WSE4T-3P1430

W4

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

Ordering information

Type	part no.
WSE4T-3P1430	1029646

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

Illustration may differ

Detailed technical data

Features

Functional principle	Through-beam photoelectric sensor
Sensing range max.	0 m … 3 m
Sensing range	0 m … 2.5 m
Emitted beam	
Light source	PinPoint LED [1]
Type of light	Visible red light
Light spot size (distance)	Ø 75 mm (2 m)
Key LED figures	
Wave length	650 nm
Adjustment	None
Special applications	Hygienic and washdown zones
Part number of individual components	2040565 WS4T-3D1430 2040566 WE4T-3P1430

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

Safety-related parameters

MTTF$_D$	1,008 years
DC$_{avg}$	0 %

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	
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]
Test input sender off	TE to 0 V

[1] Limit values.

[2] May not fall below or exceed U$_V$ tolerances.

[3] Sender.

[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, 3-wire, 5 m [1]
Connection detail	
Conductor size	0.14 mm²
Cable diameter	Ø 3.4 mm
Length of cable (L)	5 m [1]
Material	
Housing	Metal, zinc diecast
	Plastic, PTFE coating
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

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
ECOLAB certificate	✓
Photobiological safety (DIN EN 62471) certificate	✓

Classifications

ECLASS 5.0	27270901
ECLASS 5.1.4	27270901
ECLASS 6.0	27270901
ECLASS 6.2	27270901
ECLASS 7.0	27270901
ECLASS 8.0	27270901
ECLASS 8.1	27270901
ECLASS 9.0	27270901
ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 12.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

Connection type
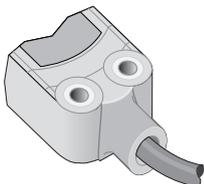
Connection diagram Cd-061

①

BN	+ (L+)
BU	- (M)
BK	Test

②

BN	+ (L+)
BU	- (M)
BK	Q
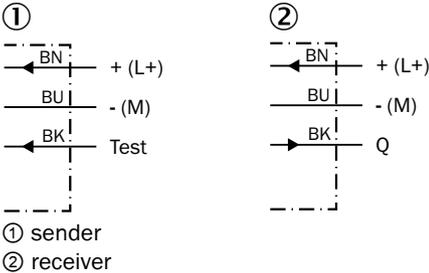
① sender
② receiver

Characteristic curve WSE4-3 PTFE

Operating reserve

Operating range
Sensing range max. typical

| m (feet) | 1 (3.28) | 2 (6.56) | 3 (9.84) | 4 (13.12) |

Distance in m (feet)
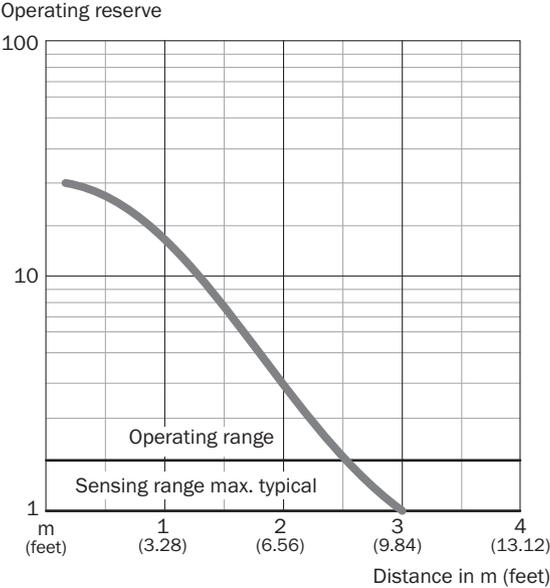
Sensing range diagram WSE4-3 PTFE

| 0 | | 2,5 | 3 |

| 0 | 1 (3.28) | 2 (6.56) | 3 (9.84) |

Distance in m (feet)

Sensing range typ. max   Sensing range
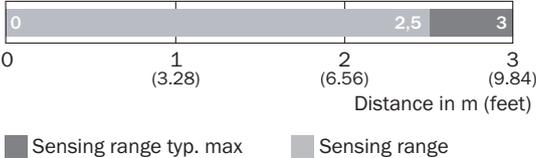
Dimensional drawing Wx4-3, PTFE
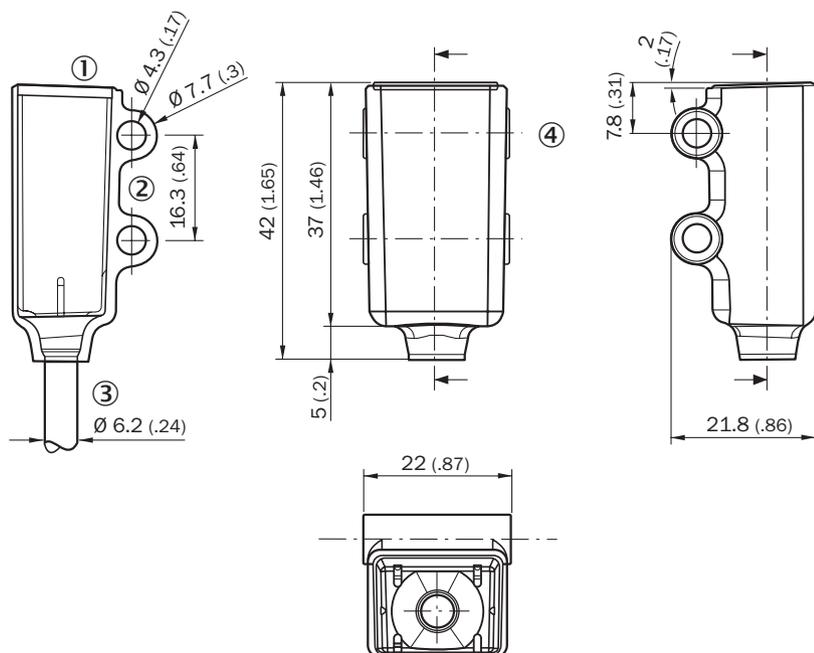
Dimensions in mm (inch)
① LED signal
② Mounting hole, Ø 4.3 mm
③ cable 5 m, Ø 3.4 mm, 2 m Teflon coated Ø 6.2
④ Optical axis, receiver
⑤ Optical axis, sender

Recommended accessories

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

	Brief description	Type	part no.
connectors and cables			
	• **Connection type head A:** Male connector, M8, 3-pin, straight, A-coded • **Description:** Unshielded • **Connection systems:** Screw-type terminals • **Permitted cross-section:** 0.14 mm² ... 0.5 mm²	STE-0803-G	6037322

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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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