SICK.COM




DATA SHEET

# WSO26P-243ZZ1A0ZZZZL-LZZZZZZZZ1

L26
Safety single-beam sensors

SICK Sensor Intelligence




# SAFETY SINGLE-BEAM SENSORS

# WSO26P-243ZZ1A0ZZZZLLZZZZZZ

## ORDERING INFORMATION

| Type | part no. |
|---|---|
| WSO26P-243ZZ1A0ZZZZLLZZZZZZZZ1 | 2113106 |

Further device versions and accessories at www.sick.com/L26

## DETAILED TECHNICAL DATA

### FEATURES

| | |
|---|---|
| Smart Sensor | Diagnosis<br>Efficient communication<br>Smart Task |
| Light source | PinPoint LED |
| Type of light | Red light, visible |
| Scanning range | 50 m |
| Number of beams | 1 |
| Detection capability | 30 mm [1] |
| Response time | 0.5 ms |
| Response time | 0.5 ms + Test device response time |
| Cascading | Cascading allows up to 4 single-beam photoelectric safety switches to be connected in series. You can find response times and connection diagrams for cascading in the operating instructions. |

[1] A test rod with a diameter of at least 30 mm is required for thorough check. Suitable test rods are available as accessories from SICK.

### SAFETY-RELATED PARAMETERS

| | |
|---|---|
| Type | Type 2 (IEC 61496-1) [1] |
| Safety integrity level | SIL 1 (IEC 61508) [1] |
| Category | Category 2 (EN ISO 13849) [1] |
| Test rate (external test) | 100 /s (EN ISO 13849) |
| Maximum demand rate | 60 $min^{-1}$ (EN ISO 13849) [2] |
| Performance level | PL c (EN ISO 13849) [1] |
| $PFH_D$ (mean probability of a dangerous failure per hour) | 1.0 x $10^{-6}$ (EN ISO 13849) [1] |

[1] Only in combination with an appropriate test device, e.g., Flexi Classic or Flexi Soft.

[2] Between two requirements on a safety-related response of the device, at least 100 external tests must be carried out.

| | |
|---|---|
| $T_M$ (mission time) | 20 years (EN ISO 13849) |

[1] Only in combination with an appropriate test device, e.g., Flexi Classic or Flexi Soft.

[2] Between two requirements on a safety-related response of the device, at least 100 external tests must be carried out.

## INTERFACES

| | |
|---|---|
| Connection type | Male connector M12, 4-pin, connector 270° rotatable |
| Configuration method | Via IO-Link |
| Display elements | LEDs |
| Alignment aid | Alignment quality via diagnostic LEDs<br>Easy and quick sensor alignment using BluePilot |
| Application diagnostic output (ADO) | ✓ |
| IO-Link | ✓ |
| Data exchange via IO-Link | Device information<br>Quality of reception |
| Configuration via IO-Link | Switching output<br>Application diagnostic output (ADO) |
| IO-Link master | SiLink2 Master IOLA2US-01101 |
| Configuration software | SOPAS ET |

## ELECTRONICS

| | |
|---|---|
| Protection class | III (IEC 61140) |
| Supply voltage $V_S$ | 24 V DC (19.2 V DC ... 28.8 V DC) |
| Residual ripple | ≤ 5 V |
| Power consumption | ≤ 30 mA |
| Test input voltage | ≤ 3 V (Sender off) [1]<br>≥ $U_V$ - 4 V (Sender on) [1] |
| Test input response time | ≤ 1.1 ms |

[1] The test input may not not be operated when not connected. The test input has a pull-up resistor to activate the sender (sender on) even when not connected. Therefore, an active-switched LOW signal is required to activate the cyclic test with test gap (sender off).

