OLM100-1206

OLM

OPTICAL LINEAR MEASUREMENT SENSORS

SICK
Sensor Intelligence.

OLM100-1206 | OLM
OPTICAL LINEAR MEASUREMENT SENSORS

Illustration may differ

Ordering information

Type	part no.
OLM100-1206	1059271

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

Detailed technical data

Features

Measuring range	0 m … 10,000 m [1]
Resolution	0.1 mm, 1 mm
Repeatability	0.15 mm [2]
Output time	1 ms
Light source	LED, red
Max. movement speed	7 m/s
Reading distance	100 mm, ± 20 mm
Barcode width	30 mm

[1] Dependent on the set resolution and transfer protocol.

[2] Statistical error 3 σ.

Interfaces

CANopen	✓

Electronics

Supply voltage V_s	DC 10 V … 30 V [1]
Ripple	≤ 5 V_{pp}
Power consumption	< 3 W
Initialization time	< 3 s
Enclosure rating	IP65
Protection class	III

[1] Limit values, reverse-polarity protected.

Ambient data

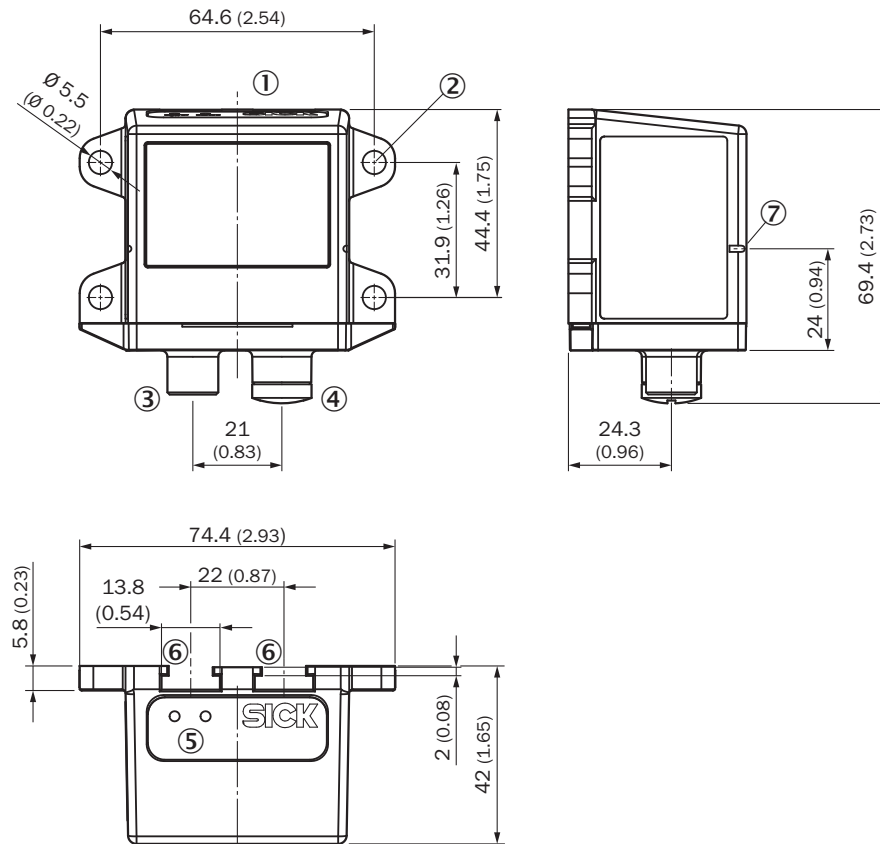|	
Electromagnetic compatibility (EMC)	EN 61000-6-2 / EN 61000-6-4
Ambient temperature, operation	–30 °C ... +60 °C [1]
Ambient temperature, storage	–40 °C ... +75 °C [2]
Typ. Ambient light immunity	≤ 9,000 lx [3]
Vibration resistance	DIN/EN 60068-2-6, DIN/EN 60068-2-64
Shock resistance	DIN/EN 60068-2-27

[1] Temperatures < –20 °C with 5 min warm-up time.
[2] Max. 95 % humidity, non-condensing.
[3] Typ. value at +25 °C ambient temperature.

