



WS026P-243ZZ1A0ZZZZLLZZZZZZZZ1

L26

SAFETY SINGLE-BEAM SENSORS

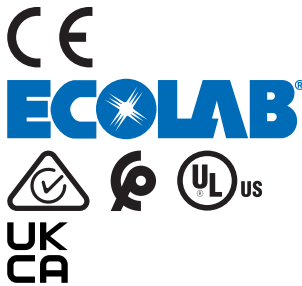
SICK
Sensor Intelligence.



Ordering information

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

Other models and accessories → www.sick.com/L26



Detailed technical data

Features

| | |
|-----------------------------|--|
| Smart Sensor | Diagnosis Efficient communication 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) |

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.

| | |
|---|---|
| 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⁾ |
| 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 Easy and quick sensor alignment using BluePilot |
| Application diagnostic output (ADO) | ✓ |
| IO-Link | ✓ |
| Data exchange via IO-Link | Device information Quality of reception |
| Configuration via IO-Link | Switching output 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⁾ ≥ U _V - 4 V (Sender on) ¹⁾ |
| Test input response time | ≤ 1.1 ms |

¹⁾ The test input may 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) IP67 (IEC 60529) 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) |

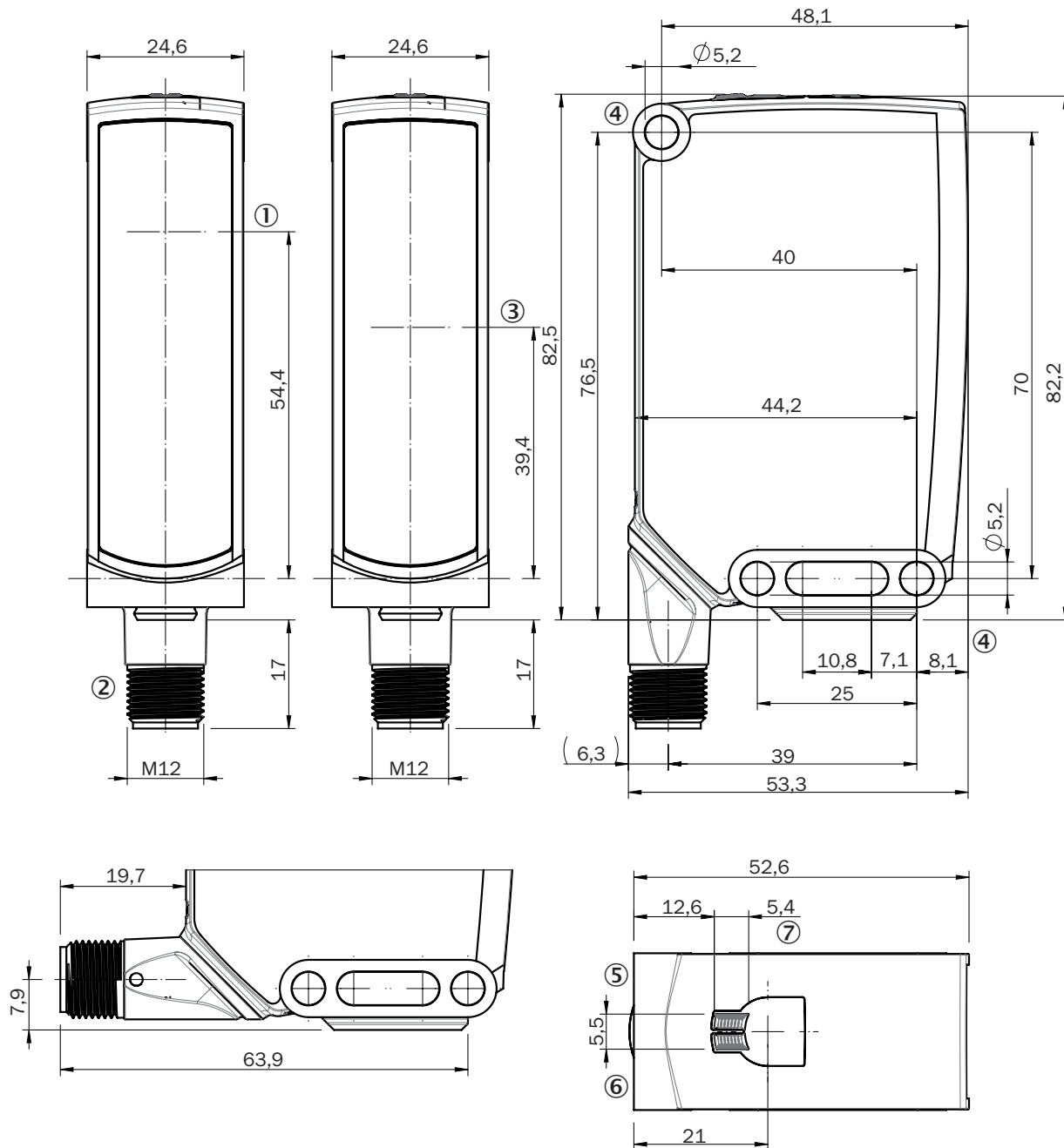
Certificates

| | |
|--|---|
| 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 | ✓ |

Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27272701 |
| ECLASS 5.1.4 | 27272701 |
| ECLASS 6.0 | 27272701 |
| ECLASS 6.2 | 27272701 |
| ECLASS 7.0 | 27272701 |
| ECLASS 8.0 | 27272701 |
| ECLASS 8.1 | 27272701 |
| ECLASS 9.0 | 27272701 |
| ECLASS 10.0 | 27272701 |
| ECLASS 11.0 | 27272701 |
| ECLASS 12.0 | 27272701 |
| ETIM 5.0 | EC001831 |
| ETIM 6.0 | EC001831 |
| ETIM 7.0 | EC001831 |
| ETIM 8.0 | EC001831 |
| UNSPSC 16.0901 | 46171620 |