## MECHANICS

| | |
|---|---|
| Design | Rectangular |
| Dimensions (W x H x D) | 26.4 mm x 48.1 mm x 82.2 mm |
| Housing material | VISTAL® |

## AMBIENT DATA

| | |
|---|---|
| Enclosure rating | IP66 (IEC 60529)<br>IP67 (IEC 60529)<br>IP69K (ISO 20653) |
| Ambient operating temperature | –40 °C ... +60 °C |
| Storage temperature | –40 °C ... +75 °C |
| Air humidity | 15 % ... 95 %, Non-condensing |
| Vibration resistance | 5 g, 10 Hz ... 55 Hz (IEC 60068-2-6) |
| Shock resistance | 10 g, 16 ms (IEC 60068-2-27) |

## OTHER INFORMATION

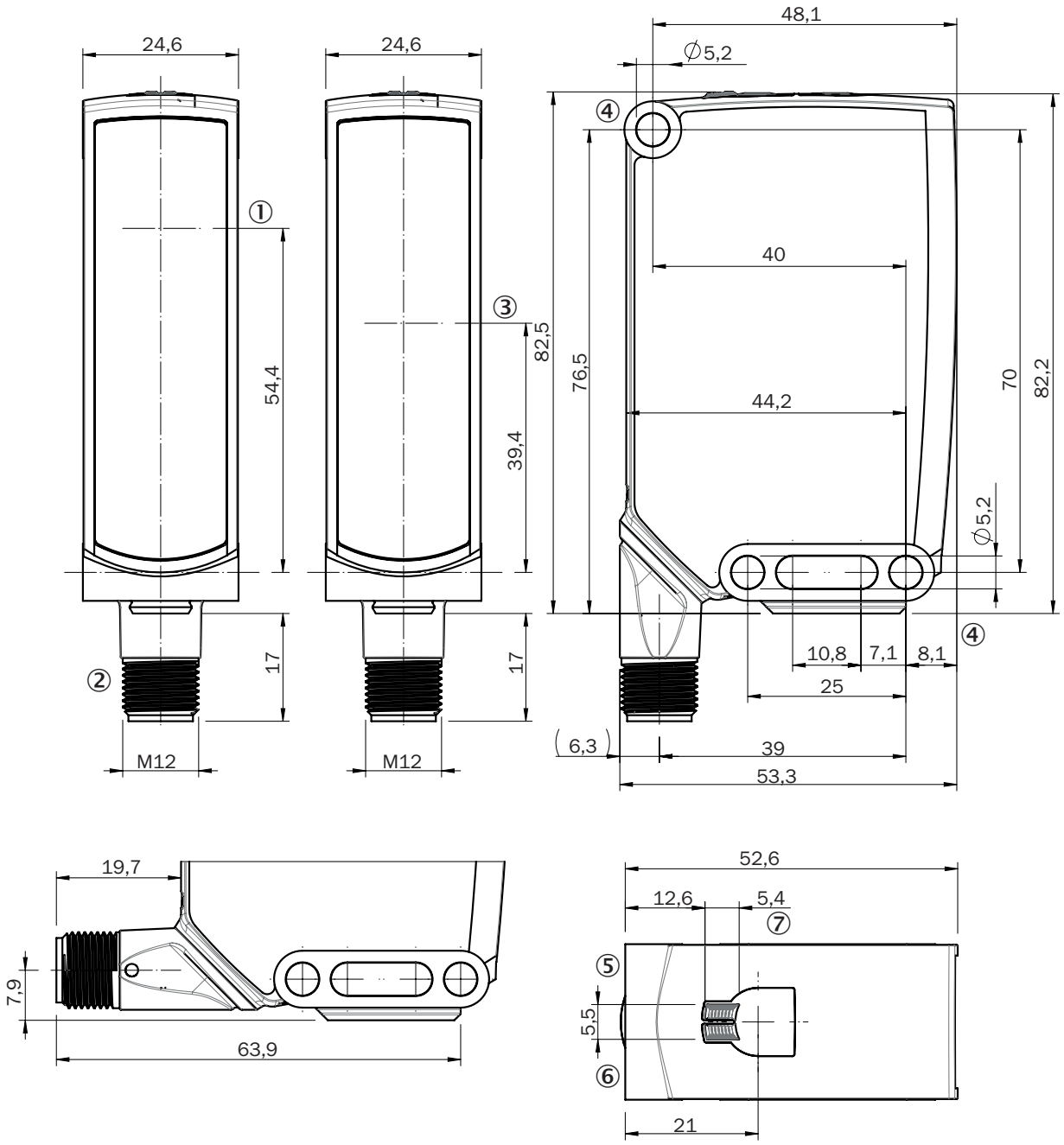
| | |
|---|---|
| Light source | PinPoint LED |
| Type of light | Red light, visible |
| Wave length | 635 nm |

