

OLS10-BP112311

OLS

CONTRAST SENSORS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	part no.
OLS10-BP112311	1092169

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

Detailed technical data

Features

Housing design	Middle
Dimensions (W x H x D)	46 mm x 77 mm x 46 mm
Module width (min.)	≥ 1.5 mm
Line radius (min.)	≥ 0.5 m
Light source	LED, blue ¹⁾
Light spot size	180 mm x 11 mm ²⁾
Receiving filters	None
Wave length	450 nm
Bar code types	Interleaved 2 of 5
Sensing distance	≤ 100 mm
Sensing distance tolerance	± 10 mm

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

²⁾ Field of view line +90mm, field of view code +50mm.

Interfaces

Ethernet	✓, TCP/IP
Cycle time	1 ms
Process data length	21 Byte Process Data In
CANopen	✓
Digital output	Q ₁ , Q ₂
Number	2

Electronics

Supply voltage	12 V DC ... 30 V DC ¹⁾
Ripple	$\leq 5 V_{pp}$ ²⁾
Power consumption	$< 3 W$ ³⁾
Initialization time	$< 10 s$
Sampling rate	10 ms ⁴⁾ 20 ms ⁵⁾
Accuracy optical center	$\pm 1 mm$
Switching output	PNP
Switching output (voltage)	PNP: HIGH = $V_S - \leq 2 V$ / LOW $< 0,5 V$
Status output	PNP: HIGH = $V_S - \leq 2 V$ / LOW $< 0,5 V$ ⁶⁾
Output current I_{max}	$< 100 mA$ ⁷⁾
Time delay	None
Protection class	III
Circuit protection	U _V connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression
LED risk group	1 (IEC 62471)
Connection type	Connector M12, 12-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⁾ CANopen.

⁵⁾ Ethernet.

⁶⁾ Detailed description of the status output in operating manual.

⁷⁾ Sum $I_{out} = Q1 + Q2$.

Mechanics

Housing material	Metal
Weight	325 g

Ambient data

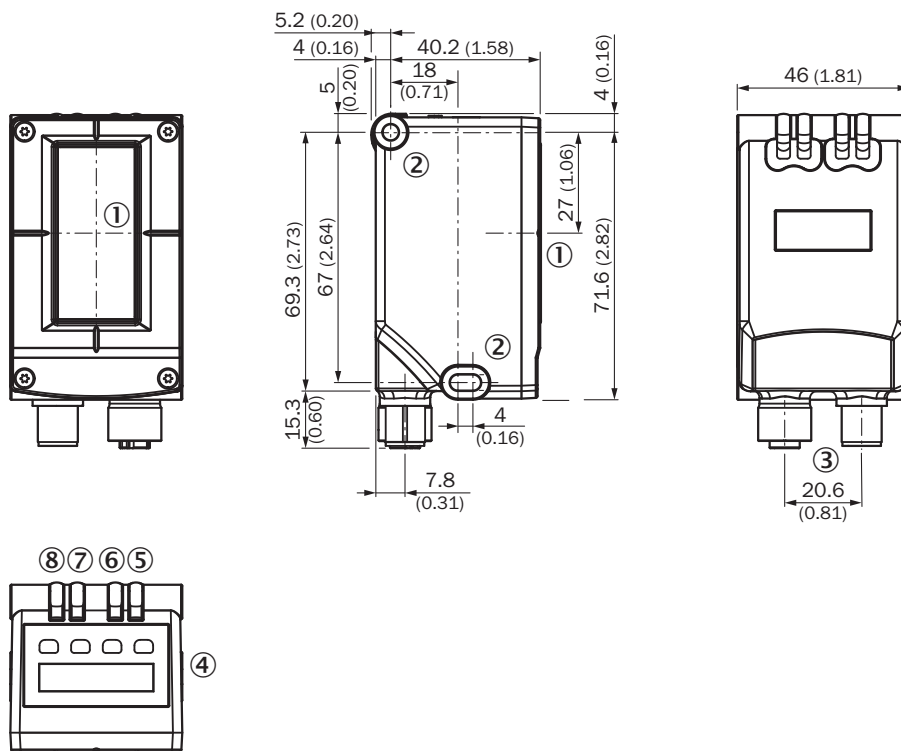
Ambient operating temperature	-10 °C ... +55 °C
Ambient temperature, storage	-20 °C ... +75 °C
Ambient light immunity	50,000 lx
Shock load	According to IEC 60068
Enclosure rating	IP64
UL File No.	NRKH.E181493 & NRKH7.E181493

