



Photoelectric sensors W4S-3 Inox, Through-beam photoelectric sensor

WSE4S-3N2130V



Model Name > [WSE4S-3N2130V](#)
Part No. > [1052878](#)



Illustration may differ

At a glance

- WashDown rated for fluid tightness (IP 66, IP 67, IP 68 and IP 69K) and Ecolab certified
- Tough stainless steel housing (316L/1.4404)
- Resistant to a variety of common cleaning and disinfection agents
- Modern electrical connection available - M12 connector with pin casting
- Teach-in via stainless steel metal membrane teach button
- PinPoint LED technology provides a highly visible laser-like light spot

Your benefits

- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Quick and easy alignment due to highly visible PinPoint emitter LED
- Easy adjustment via a stainless steel metal membrane teach-in pushbutton



Features

Sensor/detection principle:	Through-beam photoelectric sensor
Dimensions (W x H x D):	15.25 mm x 44.5 mm x 22.2 mm
Housing design:	Washdown
Housing design (light emission):	Rectangular, Slim
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⁾
Wave length:	650 nm
Light spot size (distance):	Ø 50 mm (2 m)

¹⁾ Average service life of 100,000 h at $T_A = +25\text{ °C}$

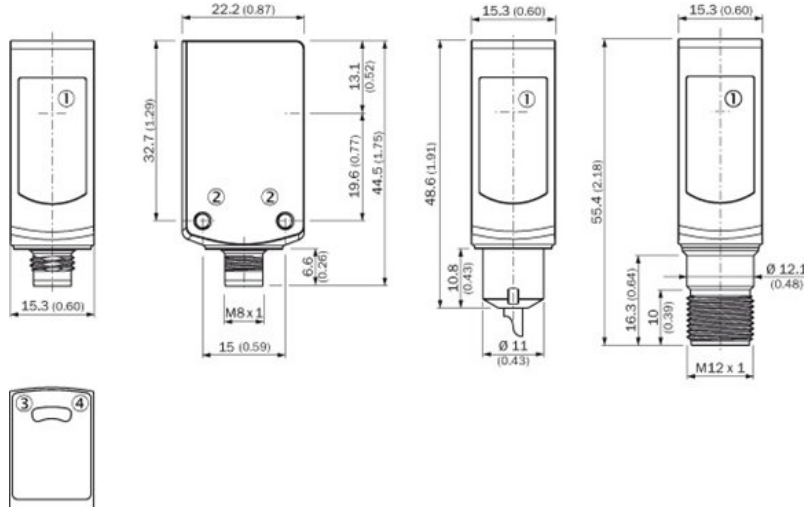
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	< 5 Vpp ²⁾
Power consumption, sender:	≤ 20 mA ³⁾
Power consumption, receiver:	≤ 20 mA ⁴⁾
Power consumption:	≤ 30 mA ⁵⁾
Output type:	NPN
Switching mode:	Light switching

Output current I _{max} :	≤ 100 mA
Response time:	≤ < 0.5 ms ⁶⁾
Switching frequency:	1,000 Hz ⁷⁾
Connection type:	Connector M8, 3-pin
Circuit protection:::	A B 8) 9) 10) C
Protection class:	III
Weight:	40 g
Housing material:	Stainless steel, Stainless steel 316L
Enclosure rating:	IP 66 IP 67 IP 68 ¹¹⁾ IP 69K
Test input sender off:	TE to 0 V
Ambient operating temperature:	-30 °C ... 70 °C ¹²⁾
Ambient storage temperature:	-30 °C ... 75 °C
Part number of individual components:	Receiver, WE4S-3N2130V, 2058666, Sender, WS4S-3D2130V, 2058639

