



PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	Part no.
WSE4S-3F1330V	1052880

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



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

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Power consumption	≤ 30 mA ³⁾
Power consumption, sender	≤ 20 mA ³⁾
Power consumption, receiver	≤ 20 mA ³⁾
Switching output	PNP
Switching mode	Dark switching
Output current I_{max}	≤ 100 mA
Response time	< 0.5 ms ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Connection type	Cable, 3-wire, 2 m ⁶⁾
Cable material	PVC
Conductor cross-section	0.14 mm ²
Circuit protection	A, B, C ^{7) 8) 9)}
Protection class	III
Weight	80 g
Housing material	Stainless steel, stainless steel 316L
Enclosure rating	IP66, IP67, IP68, IP69K
Test input sender off	TE to 0 V
Ambient operating temperature	-30 °C ... +70 °C ¹⁰⁾
Ambient storage temperature	-30 °C ... +75 °C
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.

²⁾ May not exceed or fall below U_v tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ Do not bend below 0 °C.

⁷⁾ A = V_S connections reverse-polarity protected.

⁸⁾ B = inputs and output reverse-polarity protected.

⁹⁾ C = interference suppression.

¹⁰⁾ At UV ≤ 24 V and IA < 30 mA.

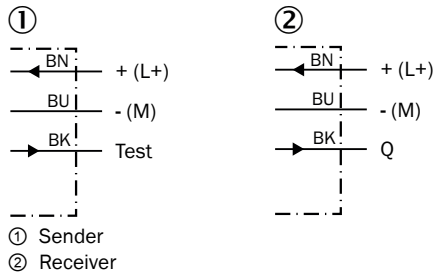
Classifications

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

ECl@ss 9.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
UNSPSC 16.0901	39121528

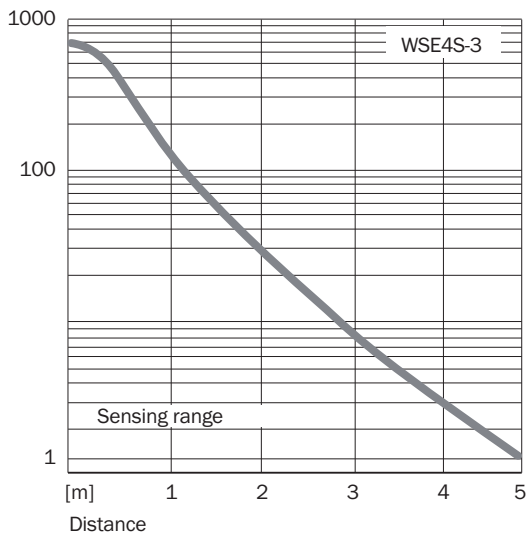
Connection diagram

Cd-061



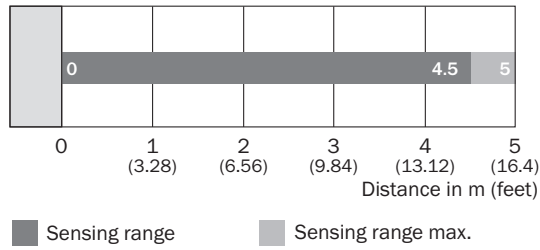
Characteristic curve

WSE4S-3V, WSE4S-3H



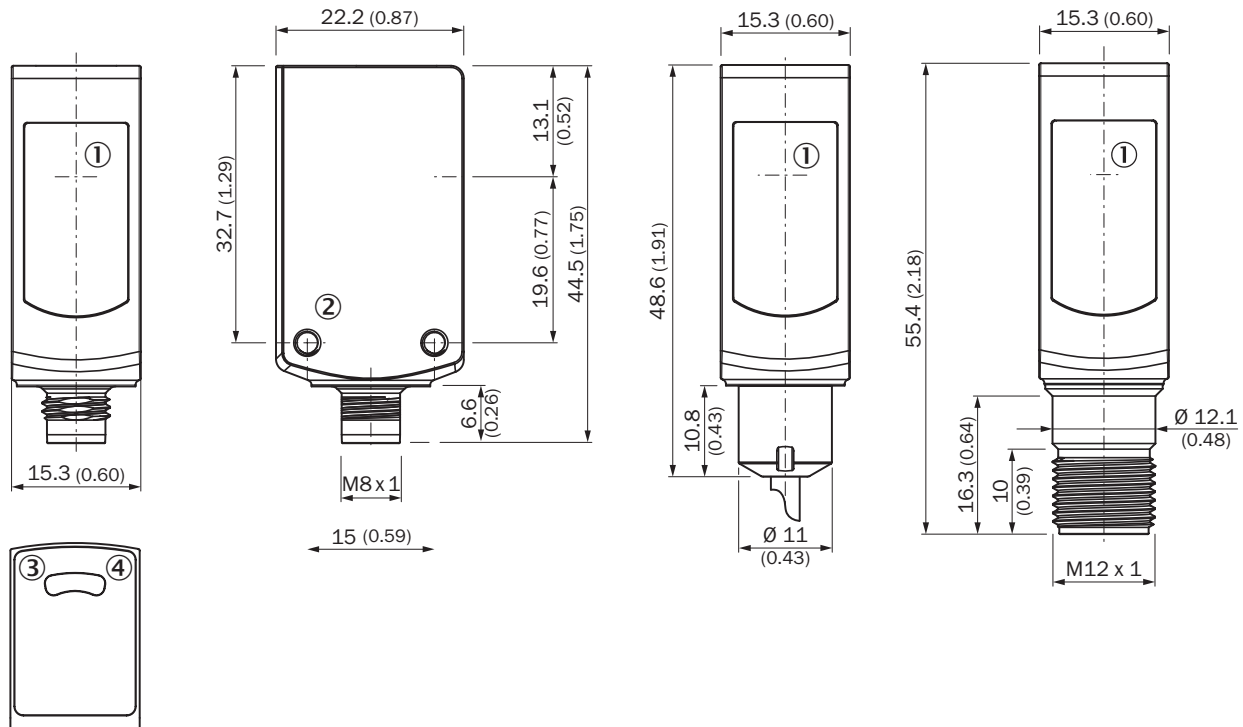
Sensing range diagram

WSE4S-3




Dimensional drawing (Dimensions in mm (inch))

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



Recommended accessories

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

	Brief description	Type	Part no.
Universal bar clamp systems			
	Plate NO2N for universal clamp bracket, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp (5322626), mounting hardware	BEF-KHS-NO2N	2051618

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

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