



OLM100-1005

OLM100

LINEAR MEASUREMENT SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
OLM100-1005	1046580

Other models and accessories → www.sick.com/OLM100



Detailed technical data

Performance

Resolution	0.1 mm, 1 mm
Repeatability	1 mm ¹⁾
Output time	5 ms
Light source	LED, red
Measurement range	0 m ... 10,000 m ²⁾
Max. movement speed	4 m/s
Sensing distance	100 mm, ± 20 mm
Bar code width	30 mm

¹⁾ Statistical error 1 σ.

²⁾ Dependent on the set resolution and transfer protocol.

Interfaces

Data interface	RS-485
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Mechanics/electronics

Supply voltage V_s	DC 10 V ... 30 V ¹⁾
Ripple	≤ 5 V _{pp} ²⁾
Power consumption	< 3 W
Initialization time	< 3 s
Housing material	Magnesium Zinc
Weight	Approx. 168 g

¹⁾ Limit values, reverse-polarity protected.

²⁾ May not exceed or fall below U_v tolerances.

Ambient data

Enclosure rating	IP 65 (EN 60 529)
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¹⁾ Temperatures < -20 °C with 5 min warm up time.

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

³⁾ Typ. value at +25 °C ambient temperature.

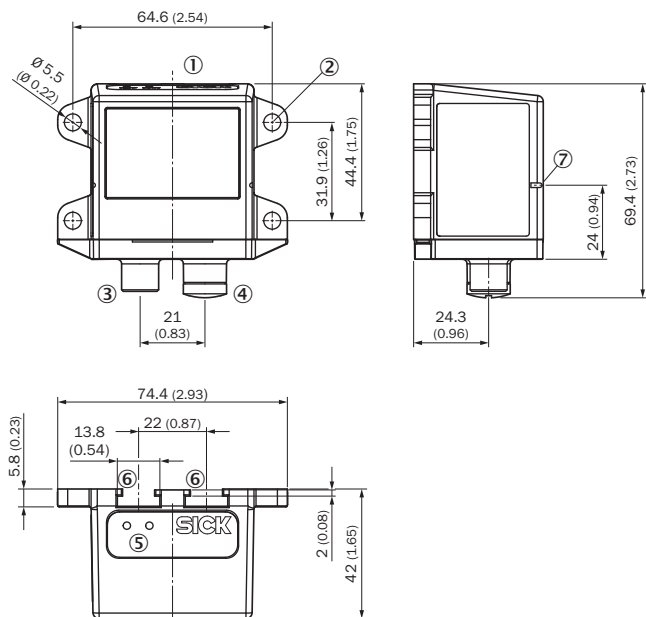
Protection class	III
Electromagnetic compatibility (EMC)	EN 61000-6-2 EN 61000-6-4
Ambient temperature	Operation: -30 °C ... +60 °C Storage: -40 °C ... +75 °C ^{1) 2)}
Typ. Ambient light immunity	≤ 30,000 lx ³⁾
Vibration resistance	DIN/EN 60068-2-6, DIN/EN 60068-2-64
Shock resistance	DIN/EN 60068-2-27

1) Temperatures < -20 °C with 5 min warm up time.

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

3) Typ. value at +25 °C ambient temperature.

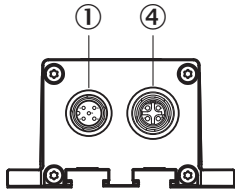
Dimensional drawing (Dimensions in mm (inch))



- 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)

Connection type

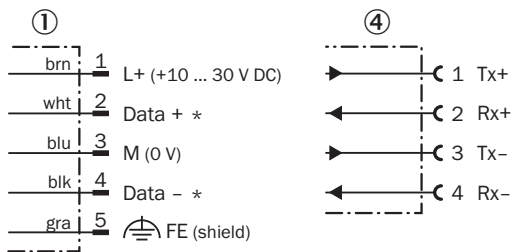
OLM100-10x5 1 x socket M12, 4-pin 1 x connector M12, 5-pin



- ① RS-485
- ④ Ethernet

Connection diagram

OLM100-10x5 1 x socket M12, 4-pin 1 x connector M12, 5-pin



M12 (A-coded)





M12 (D-coded)


* Termination resistors
integrated in sensor

- ① RS-485
- ④ Ethernet

Recommended accessories

Other models and accessories → www.sick.com/OLM100

	Brief description	Type	Part no.
Other mounting accessories			
	4 pieces, Sliding nut set, M5, 4x, Included in delivery	Sliding nuts	2017550
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight, A-coded Head B: cable Cable: Power, drag chain use, PUR, halogen-free, shielded, 5 m	DOL-1205-G05MAC	6036384
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, drag chain use, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: EtherNet/IP, PUR, halogen-free, shielded, 2 m	SSL-2J04-H02ME	6047911

	Brief description	Type	Part no.
	Head A: male connector, M12, 5-pin, straight, A-coded Cable: CANopen, DeviceNet, shielded	STE-1205-GA	6027533

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.”

WORLDWIDE PRESENCE:

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