1,000 Hz ⁵⁾
Circuit protection	A ⁶⁾ C ⁷⁾ D ⁸⁾

¹⁾ Limit values.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⁾ C = interference suppression.⁸⁾ D = outputs overcurrent and short-circuit protected.

MECHANICS

Housing	Rectangular
Design detail	Flat
Dimensions (W x H x D)	16 mm x 39.5 mm x 12 mm
Connection	Cable with connector RJ10, 4-pin ¹⁾
Connection detail	Conductor size 0.14 mm² Cable diameter Ø 3.4 mm Length of cable (L) 1.37 m ¹⁾
Material	Housing Plastic, ABS Front screen Plastic, PMMA Cable Plastic, PVC
Weight	30 g

¹⁾ Do not bend below 0 °C.

AMBIENT DATA

Enclosure rating	IP67
Ambient operating temperature	-40 °C ... +60 °C
Ambient temperature, storage	-40 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1057156



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SICK AT A GLANCE

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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