



WSE11-2K2430

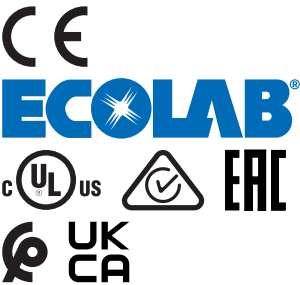
W11-2

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | part no. |
|--------------|----------|
| WSE11-2K2430 | 1057575 |

Other models and accessories → www.sick.com/W11-2

Detailed technical data

Features

| | |
|---------------------------------|-----------------------------------|
| Functional principle | Through-beam photoelectric sensor |
| Dimensions (W x H x D) | 15.6 mm x 48.5 mm x 42 mm |
| Housing design (light emission) | Rectangular |
| Sensing range max. | 0 m ... 20 m |
| Sensing range | 0 m ... 15 m |
| Focus | Approx. 1.5° |
| Type of light | Visible red light |
| Light source | LED ¹⁾ |
| Light spot size (distance) | Ø 220 mm (15 m) |
| Angle of dispersion | Approx. 1.5° |
| Wave length | 633 nm |
| Adjustment | None |

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

Mechanics/electronics

| | |
|---|---|
| Supply voltage U_B | 10 V DC ... 30 V DC ¹⁾ |
| Ripple | < 5 V _{pp} ²⁾ |
| Power consumption, sender | ≤ 25 mA ³⁾ |
| Power consumption, receiver | ≤ 20 mA ³⁾ |
| Switching output | PNP ⁴⁾ |
| Output function | Complementary |
| Switching mode | Light/dark switching ⁴⁾ |
| Signal voltage PNP HIGH/LOW | U _v - 2.5 V / approx. 0 V |
| Output current I_{max} | ≤ 100 mA |
| Response time | ≤ 2.5 ms ⁵⁾ |
| Switching frequency | 200 Hz ⁶⁾ |
| Connection type | Male connector M12, 4-pin |
| Circuit protection | A ⁷⁾ C ⁸⁾ D ⁹⁾ |
| Protection class | III |
| Weight | 120 g |
| Housing material | Plastic, ABS |
| Optics material | Plastic, PMMA |
| Enclosure rating | IP66 IP67 IP69K |
| Test input sender off | TE to 0 V |
| Ambient operating temperature | -30 °C ... +60 °C |
| Ambient temperature, storage | -40 °C ... +75 °C |
| UL File No. | NRKH.E181493 & NRKH7.E181493 |
| Part number of individual components | 2063410 WS11-2D2430 2063416 WE11-2K2430 |

¹⁾ Limit values when operated in short-circuit protected network: max. 8 A.

²⁾ May not fall below or exceed U_y tolerances.

³⁾ Without load.

⁴⁾ Pin 2 and pin 4 swapped over.

⁵⁾ Signal transit time with resistive load.

⁶⁾ With light/dark ratio 1:1.

⁷⁾ A = V_S connections reverse-polarity protected.

⁸⁾ C = interference suppression.

⁹⁾ D = outputs overcurrent and short-circuit protected.

Safety-related parameters

| | |
|-------------------------------------|-----------|
| MTTF_D | 982 years |
| DC_{avg} | 0 % |
| T_M (mission time) | 20 years |

Certificates

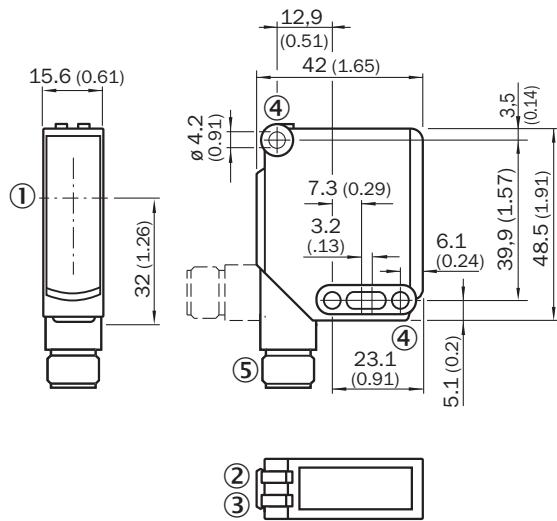
| | |
|-------------------------------------|---|
| EU declaration of conformity | ✓ |
|-------------------------------------|---|