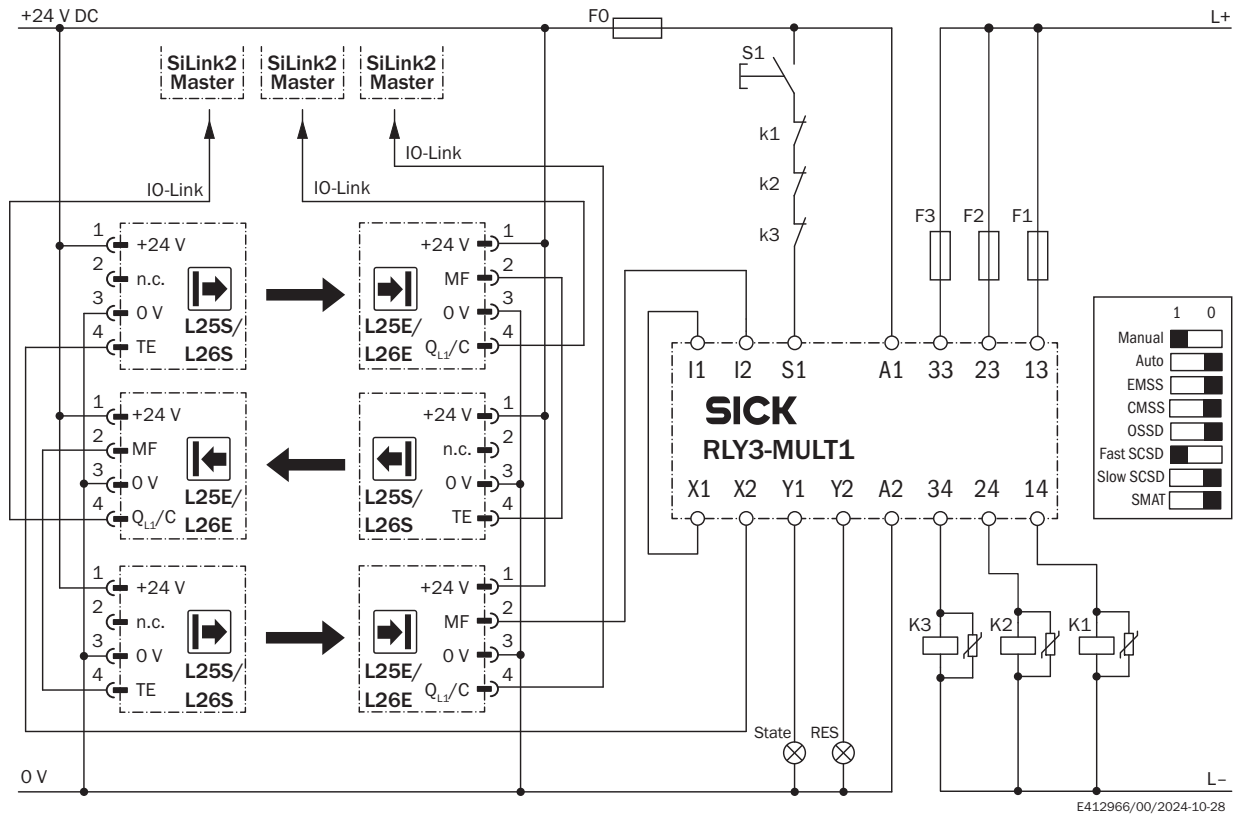
Dimensional drawing L26



Dimensions in mm (inch)

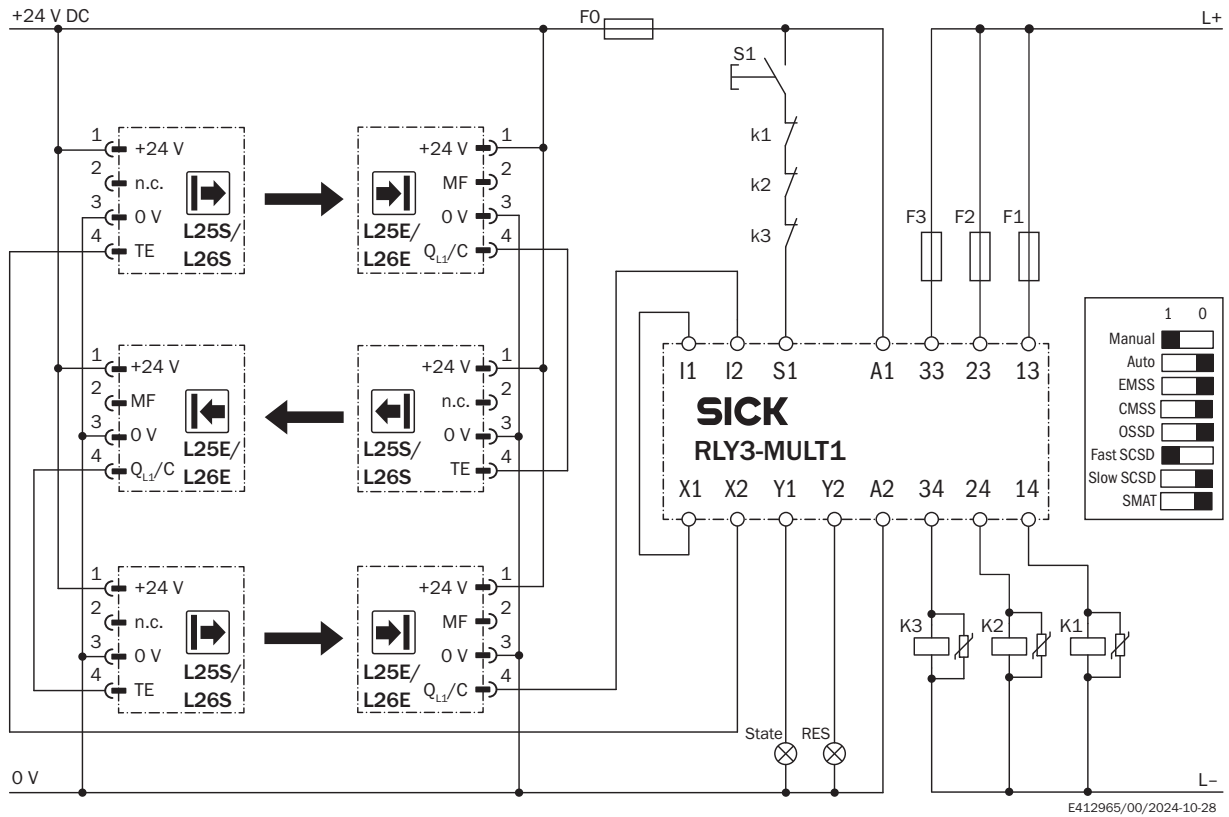
- ① Center of optical axis, sender
- ② Connection
- ③ Center of optical axis, receiver
- ④ Mounting holes
- ⑤ Green operating LED: Supply voltage active
- ⑥ Yellow status LED: Light receiver indication
- ⑦ Alignment aid (BluePilot): Blue alignment quality LEDs

