



# OLM200-1009

OLM200

LINEAR MEASUREMENT SENSORS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
OLM200-1009	1058126

Other models and accessories → [www.sick.com/OLM200](http://www.sick.com/OLM200)



## Detailed technical data

### Mechanics/electronics

<b>Supply voltage <math>V_s</math></b>	DC 18 V ... 30 V <sup>1)</sup>
<b>Ripple</b>	$\leq 5 V_{pp}$ <sup>2)</sup>
<b>Power consumption</b>	< 5.5 W
<b>Initialization time</b>	10 s
<b>Enclosure rating</b>	IP65 (EN 60 529)
<b>Protection class</b>	III

<sup>1)</sup> Limit values, reverse-polarity protected.

<sup>2)</sup> May not exceed or fall below  $U_v$  tolerances.

### Performance

<b>Measuring range</b>	0 m ... 10,000 m <sup>1)</sup>
<b>Resolution</b>	0.1 mm, 1 mm, 10 mm, 100 mm
<b>Repeatability</b>	0.15 mm <sup>2)</sup>
<b>Response time</b>	10 ms <sup>3)</sup>
<b>Output time</b>	2.5 ms
<b>Light source</b>	LED, red
<b>Accuracy of speed output</b>	$\pm 5$ mm/s
<b>Max. movement speed</b>	7 m/s
<b>Reading distance</b>	100 mm, $\pm 20$ mm
<b>Barcode width</b>	30 mm

<sup>1)</sup> Dependent on the set resolution and transfer protocol.

<sup>2)</sup> Statistical error 3 s, no warm-up time required.

<sup>3)</sup> Response time of digital output.

## Interfaces

<b>PROFINET</b>	✓
<b>Digital input</b>	Multifunctional input MF2
<b>Digital output</b>	
Number	1 <sup>1)</sup>
Type	PNP / NPN
Function	Position, speed, control mark Q00 (off), Q01 (on), illumination on/off, service [failure (dirt/LED service life), no barcode tape, over/under temperature, out of measuring range 0 km > position > 10 km, internal error]
Maximum output current I <sub>A</sub>	≤ 100 mA <sup>2)</sup>

<sup>1)</sup> Via multifunctional output MF1.

<sup>2)</sup> Outputs MF1 short-circuit protected.

## Ambient data

<b>Electromagnetic compatibility (EMC)</b>	EN 61000-6-2 EN 61000-6-4
<b>Ambient temperature, operation</b>	-30 °C ... +60 °C <sup>1)</sup>
<b>Ambient temperature, storage</b>	-40 °C ... +75 °C <sup>2)</sup>
<b>Typ. Ambient light immunity</b>	≤ 5,000 lx <sup>3)</sup>
<b>Vibration resistance</b>	DIN/EN 60068-2-6, DIN/EN 60068-2-64
<b>Shock resistance</b>	DIN/EN 60068-2-27

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

<sup>2)</sup> Max. 95 % humidity, non-condensing.

