



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

WSE4S-3N1330V



Model Name > [WSE4S-3N1330V](#)
Part No. > [1046444](#)



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

Note: This part is discontinued. Please see the replacement product under "Replacement Products" link. "



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, 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 °C

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	≤ 5 Vpp

Power consumption, sender:	≤ 20 mA
Power consumption, receiver:	≤ 20 mA
Power consumption:	≤ 30 mA
Output type:	NPN
Switching mode:	Light switching
Output current I _{max} :	≤ 100 mA
Response time:	≤ 0.5 ms
Switching frequency:	≥ 100 Hz
Connection type:	Cable, 3-wire, 2 m ⁸⁾
Cable material:	PVC
Conductor cross-section:	0.14 mm ²
Circuit protection:::	A B ⁹⁾ 10) 11) C
Protection class:	III
Weight:	80 g
Housing material:	Stainless steel, Stainless steel 316L
Enclosure rating:	IP 66 IP 67 IP 68 IP 69K
Test input sender off:	TE to 0 V
Ambient operating temperature:	-30 °C ... 60 °C, -30 °C ... 70 °C ¹²⁾
Ambient storage temperature:	-30 °C ... 75 °C
Part number of individual components:	Receiver, WE4S-3N1330V, 2048533, Sender, WS4S-3D1330V, 2048531
UL File No.:	NRKH.E181493 & NRKH7.E181493

- 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⁾ Do not bend below 0 °C ⁹⁾ A = V_S connections reverse-polarity protected ¹⁰⁾ B = inputs and output reverse-polarity protected ¹¹⁾ C = interference suppression ¹²⁾ At UV ≤ 24 V and IA < 30 mA

Technical drawings of the M12x1 1/2" (1.5") cable gland, showing front, side, and detail views with dimensions in mm and inches.

Front View (Top):

- Overall width: 15.3 (0.60)
- Overall height: 32.7 (1.29)
- Mounting hole diameter: Ø 12.1 (0.48)
- Mounting hole spacing: 22.2 (0.87)
- Flange thickness: 13.1 (0.52)
- Flange outer diameter: 44.5 (1.75)
- Flange inner diameter: 19.6 (0.77)
- Flange hole diameter: Ø 8 (0.31)
- Flange hole spacing: 15 (0.59)
- Flange hole diameter: Ø 6.6 (0.26)
- Flange hole diameter: Ø 11 (0.43)
- Flange hole diameter: Ø 12.1 (0.48)

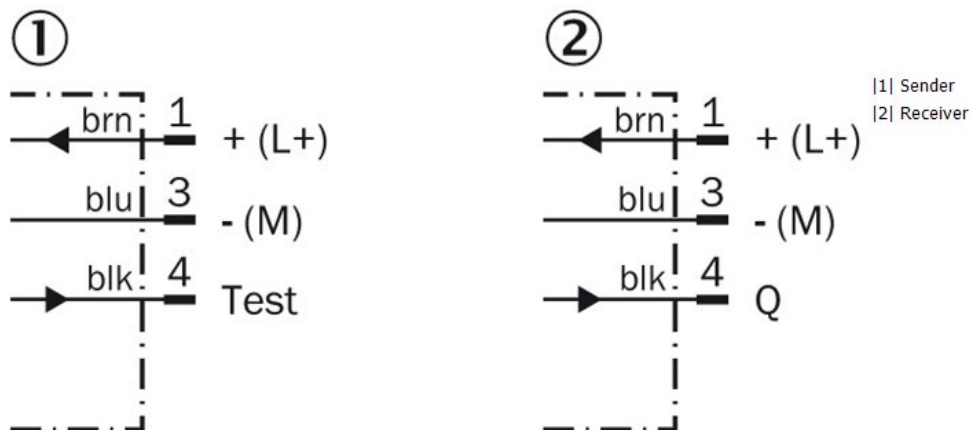
Side View (Right):

- Overall width: 15.3 (0.60)
- Overall height: 55.4 (2.18)
- Mounting hole diameter: Ø 12.1 (0.48)
- Mounting hole spacing: 22.2 (0.87)
- Flange thickness: 13.1 (0.52)
- Flange outer diameter: 44.5 (1.75)
- Flange inner diameter: 19.6 (0.77)
- Flange hole diameter: Ø 8 (0.31)
- Flange hole spacing: 15 (0.59)
- Flange hole diameter: Ø 6.6 (0.26)
- Flange hole diameter: Ø 11 (0.43)
- Flange hole diameter: Ø 12.1 (0.48)

