

WSE4S-3N2430V w4

MINIATURE PHOTOELECTRIC SENSORS

SICKSensor Intelligence.

Ordering information

Туре	Part no.
WSE4S-3N2430V	1054786

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 5 m
Sensing range	0 m 4.5 m
Emitted beam	
Light source	PinPoint LED ¹⁾
Type of light	Visible red light
Light spot size (distance)	Ø 50 mm (2 m)
Key LED figures	
Wave length	650 nm
Adjustment	None
Part number of individual components	2060942 WS4S-3D2430V 2060991 WE4S-3N2430V
Housing design	Washdown

 $^{^{1)}}$ Average service life: 100,000 h at TU = +25 °C.

Safety-related parameters

MTTF _D	753 years
DC _{avg}	0 %
T _M (mission time)	20 years

Electronics

Supply voltage U _B	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Protection class	III
Digital output	
Туре	NPN
Switching mode	Light/dark switching
Output current I _{max.}	≤ 100 mA
Response time	< 0.5 ms ³⁾
Switching frequency	200 Hz ⁴⁾
Output function	Complementary
Circuit protection	A ⁵⁾ B ⁶⁾ C ⁷⁾
Test input sender off	TE to 0 V

 $^{^{1)}}$ 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 49.2 mm x 22.2 mm
Connection	Male connector M12, 4-pin
Material	
Housing	Metal, Stainless steel V4A (1.4404, 316L)
Front screen	Plastic, PMMA
Weight	45 g

Ambient data

Enclosure rating	IP66 IP67 IP68 IP69K
Ambient operating temperature	-30 °C +70 °C ¹⁾ -30 °C +60 °C
Ambient temperature, storage	-30 °C +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

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

Classifications

ECLASS 5.0	27270901
ECLASS 5.1.4	27270901

 $^{^{2)}}$ May not fall below or exceed U_{V} tolerances.

³⁾ Signal transit time with resistive load.

⁴⁾ With light/dark ratio 1:1.

 $^{^{5)}}$ A = V_S connections reverse-polarity protected.

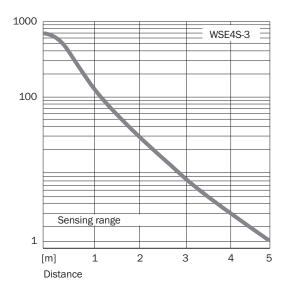
⁶⁾ B = inputs and output reverse-polarity protected.

 $^{^{7)}}$ C = interference suppression.

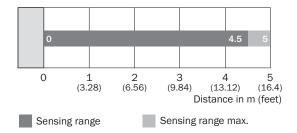
EQL 400 0 0	07070004
ECLASS 6.0	27270901
ECLASS 6.2	27270901
ECLASS 7.0	27270901
ECLASS 8.0	27270901
ECLASS 8.1	27270901
ECLASS 9.0	27270901
ECLASS 10.0	27270901
ECLASS 11.0	27270901
ECLASS 12.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

Connection diagram

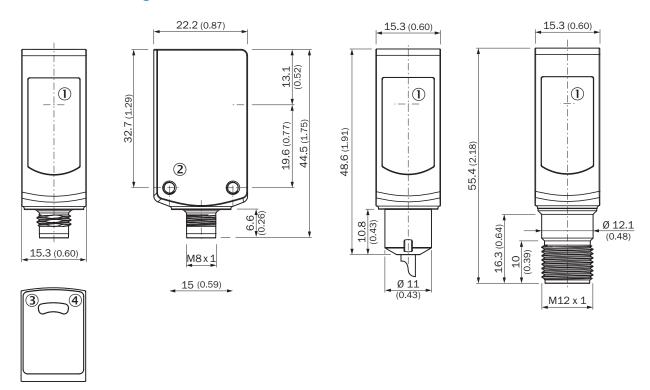
Characteristic curve



Sensing range diagram



Dimensional drawing (Dimensions in mm (inch))



Recommended accessories

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

	Brief description	Туре	Part no.
Mounting brad			
A	 Description: Mounting bracket for floor mounting Material: Stainless steel Details: Stainless steel 1.4571 Items supplied: Mounting hardware included Suitable for: W4S, W4F, W4S 	BEF-W4-B	2051630
Others			
	Connection type head A: Female connector, M12, 4-pin, straight Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PP Description: Sensor/actuator cable, unshielded Connection systems: Flying leads Note: This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H202 and CH202. Before permanent installation is carried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H202) Application: Hygienic and washdown zones, Drag chain operation	DOL-1204-G05MRN	6058476

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