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
CANopen certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Dimensional drawing

64.6 (2.54)

Ø 5.5 (Ø 0.22)

31.9 (1.26)

44.4 (1.75)

21 (0.83)

69.4 (2.73)

24 (0.94)

24.3 (0.96)

74.4 (2.93)

13.8 (0.54)

22 (0.87)

5.8 (0.23)

2 (0.08)

42 (1.65)

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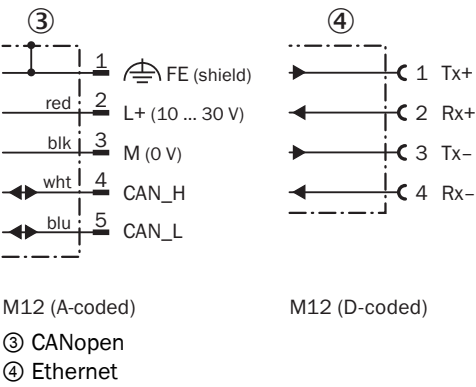
Dimensions in mm (inch)
① Reference axis position measurement
② Mounting holes, Ø 5.5 mm
③ Connector M12, 5-pin
④ Ethernet M12 female connector, 4-pin
⑤ status LED [status]
⑥ T-slot
⑦ Adjustment aid (slot)

Pinouts OLM100-10x6 1 x socket M12, 4-pin 1 x connector M12, 5-pin

③ CANopen
④ Ethernet
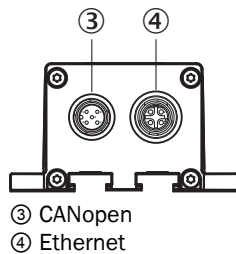
Connection diagram OLM100-10x6 1 x socket M12, 4-pin 1 x connector M12, 5-pin

③

pin		
1	⏚	FE (shield)
red 2		L+ (10 ... 30 V)
blk 3		M (0 V)
wht 4		CAN_H
blu 5		CAN_L

④

pin	
1	Tx+
2	Rx+
3	Tx−
4	Rx−

M12 (A-coded)   M12 (D-coded)

③ CANopen
④ Ethernet

Recommended accessories

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

Brief description	Type	part no.
Mounting systems		
• **Description:** Sliding nut set, M5, 4x • **Packing unit:** 4 pieces • **Items supplied:** Included in delivery	Sliding nuts	2017550

	Brief description	Type	part no.
connectors and cables			
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Male connector, M12, 5-pin, straight, A-coded • **Signal type:** DeviceNet™, CANopen • **Cable:** 1 m, PUR, halogen-free • **Description:** DeviceNet™, shielded, CANopen	CAN cable (male connector - female connector)	6021164
	• **Connection type head A:** Male connector, M12, 5-pin, straight • **Signal type:** CANopen • **Description:** CANopen, unshielded	CAN male connector	6021167
	• **Connection type head A:** Female connector, M12, 5-pin, A-coded • **Connection type head B:** Flying leads • **Signal type:** Power, CAN • **Cable:** 5 m, 5-wire • **Description:** Power, unshielded, CAN	DOL-1205-G05M_Can	6021166
	• **Connection type head A:** Female connector, M12, 5-pin, A-coded • **Connection type head B:** Female connector, M12, 5-pin, A-coded • **Connection type head C:** Male connector, M12, 5-pin, A-coded • **Description:** Unshielded	DSC-1205T000025KM0	6030664
	• **Connection type head A:** Male connector, M12, 5-pin, straight, A-coded • **Signal type:** CANopen, DeviceNet™ • **Description:** CANopen, shieldedDeviceNet™ • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm²	STE-1205-GA	6027533
	• **Connection type head A:** Male connector, M12, 4-pin, angled, D-coded • **Connection type head B:** Male connector, RJ45, 8-pin, straight • **Signal type:** Ethernet • **Cable:** 2 m, 4-wire, CAT5, CAT5e, PUR, halogen-free • **Description:** Ethernet, shielded	SSL-2J04-H02ME	6047911
	• **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 • **Application:** Drag chain operation, Zones with oils and lubricants	YM2D24-020P-N1MRJA4	2106182
Codes			
	• **Product family:** Positioning codes • **Description:** 30 mm, height: 60 mm, measuring range: customer-specific	Customer-specific bar code tape	5327812
	• **Product family:** Positioning codes • **Description:** 30 mm, height: 100 mm, measuring range: customer-specific	Customer-specific bar code tape	5327576
	• **Product family:** Positioning codes • **Description:** 30 mm, height: 25 mm, measuring range: customer-specific	Customer-specific bar code tape	5328960
	• **Product family:** Positioning codes • **Description:** 30 mm, height: 30 mm, measuring range: customer-specific	Customer-specific bar code tape	5322556
	• **Product family:** Positioning codes • **Description:** 30 mm, height: 40 mm, measuring range: customer-specific	Customer-specific bar code tape	5323951

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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