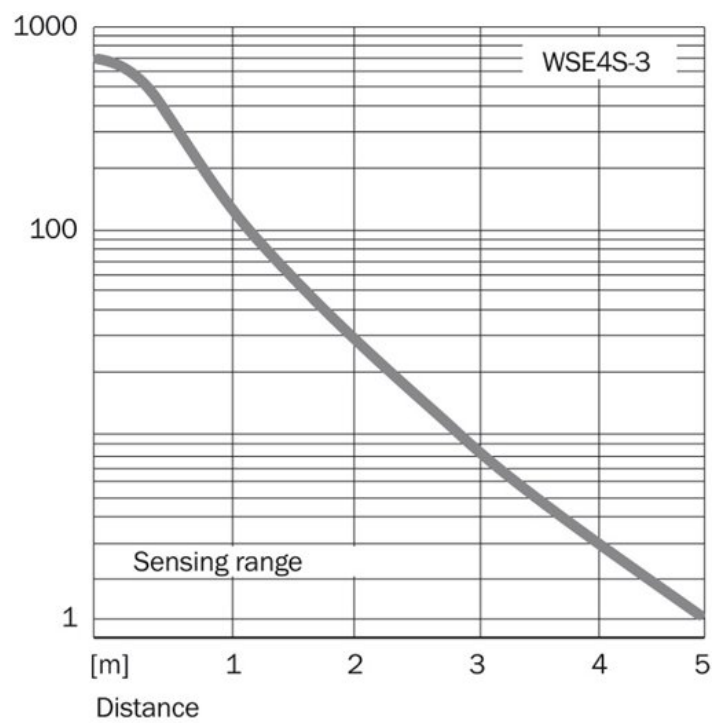
Detail View (Bottom):

- Overall width: 15.3 (0.60)
- Overall height: 10.8 (0.43)
- Mounting hole diameter: Ø 12.1 (0.48)
- Mounting hole spacing: 22.2 (0.87)
- Flange thickness: 13.1 (0.52)
- Flange outer diameter: 44.5 (1.75)
- Flange inner diameter: 19.6 (0.77)
- Flange hole diameter: Ø 8 (0.31)
- Flange hole spacing: 15 (0.59)
- Flange hole diameter: Ø 6.6 (0.26)
- Flange hole diameter: Ø 11 (0.43)
- Flange hole diameter: Ø 12.1 (0.48)

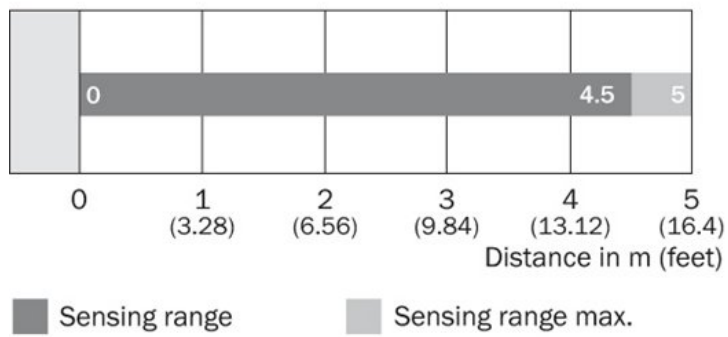
- ### Connection diagram



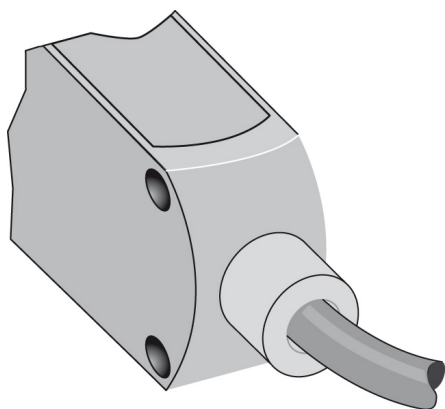
Characteristic curve



Sensing range diagram



Connection type



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