



WSE4S-3P1330H

W4

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|---------------|----------|
| WSE4S-3P1330H | 1052886 |

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

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 |
| Special applications | Hygienic and washdown zones |
| Part number of individual components | 2058456 WS4S-3D1330H 2058719 WE4S-3P1330H |
| Housing design | Hygiene |

¹⁾ Average service life: 100,000 h at T_J = +25 °C.

Safety-related parameters

| | |
|-------------------------------------|-----------|
| MTTF_D | 968 years |
| DC_{avg} | 0 % |
| T_M (mission time) | 20 years |

Electrical data

| | |
|--|-----------------------------------|
| Supply voltage U_B | 10 V DC ... 30 V DC ¹⁾ |
| Ripple | < 5 V _{pp} ²⁾ |
| Current consumption | 20 mA ³⁾ |
| Protection class | III |
| Digital output | |
| Type | PNP |
| Switching mode | Light switching |
| Output current I_{max} | ≤ 100 mA |
| Response time | < 0,5 ms ⁴⁾ |
| Switching frequency | 1,000 Hz ⁵⁾ |
| Circuit protection | A, B, C ^{6) 7) 8)} |
| Test input sender off | TE to 0 V |

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⁾ Sender.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ A = V_S connections reverse-polarity protected.

⁷⁾ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

Mechanical data

| | |
|-------------------------------|---|
| Housing | Rectangular |
| Design detail | Slim |
| Dimensions (W x H x D) | 15.25 mm x 48.6 mm x 22.15 mm |
| Connection | Cable, 3-wire, 2 m ¹⁾ |
| Connection detail | |
| Conductor size | 0.14 mm ² |
| Length of cable (L) | 2 m ¹⁾ |
| Material | |
| Housing | Stainless steel, Stainless steel V4A (1.4404, 316L) |
| Front screen | Plastic, PMMA |
| Cable | PVC |
| Weight | 80 g |

¹⁾ Do not bend below 0 °C.

Ambient data

| | |
|--------------------------------------|---------------------------------|
| Enclosure rating | IP66 IP67 IP68 IP69K |
| Ambient operating temperature | -30 °C ... +60 °C ¹⁾ |
| Ambient temperature, storage | -30 °C ... +75 °C |

¹⁾ At $U_V \leq 24$ V and $I_A < 30$ mA.

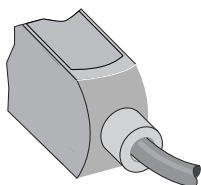
| | |
|--------------------|--|
| UL File No. | FDA, UL No. NRKH.E181493 & cUL No. NRKH7.E181493 |
|--------------------|--|

¹⁾ At UV ≤ 24 V and IA < 30 mA.

Classifications

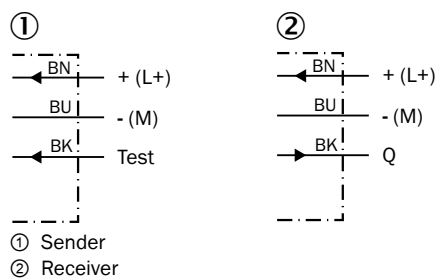
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270901 |
| ECLASS 5.1.4 | 27270901 |
| ECLASS 6.0 | 27270901 |
| ECLASS 6.2 | 27270901 |
| ECLASS 7.0 | 27270901 |
| ECLASS 8.0 | 27270901 |
| ECLASS 8.1 | 27270901 |
| ECLASS 9.0 | 27270901 |
| ECLASS 10.0 | 27270901 |
| ECLASS 11.0 | 27270901 |
| 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 type



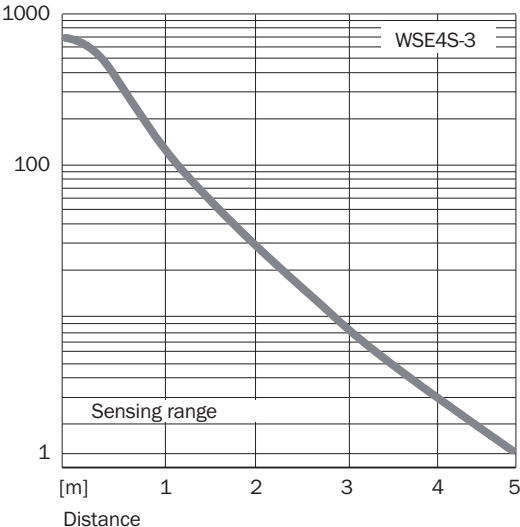
Connection diagram

Cd-061



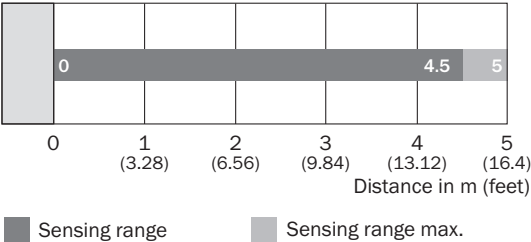
Characteristic curve

WSE4S-3V, WSE4S-3H



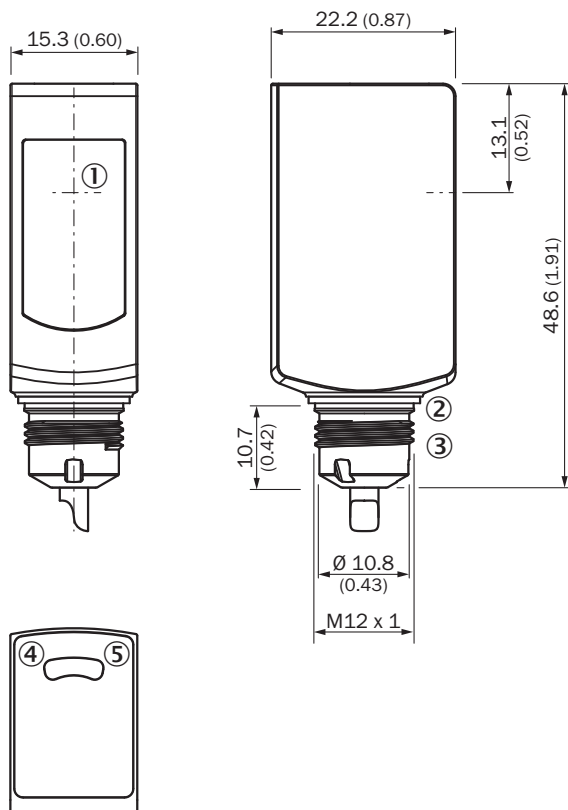
Sensing range diagram

WSE4S-3



Dimensional drawing (Dimensions in mm (inch))



WSE4S-3H



- ① Center of optical axis, sender (WS) and receiver (WE)
- ② Sealing ring (tightening torque 6 Nm)
- ③ Connector M12
- ④ LED indicator yellow: Status of received light beam
- ⑤ LED indicator green: Supply voltage active

Recommended accessories

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

| | Brief description | Type | Part no. |
|---|---|--------------|-----------------|
| Other mounting accessories | | | |
|  | Diameter 18 mm x 100 mm for W4S-3 Inox hygiene. Hygienic integration without holes and brackets. Cable run inside tube | BEF-MR18G-NA | 4065853 |
| Plug connectors and cables | | | |
|  | <ul style="list-style-type: none"> • Connection type head A: Male connector, M8, 3-pin, straight • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² | STE-0803-G | 6037322 |

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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.”

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