OLM100-1006

OLM

OPTICAL LINEAR MEASUREMENT SENSORS

SICK
Sensor Intelligence.

OLM100-1006 | OLM
OPTICAL LINEAR MEASUREMENT SENSORS

Ordering information

Type	part no.
OLM100-1006	1047413

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

Illustration may differ

Detailed technical data

Safety-related parameters

MTTF$_D$ (mean time to dangerous failure)	> 100 years
DC$_{avg}$ (average diagnostic coverage)	0 %

Features

Measuring range	0 m ... 10,000 m [1]
Resolution	0.1 mm, 1 mm
Repeatability	1 mm [2]
Output time	1 ms
Light source	LED, red
Max. movement speed	4 m/s
Reading distance	100 mm, ± 20 mm
Barcode width	30 mm

[1] Dependent on the set resolution and transfer protocol.
[2] Statistical error 1 σ.

Interfaces

CANopen	✓

Electronics

Supply voltage V$_s$	DC 10 V ... 30 V [1]
Ripple	≤ 5 V$_{pp}$ [2]

[1] Limit values, reverse-polarity protected.
[2] May not fall below or exceed U$_V$ tolerances.

Power consumption	< 3 W
Initialization time	< 3 s
Enclosure rating	IP65
Protection class	III

[1] Limit values, reverse-polarity protected.

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

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

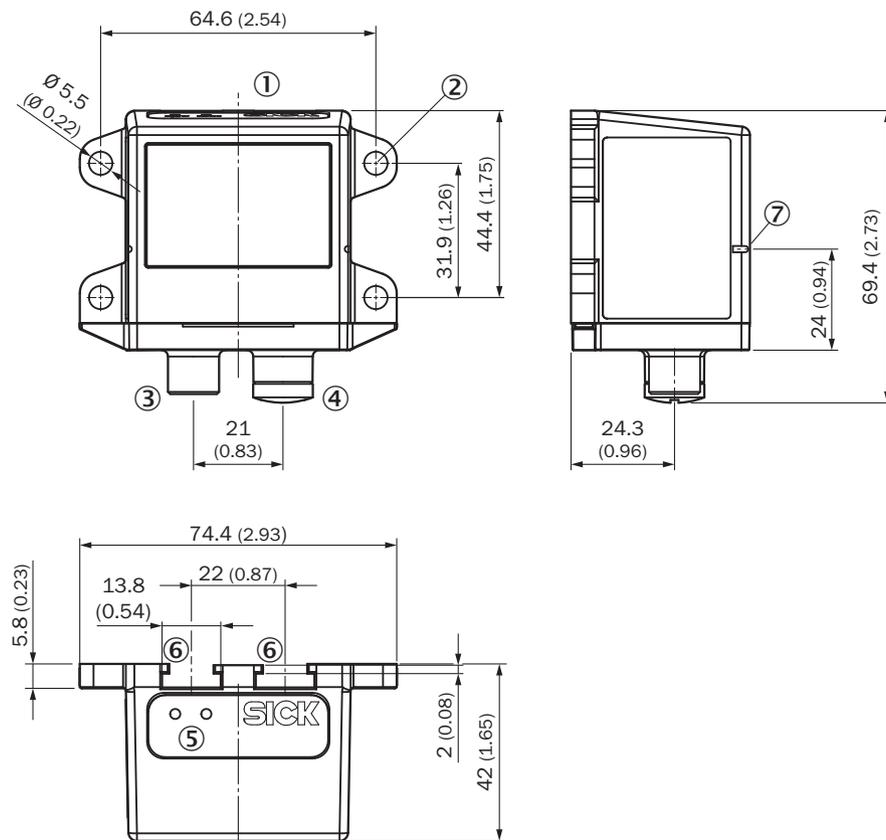[1] Temperatures < –20 °C with 5 min warm-up time.

[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)	✓

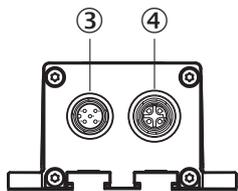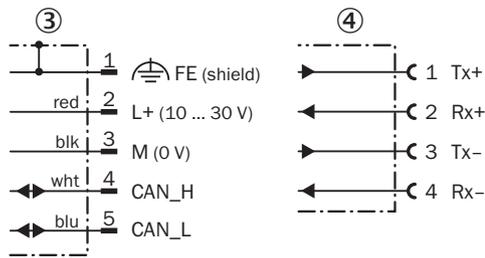## Dimensional drawing

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

Pinouts OLM100-10x6

③ M12 plug, 5-pin, CANopen interface
④ M12 socket, 4-pin, Ethernet interface

Connection diagram OLM100-10x6

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

④
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
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, shielded, DeviceNet™ • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm²	STE-1205-GA	6027533

	Brief description	Type	part no.
Codes			
SICK	• **Description:** 30 mm, height: 30 mm, measuring range: 0 m ... 20 m • **Suitable for:** 0LM100/0LM200-1x0x	Customer-specific bar code tape	5327812
SICK	• **Description:** 30 mm, height: 30 mm, measuring range: 0 m ... 20 m • **Suitable for:** 0LM100/0LM200-1x0x	Customer-specific bar code tape	5327576
SICK	• **Description:** 30 mm, height: 30 mm, measuring range: 0 m ... 20 m • **Suitable for:** 0LM100/0LM200-1x0x	Customer-specific bar code tape	5328960
	• **Description:** 30 mm, height: 30 mm, measuring range: 0 m ... 20 m • **Suitable for:** 0LM100/0LM200-1x0x	Customer-specific bar code tape	5323951
	• **Description:** 30 mm, height: 30 mm, measuring range: 0 m ... 20 m • **Suitable for:** 0LM100/0LM200-1x0x	Customer-specific bar code tape	5322556

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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