| | |
|--|---|
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China-RoHS | ✓ |
| ECOLAB certificate | ✓ |
| cULus certificate | ✓ |
| EAC certificate / DoC | ✓ |
| Photobiological safety (DIN EN 62471) certificate | ✓ |

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 |

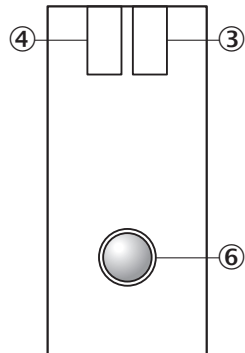
Dimensional drawing WSE11-2



Dimensions in mm (inch)

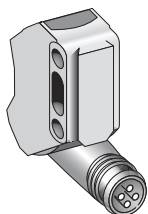
- ① Center of optical axis
- ② LED indicator green: Supply voltage active
- ③ LED indicator yellow: Status of received light beam
- ④ Mounting hole \varnothing 4.2 mm
- ⑤ M12 connector, 4-pin or cable

Adjustments WTE11-2, WSE11-2

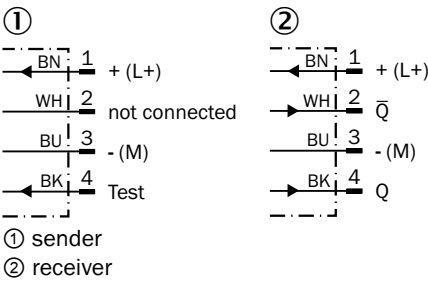


- ③ LED indicator green: Supply voltage active
- ④ LED indicator yellow: Status of received light beam
- ⑥ Adjustment sensing range: single teach-in button

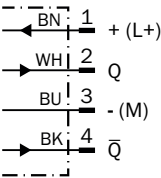
Connection type



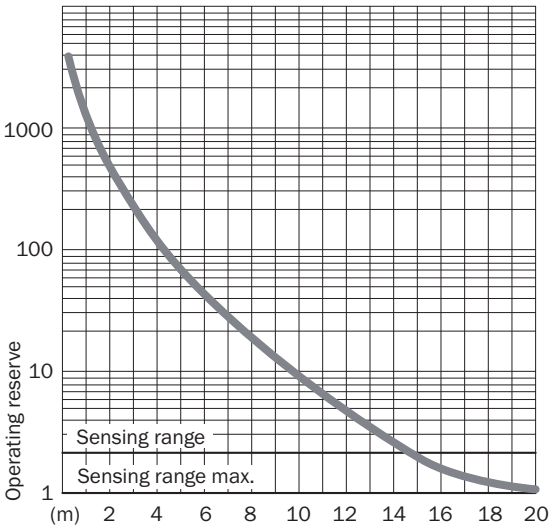
Connection diagram Cd-072



Connection diagram Cd-102





Characteristic curve WSE11-2



Recommended accessories

Other models and accessories → www.sick.com/W11-2

| | Brief description | Type | part no. |
|---|---|--------------------|----------|
| connectors and cables | | | |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals, Uncontaminated zones | YF2A14-050VB3XLEAX | 2096235 |
| | <ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, A-coded • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² | STE-1204-G | 6009932 |
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> • Description: Mounting bracket, large • Material: Stainless steel • Details: Stainless steel • Items supplied: Mounting hardware included • Suitable for: W11-2, W12-3, W16 | BEF-WG-W12 | 2013942 |

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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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