RS25-WL334000

RS25

CONTRAST SENSORS

SICK
Sensor Intelligence.

Ordering information

Type	part no.
RS25-WL334000	1061571

Included in delivery: RS25 - optical sensor head (1)

Other models and accessories ➜ www.sick.com/RS25

Illustration may differ

Detailed technical data

Features

Housing design	Middle
Dimensions (W x H x D)	100 mm x 47 mm x 200 mm
Light source	LED, RGB
Sensing distance	≤ 10 mm
Sensing distance tolerance	± 1 mm
Start code	Configurable
Max. number of marks in the register	20
Special features	Special device

Electronics

Supply voltage	12 V DC … 30 V DC [1]
Ripple	≤ 5 V_{pp} [2]
Current consumption	< 250 mA [3]
Accuracy	40 µm
Time delay	None
Protection class	III [4]
Circuit protection	U_V connections, reverse polarity protected Interference pulse suppression Outputs overcurrent and short-circuit protected
ATEX approval	✓
ATEX marking	Ex II (2)G [Ex op is Gb] IIB
Connection type	
	Male connector M12, 4-pin

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

[2] May not fall below or exceed U_V tolerances.

[3] Without load.

[4] Reference voltage DC 50 V.

Mechanics

Housing material	Aluminum
Weight	1,000 g

Ambient data

Ambient operating temperature	−10 °C … +55 °C

Ambient temperature, storage	−20 °C ... +70 °C
Shock load	According to IEC 60068
Enclosure rating	IP65

Classifications

| ECLASS 5.0	27270906
ECLASS 5.1.4	27270906
ECLASS 6.0	27270906
ECLASS 6.2	27270906
ECLASS 7.0	27270906
ECLASS 8.0	27270906
ECLASS 8.1	27270906
ECLASS 9.0	27270906
ECLASS 10.0	27270906
ECLASS 11.0	27270906
ECLASS 12.0	27270906
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	39121528

