



OLM100-1206

OLM

OPTICAL LINEAR MEASUREMENT SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|-------------|----------|
| OLM100-1206 | 1059271 |

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 | 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 |

¹⁾ Limit values, reverse-polarity protected.

| | |
|----------------------------|-------|
| 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.

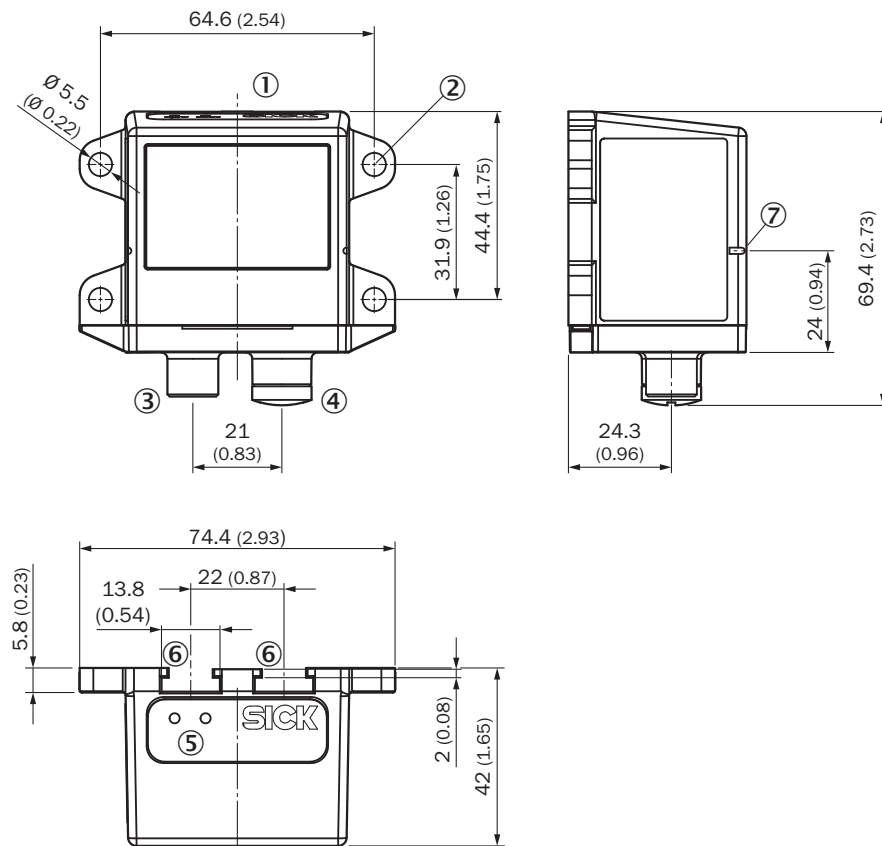
²⁾ Max. 95 % humidity, non-condensing.

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) | ✓ |

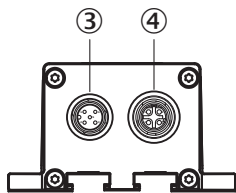
Dimensional drawing



Dimensions in mm (inch)

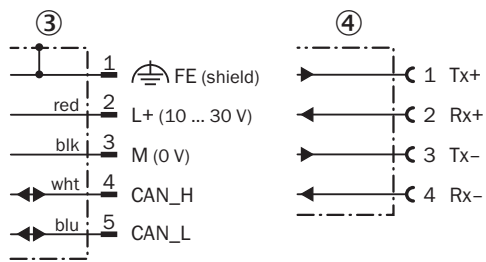
- ① Reference axis position measurement
- ② Mounting holes, \varnothing 5.5 mm
- ③ M12 device connector plug, 5-pin
- ④ Ethernet M12 female connector, 4-pin
- ⑤ status LED [status]
- ⑥ T-slot
- ⑦ Adjustment aid (slot)

Pinouts OLM100-10x6



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

Connection diagram OLM100-10x6



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 | | | |
|  | <ul style="list-style-type: none"> 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 | | | |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • Description: CANopen, unshielded • Connection type head A: Male connector, M12, 5-pin, straight • Signal type: CANopen | CAN male connector | 6021167 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • Description: Unshielded • 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 | DSC-1205T000025KMC | 6030664 |
|  | <ul style="list-style-type: none"> • Description: CANopen, shielded, DeviceNet™ • Connection type head A: Male connector, M12, 5-pin, straight, A-coded • Signal type: CANopen, DeviceNet™ • Connection systems: Screw-type terminals • Permitted cross-section: ≤ 0.75 mm² | STE-1205-GA | 6027533 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <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: 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 | | | |
|  | <ul style="list-style-type: none"> • Description: 30 mm, height: 60 mm, measuring range: customer-specific • Suitable for: OLM100/OLM200-1x0x | Customer-specific bar code tape | 5327812 |
|  | <ul style="list-style-type: none"> • Description: 30 mm, height: 100 mm, measuring range: customer-specific • Suitable for: OLM100/OLM200-1x0x | Customer-specific bar code tape | 5327576 |
|  | <ul style="list-style-type: none"> • Description: 30 mm, height: 25 mm, measuring range: customer-specific • Suitable for: OLM100/OLM200-1x0x | Customer-specific bar code tape | 5328960 |
|  | <ul style="list-style-type: none"> • Description: 30 mm, height: 30 mm, measuring range: customer-specific • Suitable for: OLM100/OLM200-1x0x | Customer-specific bar code tape | 5322556 |
|  | <ul style="list-style-type: none"> • Description: 30 mm, height: 40 mm, measuring range: customer-specific • Suitable for: OLM100/OLM200-1x0x | 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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