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

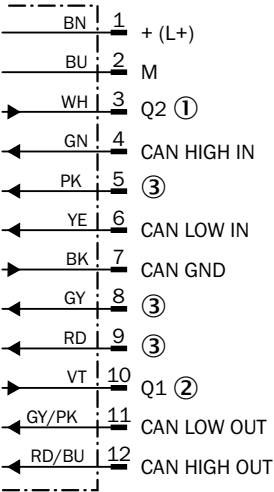
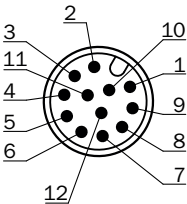


Dimensions in mm (inch)

- ① Center of optical axis
- ② Mounting hole, Ø 4.2 mm
- ③ Connector M12, 12-pin/Connector M12, 4-pin, rotatable up to 90° (Ethernet)
- ④ Display and function buttons
- ⑤ Function signal indicator (green) "on"
- ⑥ Function signal indicator (yellow) "Q"
- ⑦ Function signal indicator (green) "Link"
- ⑧ Function signal indicator (yellow) "Act"

Connection diagram Cd-395

M12 (A-coded)





- ① valid BarCode read
- ② line detected
- ③ reserved, do not connect

Recommended accessories

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

	Brief description	Type	part no.
Codes			
	<ul style="list-style-type: none"> Product family: Positioning codes Description: 1D bar codes in 2/5 interleaved format, set of 108 bar codes, 9 A4 sheets of 12 bar codes each, luminescent PVC base material with protective film, codes 0001 ... 0108, neon orange 	BARCODE 7510-038-0001-0108	5338408
	<ul style="list-style-type: none"> Product family: Positioning codes Description: Luminescent duct tape for easy application to all types of flooring, width 2.5 cm, length 25 m, neon orange 	ADHESIVE TAPE, FABRIC	5337868
	<ul style="list-style-type: none"> Product family: Positioning codes Description: Luminescent rugged PVC adhesive tape for easy application to all types of flooring, width 2 cm, length 25 m, neon orange 	TAPE 7510-038-20-25	5338378
	<ul style="list-style-type: none"> Product family: Positioning codes Description: Scope of delivery: 1 x 90° arc: luminescent rugged PVC adhesive tape, prepared as 90° arc with a radius of 500 mm, neon orange 	TAPE 7510-038-500	5338387
	<ul style="list-style-type: none"> Product family: Positioning codes Description: Scope of delivery: 1 x 90° arc, luminescent rugged PVC adhesive tape, prepared as 90° arc with a radius of 1,000 mm, neon orange 	TAPE 7510-038-1000	5338388
	<ul style="list-style-type: none"> Product family: Positioning codes Description: Protective film for adhesive tape, slip resistance class R10, protection against abrasion and moisture, width 3,5 cm, length 50 m 	TAPE 250AS-35-50	5338386
	<ul style="list-style-type: none"> Product family: Positioning codes Description: Scope of delivery: 1 x 90° arc, protective film for adhesive tape, slip resistance class R10, protection against abrasion and moisture, prepared as 90° arc with a radius of 500 mm 	TAPE 250AS-500-35	5338389
	<ul style="list-style-type: none"> Product family: Positioning codes Description: Scope of delivery: 1 x 90° arc, protective film for adhesive tape, slip resistance class R10, protection against abrasion and moisture, prepared as 90° arc with a radius of 1,000 mm 	TAPE 250AS-100-35	5338390
	<ul style="list-style-type: none"> Product family: Positioning codes Description: 1D barcodes in 2/5 interleaved format, set of 108 barcodes, 9 A4 sheets of 12 barcodes each, luminescent PVC base material with protective film, codes 0109 ... 0218, neon orange. Supplement (subsequent codes) for https://www.sick.com/5338408 target="_blank">BARCODE 7510-038-0001-0108. 	BARCODE 7510-038-0109-0218	5342395
Mounting systems			
	<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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none">• 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: 5 m, 4-wire, PUR, halogen-free• Description: Ethernet, shielded, PROFINET• Application: Drag chain operation, Zones with oils and lubricants	YM2D24-050P-N1MRJA4	2106184
	<ul style="list-style-type: none">• Connection type head A: Female connector, M12, 12-pin, straight, A-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 5 m, 12-wire, PVC• Description: Sensor/actuator cable, shielded• Application: Zones with chemicals, Uncontaminated zones	YF2A2B-050VH2XLEAX	2130954

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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