Dimensional drawing: Evaluation unit
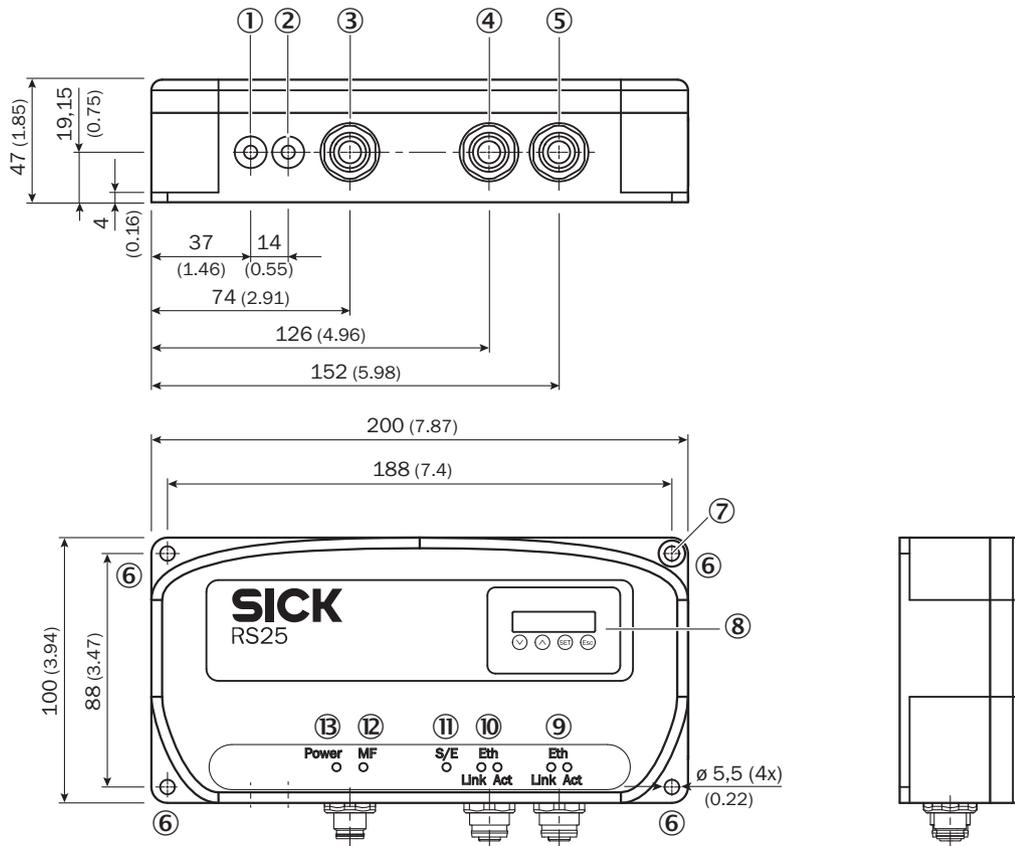
Dimensions in mm (inch)
① Connection optical sensor head receiver
② Connection optical sensor head sender
③ supply voltage connection
④ Ethernet POWERLINK connection
⑤ Ethernet POWERLINK connection
⑥ fixing hole
⑦ non-anodized surface
⑧ display and control unit
⑨ LED function indicator (green) "Eth, Link and Act"
⑩ LED function indicator (green) "Eth, Link and Act"
⑪ LED function indicator (green/red) "S/E"
⑫ LED function indicator (yellow) "MF"
⑬ LED function indicator (green) "Power"
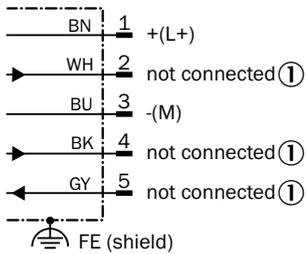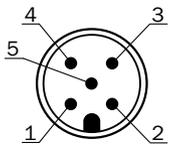
Dimensional drawing: optical sensor head
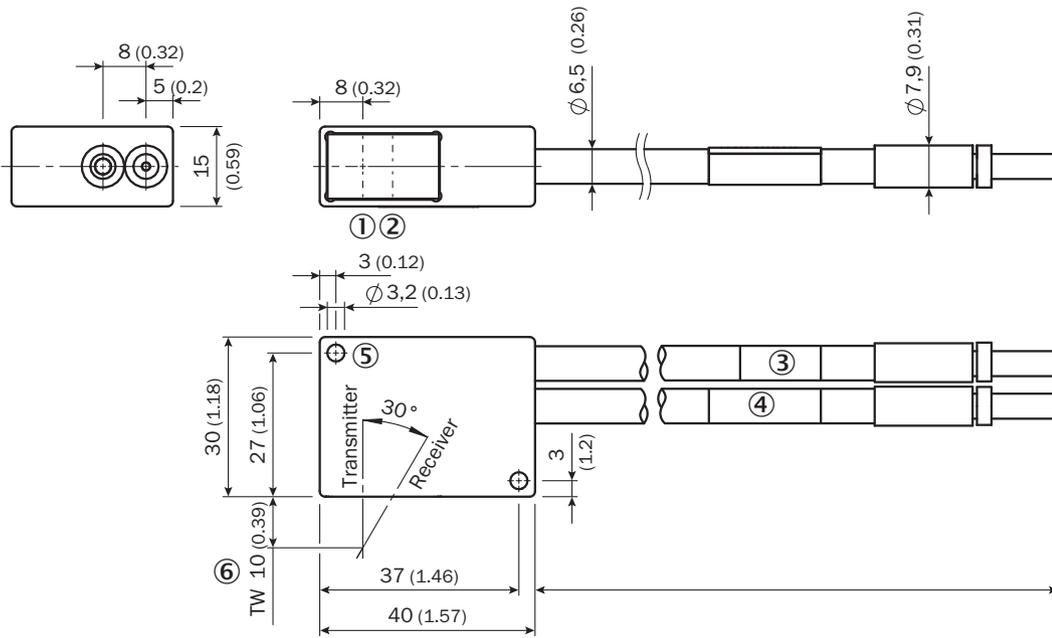
Dimensions in mm (inch)
① optical axis, sender
② optical axis, receiver
③ optical fiber, sender
④ optical fiber, receiver
⑤ fixing hole
⑥ sensing range (TM) in mm