| | |
|---|---|
| Light spot diameter (distance) | 90 mm (8 m) |

## CERTIFICATES

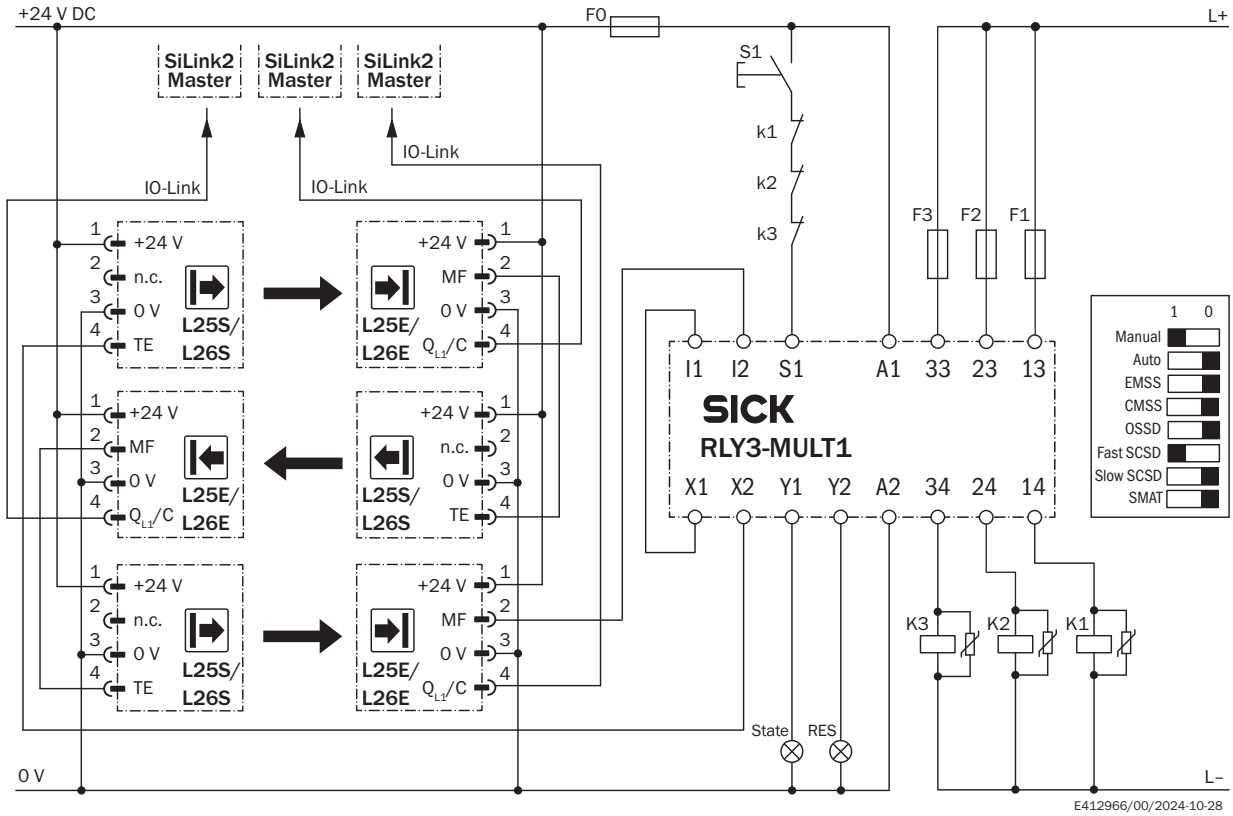
| | |
|---|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China RoHS | ✓ |
| ECOLAB certificate | ✓ |
| ULus approval | ✓ |
| cUL approval | ✓ |
| Photobiological safety (DIN EN 62471) certificate | ✓ |
| EC-Type-Examination approval | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