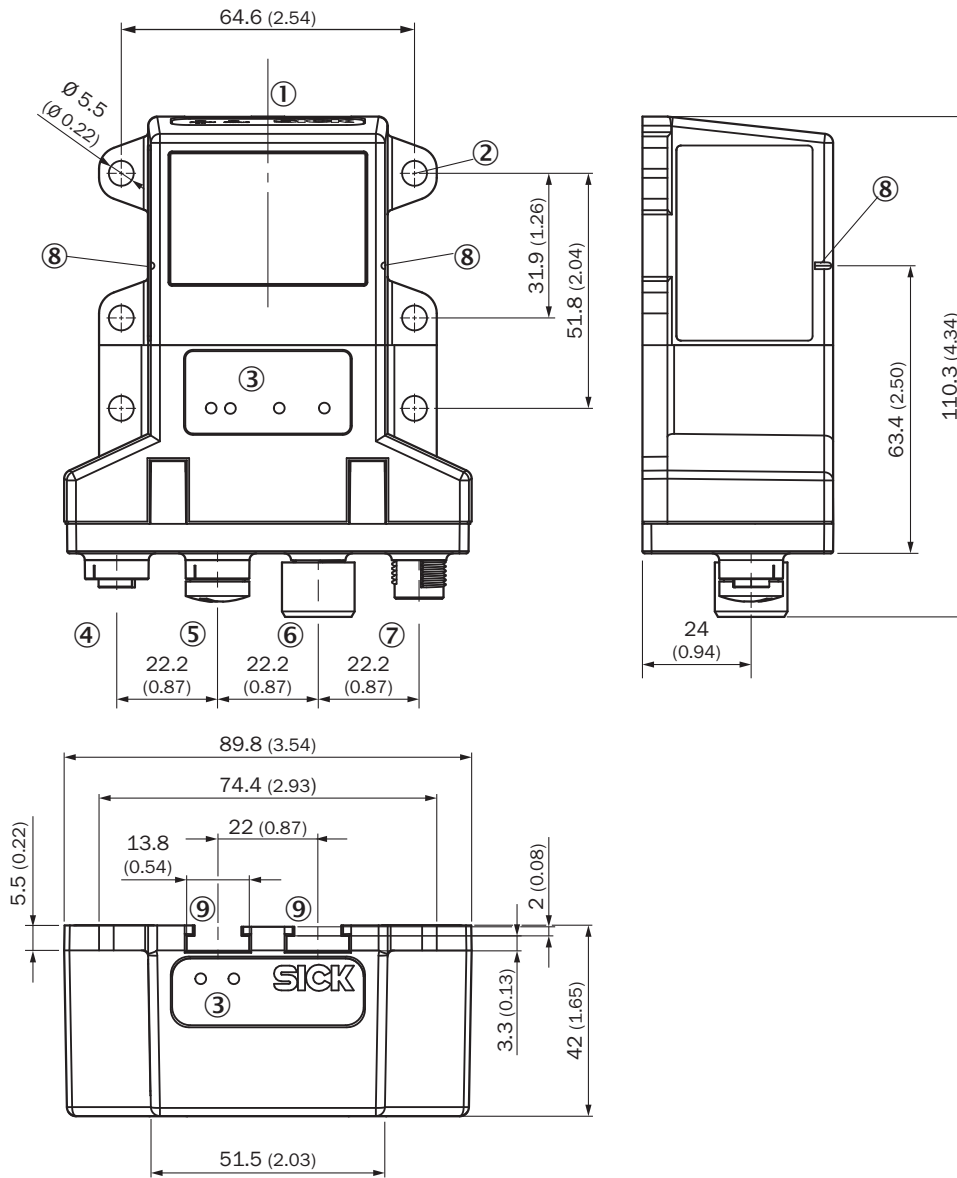
<sup>3)</sup> Typ. value at +25 °C ambient temperature.

## Classifications

<b>eCl@ss 5.0</b>	27270890
<b>eCl@ss 5.1.4</b>	27270890
<b>eCl@ss 6.0</b>	27270890
<b>eCl@ss 6.2</b>	27270890
<b>eCl@ss 7.0</b>	27270890
<b>eCl@ss 8.0</b>	27270890
<b>eCl@ss 8.1</b>	27270890
<b>eCl@ss 9.0</b>	27270890
<b>eCl@ss 10.0</b>	27270890
<b>eCl@ss 11.0</b>	27270890
<b>eCl@ss 12.0</b>	27280106
<b>ETIM 5.0</b>	EC001825
<b>ETIM 6.0</b>	EC001825
<b>ETIM 7.0</b>	EC001825
<b>ETIM 8.0</b>	EC001825
<b>UNSPSC 16.0901</b>	39121528

Dimensional drawing (Dimensions in mm (inch))

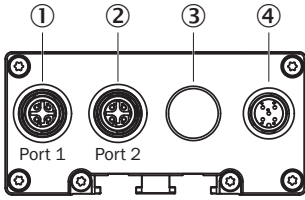
Dimensional drawing



- ① Reference axis position measurement
- ② Mounting holes
- ③ Status LED [status]
- ④ Ethernet port 1, M12 female connector, 4-pin
- ⑤ EtherNet port 2, socket M12, 4-pin
- ⑥ Not assigned
- ⑦ Connector M12, 5-pin
- ⑧ Adjustment aid (slot)
- ⑨ T-slot

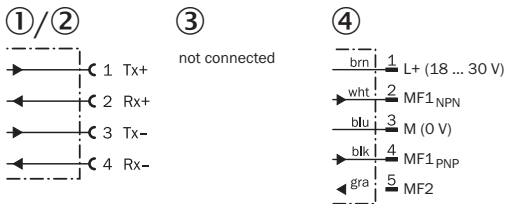
## Connection type

Connection type



- ① Ethernet port 1, M12 female connector, 4-pin
- ② EtherNet port 2, socket M12, 4-pin
- ③ Not assigned
- ④ Connector M12, 5-pin