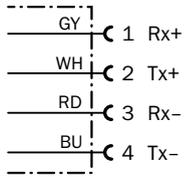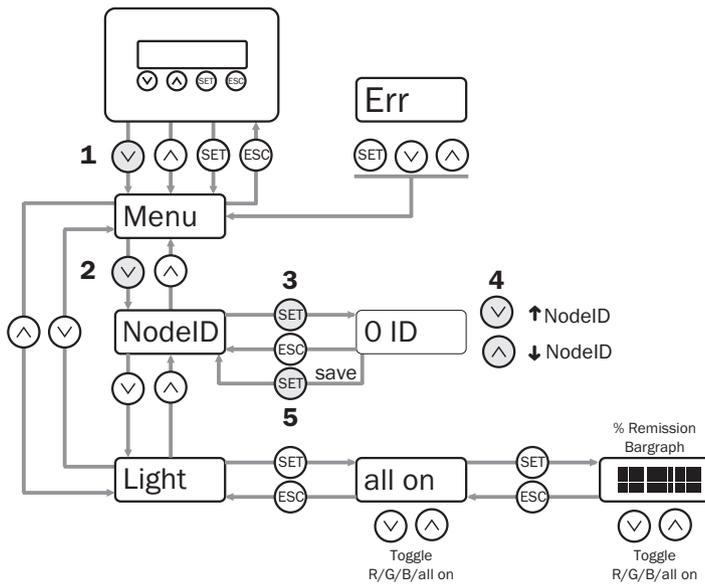## Connection type and diagram supply voltage

Voltage supply

BN	1	+(L+)
WH	2	not connected ①
BU	3	-(M)
BK	4	not connected ①
GY	5	not connected ①
		FE (shield)

M12 (A-coded)
① Not connected

Ethernet POWERLINK M12, 4-pin

Ethernet POWERLINK

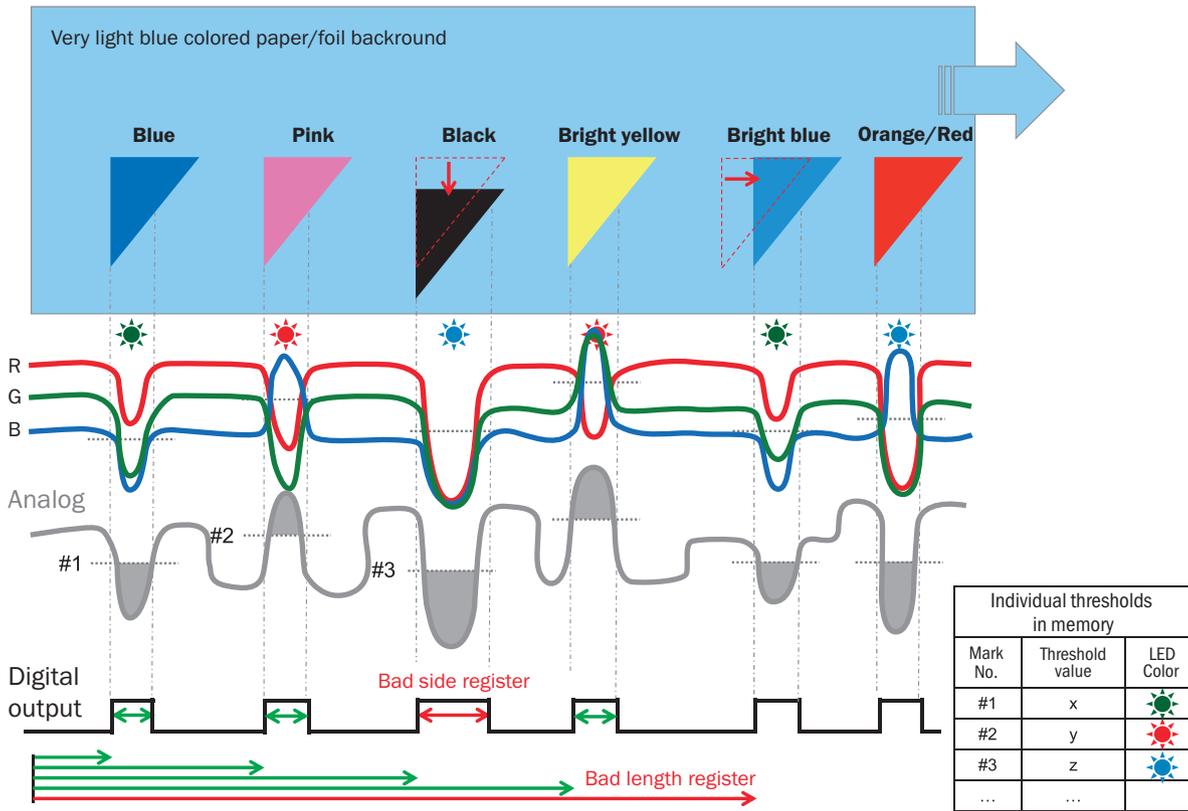| Pin	Signal
GY	1 Rx+
WH	2 Tx+
RD	3 Rx−
BU	4 Tx−