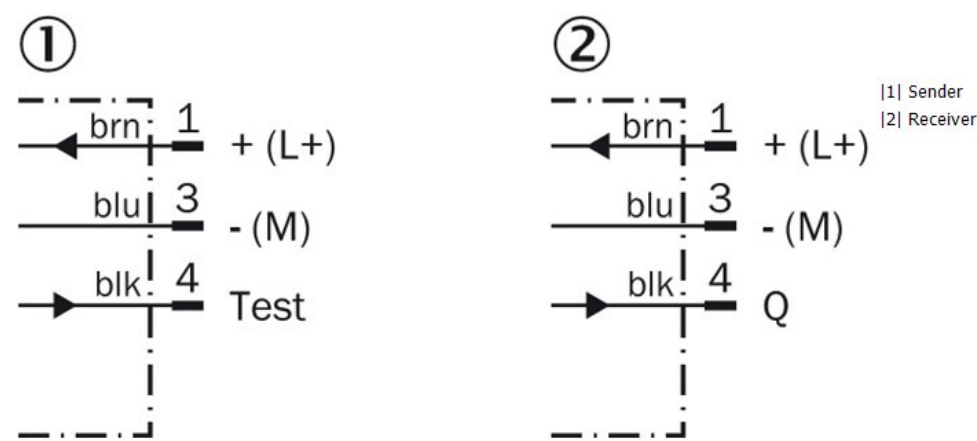
- 1) Limit values, reverse-polarity protected, operation in short-circuit protected network, max. 8 A ²⁾ May not exceed or fall short of V_S tolerances ^{3) 4) 5)} Without load
6) Signal transit time with resistive load ⁷⁾ With light/dark ratio 1:1 ⁸⁾ A = V_S connections reverse-polarity protected ⁹⁾ B = inputs and output reverse-polarity protected
10) C = interference suppression ¹¹⁾ Only in case of correctly mounted IP 69K connecting cable ¹²⁾ At UV ≤ 24 V and IA < 30 mA

Dimensional drawing



- [1] Center of optical axis
[2] Threaded mounting hole M3
[3] Status indicator LED,
yellow: Status of received light beam
[4] Status indicator LED green: power on

Connection diagram



②

brn

1

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(L+)

blu

3

-

(M)

blk

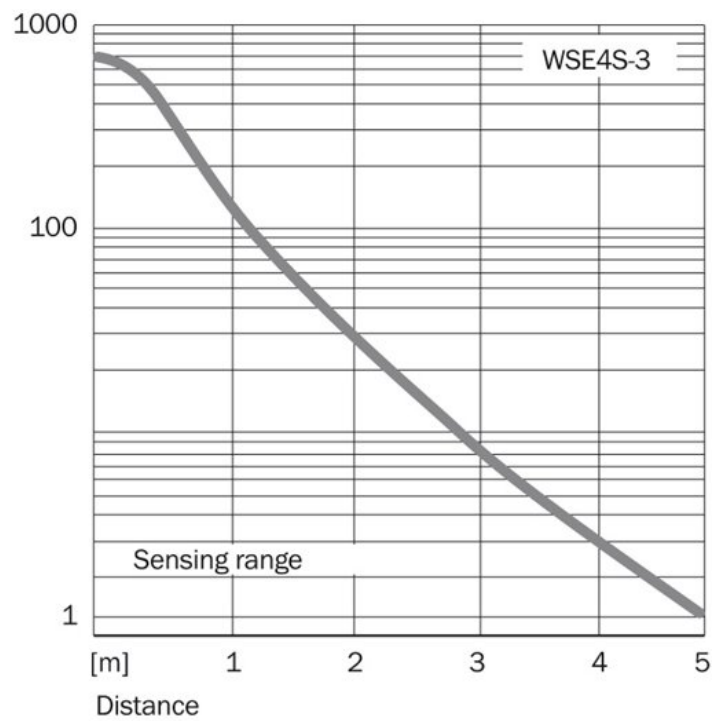
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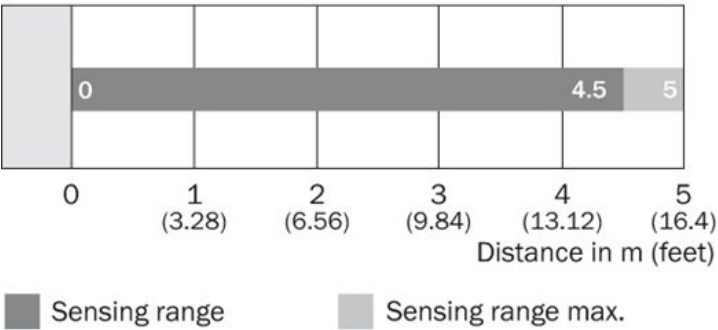
[1] Sender

[2] Receiver

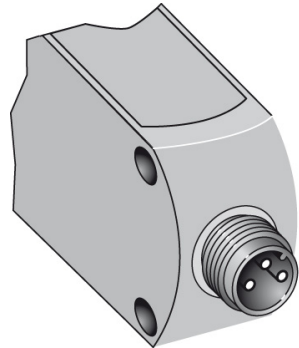
Characteristic curve



Sensing range diagram



Connection type



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