## Connection diagram

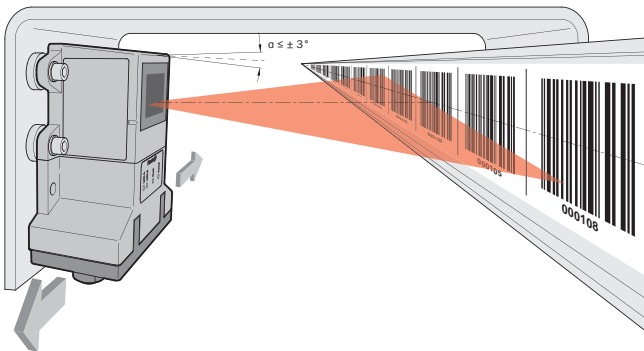


M12 (D-coded)

M12 (A-coded)

- ① Ethernet, M12 female connector, 4-pin
- ② Ethernet, M12 female connector, 4-pin
- ③ Not assigned
- ④ Connector M12, 5-pin

## Application



Recommended accessories

Other models and accessories → [www.sick.com/OLM200](http://www.sick.com/OLM200)

	Brief description	Type	Part no.
<b>Codes</b>			
	30 mm, height: 60 mm, measuring range: customer-specific	Customer-specific bar code tape	5327812
	30 mm, height: 100 mm, measuring range: customer-specific	Customer-specific bar code tape	5327576
	30 mm, height: 25 mm, measuring range: customer-specific	Customer-specific bar code tape	5328960
	30 mm, height: 40 mm, measuring range: customer-specific	Customer-specific bar code tape	5323951
	30 mm, height: 30 mm, measuring range: customer-specific	Customer-specific bar code tape	5322556
<b>Other mounting accessories</b>			
	4 pieces, Sliding nut set, M5, 4x, Included in delivery	Sliding nuts	2017550
<b>Plug connectors and cables</b>			
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: Flying leads Cable: Ethernet, PROFINET, PUR, halogen-free, shielded, 2 m	YM2D24-020PN1XLEAX	2106171
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: Flying leads Cable: Ethernet, PROFINET, PUR, halogen-free, shielded, 5 m	YN2D24-050PN1XLEAX	2106175
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, M12, 4-pin, straight, D-coded Cable: Ethernet, PROFINET, PUR, halogen-free, shielded, 2 m	YM2D24-020PN1M2D24	2106159
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 4-pin, straight Cable: Ethernet, PROFINET, PUR, halogen-free, shielded, 2 m	YM2D24-020PN1MRJA4	2106182
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, M12, 4-pin, angled, D-coded Cable: Ethernet, PROFINET, PUR, halogen-free, shielded, 5 m	YM2D24-050PN1N2D24	2106166
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: male connector, RJ45, 4-pin, straight Cable: Ethernet, PROFINET, PUR, halogen-free, shielded, 5 m	YN2D24-050PN1MRJA4	2106163
	Head A: female connector, M12, 4-pin, straight, D-coded Cable: Ethernet, shielded	DOS-1204-GE	6048153
	Head A: male connector, RJ45, 4-pin, straight Cable: Ethernet, PROFINET, EtherCAT®, shielded	STE-0J04-GZ	6048260
	Head A: male connector, M12, 4-pin, straight, D-coded Cable: Ethernet, shielded	STE-1204-GE01	6048151
	Head A: male connector, M12, 4-pin, angled, D-coded Cable: Ethernet, shielded	STE-1204-WE	6048152

## Recommended services

Additional services → [www.sick.com/OLM200](http://www.sick.com/OLM200)

	Type	Part no.
Warranty extensions		
<ul style="list-style-type: none"><li>• <b>Product area:</b> Identification solutions, machine vision, Distance sensors, Detection and ranging solutions</li><li>• <b>Range of services:</b> The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery).</li><li>• <b>Duration:</b> Five-year warranty from delivery date.</li></ul>	Extended warranty for a total of five years from delivery date	1680671

## 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:

Contacts and other locations –[www.sick.com](http://www.sick.com)