**DIMENSIONAL DRAWING L26**



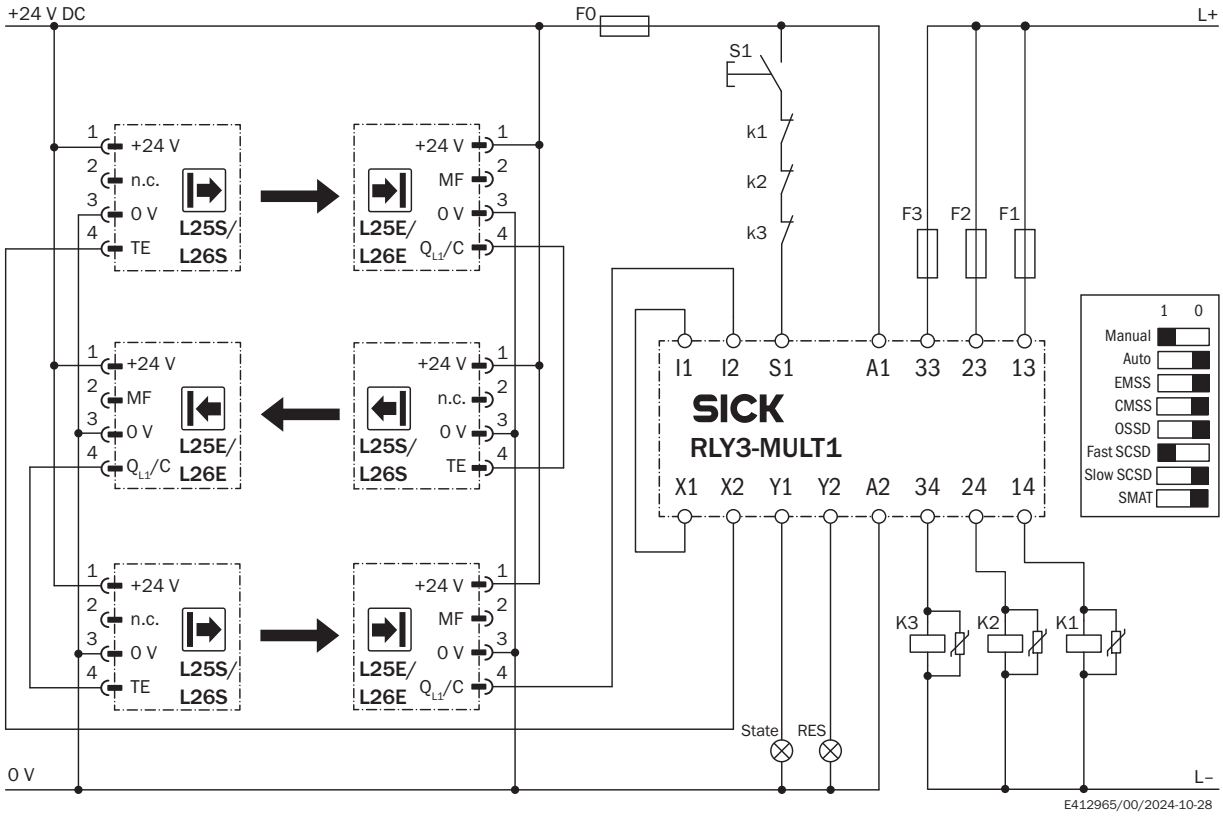

Dimensions in mm (inch)
① Center of optical axis, sender
② Connection
③ Center of optical axis, receiver
④ Mounting holes
⑤ Green operating LED: Supply voltage active
⑥ Yellow status LED: Light receiver indication
⑦ Alignment aid (BluePilot): Blue alignment quality LEDs

**CONNECTION DIAGRAM 3 X L25/L26 TO RLY3-MULT1 AND IO-LINK, WITH RESTART INTERLOCK AND EXTERNAL DEVICE MONITORING**




The requirements in the operating instructions of the devices used must be adhered to.

**CONNECTION DIAGRAM 3 X L25/L26 TO RLY3-MULT1, WITH RESTART INTERLOCK AND EXTERNAL DEVICE MONITORING**




The requirements in the operating instructions of the devices used must be adhered to.

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/2113106

SICK AG
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# SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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