M12 (D-coded)

Flow diagram

6. Perform a restart. This is done by switching the supply voltage off and then on again after 5 seconds.

The register sensor is ready to communicate with the control (PLC).

Functional principle

Individual thresholds in memory		
Mark No.	Threshold value	LED Color
#1	x	🟢
#2	y	🔴
#3	z	🔵
…	…	

Recommended accessories

Other models and accessories ➜ www.sick.com/RS25

	Brief description	Type	part no.
connectors and cables			
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 8-pin, straight • **Signal type:** Ethernet • **Cable:** 10 m, 4-wire, AWG26, PUR, halogen-free • **Description:** Ethernet, twisted pair, shielded	YM2D24-100EA1M-RJA4	6030928
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 8-pin, straight • **Signal type:** Ethernet • **Cable:** 20 m, 4-wire, AWG26, PUR, halogen-free • **Description:** Ethernet, twisted pair, shielded	YM2D24-200EA1M-RJA4	6036158
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 8-pin, straight • **Signal type:** PROFINET • **Cable:** 25 m, 4-wire, AWG22, PUR, halogen-free • **Description:** PROFINET, shielded • **Application:** Robot	SSL-2J04-G25ME	6033555
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 8-pin, straight • **Signal type:** PROFINET • **Cable:** 5 m, 4-wire, AWG22, PUR, halogen-free • **Description:** PROFINET, shielded	SSL-2J04-G05MZ	6035389
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, D-coded • **Signal type:** Ethernet • **Cable:** 2 m, 4-wire, CAT5, CAT5e, PUR, halogen-free • **Description:** Ethernet, shielded	SSL-1204-G02ME90	6045222
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, D-coded • **Signal type:** Ethernet • **Cable:** 5 m, 4-wire, CAT5, CAT5e, PUR, halogen-free • **Description:** Ethernet, shielded	SSL-1204-G05ME90	6045277
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, D-coded • **Signal type:** Ethernet • **Cable:** 10 m, 4-wire, CAT5, CAT5e, PUR, halogen-free • **Description:** Ethernet, shielded	SSL-1204-G10ME90	6045279
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A25-050UB6XLEAX	2095733
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 10 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A25-100UB6XLEAX	2095734
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 20 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A25-200UB6XLEAX	2095738
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 4-pin, straight • **Signal type:** Ethernet, PROFINET • **Cable:** 2 m, 4-wire, PUR, halogen-free • **Description:** Ethernet, shielded, PROFINET	YM2D24-020P-N1MRJA4	2106182

Brief description	Type	part no.
• **Application:** Drag chain operation, Zones with oils and lubricants • **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 2 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A25-020UB6XLEAX	2145583
• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A25-010UB6XLEAX	2145582
• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 0.6 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A25-C60UB6XLEAX	2145581

SICK AT A GLANCE

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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.

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