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DATA SHEET

WTB4T-3N1264

W4
Photoelectric sensors

SICK Sensor Intelligence

PHOTOELECTRIC SENSORS

WTB4T-3N1264

ORDERING INFORMATION

Type	part no.
WTB4T-3N1264	1028092

Further device versions and accessories at 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 ... 120 mm ¹⁾	
Sensing range	15 mm ... 120 mm ¹⁾	
Emitted beam	Light source	PinPoint LED ²⁾
	Type of light	Visible red light
	Light spot size (distance)	Ø 7 mm (50 mm)
Key LED figures	Wave length	650 nm
	Adjustment	Cable
Special applications	Hygienic and washdown zones	

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

²⁾ 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⁾										
Current consumption	20 mA ³⁾										
Protection class	III										
Digital output	<table border="0"> <tr> <td>Type</td> <td>NPN</td> </tr> <tr> <td>Switching mode</td> <td>Light switching</td> </tr> <tr> <td>Output current I_{max}</td> <td>≤ 100 mA</td> </tr> <tr> <td>Response time</td> <td>< 0.5 ms ⁴⁾</td> </tr> <tr> <td>Switching frequency</td> <td>1,000 Hz ⁵⁾</td> </tr> </table>	Type	NPN	Switching mode	Light switching	Output current I_{max}	≤ 100 mA	Response time	< 0.5 ms ⁴⁾	Switching frequency	1,000 Hz ⁵⁾
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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

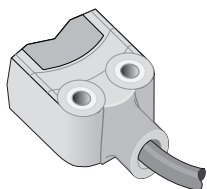
Housing	Rectangular						
Design detail	Flat						
Dimensions (W x H x D)	22 mm x 42 mm x 21.8 mm						
Connection	Cable, 4-wire, 5 m ¹⁾						
Connection detail	<table border="0"> <tr> <td>Conductor size</td> <td>0.14 mm²</td> </tr> <tr> <td>Cable diameter</td> <td>∅ 3.4 mm</td> </tr> <tr> <td>Length of cable (L)</td> <td>5 m ¹⁾</td> </tr> </table>	Conductor size	0.14 mm ²	Cable diameter	∅ 3.4 mm	Length of cable (L)	5 m ¹⁾
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Front screen	Plastic, PMMA						
Cable	Plastic, PVC/PTFE coating						
Weight	30 g						

¹⁾ Do not bend below 0 °C.

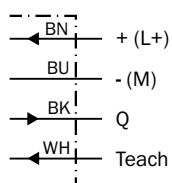
AMBIENT DATA

Enclosure rating	IP68 IP69K
Ambient operating temperature	-40 °C ... +60 °C
Ambient temperature, storage	-40 °C ... +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

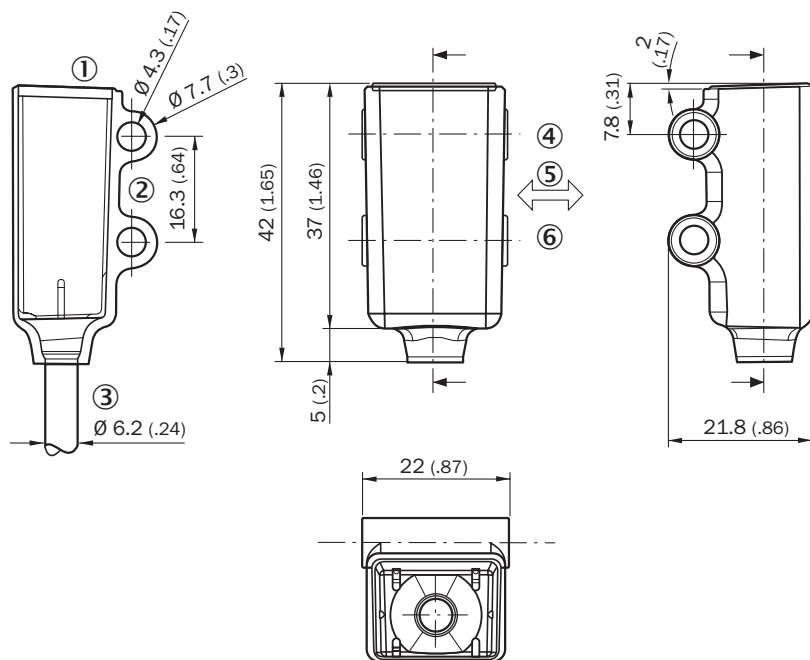
CONNECTION TYPE



CONNECTION DIAGRAM CD-093



DIMENSIONAL DRAWING



Dimensions in mm (inch)

- ① LED signal
- ② Mounting hole, $\varnothing 4.3$ mm
- ③ cable 5 m, $\varnothing 3.4$ mm, 2 m Teflon coated $\varnothing 6.2$
- ④ Optical axis, receiver
- ⑤ Standard direction of the material being detected
- ⑥ Optical axis, sender

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/1028092



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

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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