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.

Recommended accessories

Other models and accessories → www.sick.com/L26

| | 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 |

| | Brief description | Type | part no. |
|---|---|---------------|----------|
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Mounting bracket with articulated arm Material: Steel Details: Steel, zinc coated Items supplied: Mounting hardware included Suitable for: W16, W26, W11, W12, W23, W27, Dx50, W280, G10 | BEF-WN-MULTI2 | 2093945 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket Material: Steel Details: Steel, zinc coated Items supplied: Mounting hardware included Suitable for: W23-2, W27-3, Reflex Array | BEF-WN-W23 | 2019085 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket with hinged arm Material: Steel Details: Steel, zinc coated Items supplied: Mounting hardware included Suitable for: W23-2, W27-3, Reflex Array | BEF-WN-W27 | 2009122 |
|  | <ul style="list-style-type: none"> Description: Plate A for universal clamp bracket Material: Steel Details: Steel, zinc coated Items supplied: Universal clamp (2022726), mounting hardware Usable for: MultiPac, W23-2, W27-3, W26, P250, DS30 | BEF-KHS-A01 | 2022458 |
|  | <ul style="list-style-type: none"> Description: Plate N04 for universal clamp, steel Material: Steel, zinc diecast Details: Zinc plated steel (sheet), Zinc die cast (clamping bracket) Items supplied: Universal clamp (5322626), mounting hardware Usable for: Dx50, UC12, W12G, W14-2, W18-2, W23, W280, W11-2, W12-3, W12-2 Laser, W12 Teflon, W16, W18-3, W23-2, W24-2, W24-2 Ex, W26, W27-2 Laser, W27-2, W27-3, W34, W260, W280-2, PowerProx, Reflex Array, W11G-2, W18-3 Ex, W27-3 Ex | BEF-KHS-N04 | 2051610 |
|  | <ul style="list-style-type: none"> Description: Mounting bracket with articulated arm for W11-2, W27, Dx50 Material: Steel Details: Steel, zinc coated Items supplied: Mounting hardware included Suitable for: W23-2, W27-3, Reflex Array | BEF-WN-MULTI | 2064469 |

| | Brief description | Type | part no. |
|----------------------------|--|-----------------------------------|----------|
| device protection and care | | | |
| | <ul style="list-style-type: none"> • Description: Protective housing for W26, W27-3 and mounting rods with diameter 12 mm ... 20 mm • Material: Steel, zinc diecast • Items supplied: Universal clamp BEF-KHS-KH1 (2022726), mounting hardware • Suitable for: W27-3, W26, RAY26 | BEF-SG-W27 | 2039601 |
| network devices | | | |
| | | IOLA2US-01101 (SiLink2 Master) | 1061790 |
| | | SIG200-0A0G12200 | 1102605 |
| | | SIG200-0A0412200 | 1089794 |

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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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