



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

WSE4S-3N1330H

Type > [WSE4S-3N1330H](#)  
Part No. > [1052873](#)

#### At a glance

- Smooth stainless steel housing (316L/1.4404)
- Hygienic mounting using M12-adapter thread or D12-adapter shaft
- IP 66, IP 67, IP 68 and IP 69K enclosure rating and Ecolab certified
- Resistant to a variety of common cleaning and disinfection agents
- Highly visible laser-like light spot due to PinPoint LED
- Teach-in via stainless steel pushbutton with a metal membrane
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

#### Your benefits

- Smooth hygienic housing and accessories with no grooves or crevices eliminates the potential for bacteria to grow, providing a more hygienic solution.
- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Easy adjustment via a stainless steel metal membrane teach-in pushbutton
- Quick and easy alignment due to highly visible PinPoint emitter LED
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks



#### Features

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Sensor/detection principle:      | Through-beam photoelectric sensor |
| Dimensions (W x H x D):          | 15.25 mm x 48.6 mm x 22.15 mm     |
| Housing design:                  | Hygiene                           |
| 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 <sup>1)</sup>        |
| Wave length:                     | 650 nm                            |
| Light spot size (distance):      | Ø 50 mm (2 m)                     |

<sup>1)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

#### Mechanics/electronics

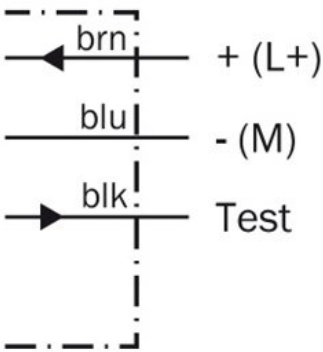
|                 |                                   |
|-----------------|-----------------------------------|
| Supply voltage: | 10 V DC ... 30 V DC <sup>1)</sup> |
|-----------------|-----------------------------------|

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| Ripple:                               | $< 5 \text{ Vpp}$ <sup>2)</sup>                                |
| Power consumption:                    | $\leq 20 \text{ mA}$ <sup>3)</sup>                             |
| Output type:                          | NPN                                                            |
| Switching mode:                       | Light switching                                                |
| Output current I <sub>max</sub> :     | $\leq 100 \text{ mA}$                                          |
| Response time:                        | $< 0.5 \text{ ms}$ <sup>4)</sup>                               |
| Switching frequency:                  | 1,000 Hz <sup>5)</sup>                                         |
| Connection type:                      | Cable, 3-wire, 2 m <sup>6)</sup>                               |
| Cable material:                       | PVC                                                            |
| Conductor cross-section:              | 0.14 mm <sup>2</sup>                                           |
| Circuit protection:::                 | A<br>B <sup>7)</sup> 8) 9)<br>C                                |
| Protection class:                     | III                                                            |
| Weight:                               | 80 g                                                           |
| Housing material:                     | Stainless steel, Stainless steel 316L                          |
| Enclosure rating:                     | IP 66<br>IP 67<br>IP 68<br>IP 69K                              |
| Test input sender off:                | TE to 0 V                                                      |
| Ambient operating temperature:        | -30 °C ... 60 °C, -30 °C ... 70 °C <sup>10)</sup>              |
| Ambient storage temperature:          | -30 °C ... 75 °C                                               |
| Part number of individual components: | Receiver, WE4S-3N1330H, 2058630, Sender, WS4S-3D1330H, 2058456 |

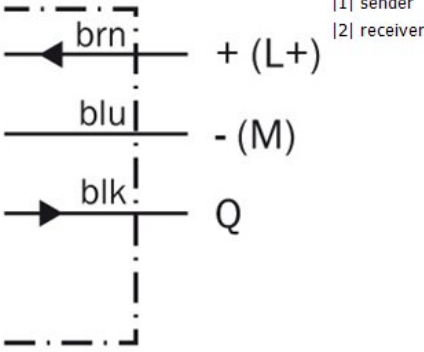
<sup>1)</sup> Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A <sup>2)</sup> May not exceed or fall short of V<sub>S</sub> tolerances <sup>3)</sup> Sender <sup>4)</sup> Signal  
transit time with resistive load <sup>5)</sup> With light/dark ratio 1:1 <sup>6)</sup> Do not bend below 0 °C <sup>7)</sup> A = V<sub>S</sub> connections reverse-polarity protected <sup>8)</sup> B = inputs and output reverse-  
polarity protected <sup>9)</sup> C = interference suppression <sup>10)</sup> At UV  $\leq 24 \text{ V}$  and IA  $< 30 \text{ mA}$

Connection diagram

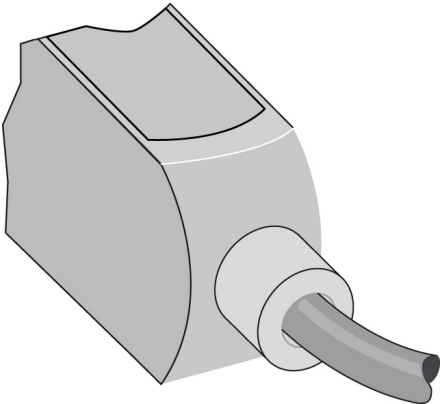
①



②



Connection type



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