



OLM200-1052

OLM200

LINEAR MEASUREMENT SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
OLM200-1052	1051659

Other models and accessories → www.sick.com/OLM200



Detailed technical data

Performance

Resolution	0.1 mm, 1 mm, 10 mm, 100 mm
Repeatability	0.15 mm ¹⁾
Response time	10 ms ²⁾
Output time	2.5 ms
Light source	LED, red
Measurement range	0 m ... 10,000 m ³⁾
Accuracy of speed output	± 5 mm/s
Max. movement speed	10 m/s
Sensing distance	130 mm, ± 20 mm
Bar code width	40 mm

¹⁾ Statistical error 3 s, no warm-up time required.

²⁾ Response time of switching output.

³⁾ Dependent on the set resolution and transfer protocol.

Interfaces

Data transmission rate	3 Mbit/s
Maximum baudrate	12 MBaud
Switching output	MF1: PNP, MF1: NPN ¹⁾
Data interface	PROFIBUS DP-V0

¹⁾ Functions of switching output MF1 PNP/MF1 NPN: position, speed, control mark Q00 (off), Q01 (on), illumination on/off, service [prefailure (dirt/LED life time), no bar code tape, over/under temperature, out of range 0 km > position > 10 km, internal error].

Mechanics/electronics

Supply voltage V_s	DC 18 V ... 30 V ¹⁾
Ripple	≤ 5 V _{pp} ²⁾

¹⁾ Limit values, reverse-polarity protected.

²⁾ May not exceed or fall below U_v tolerances.

³⁾ Switching outputs MF1 short-circuit protected.

Power consumption	< 5.5 W
Initialization time	3 s
Housing material	Magnesium Zinc
Weight	Approx. 291 g
Output current I_A	100 mA ³⁾

¹⁾ Limit values, reverse-polarity protected.

²⁾ May not exceed or fall below U_v tolerances.

³⁾ Switching outputs MF1 short-circuit protected.

Ambient data

Enclosure rating	IP 65 (EN 60 529)
Protection class	III
Electromagnetic compatibility (EMC)	EN 61000-6-2 EN 61000-6-4
Ambient temperature	Operation: -30 °C ... +60 °C ¹⁾ Storage: -40 °C ... +75 °C 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

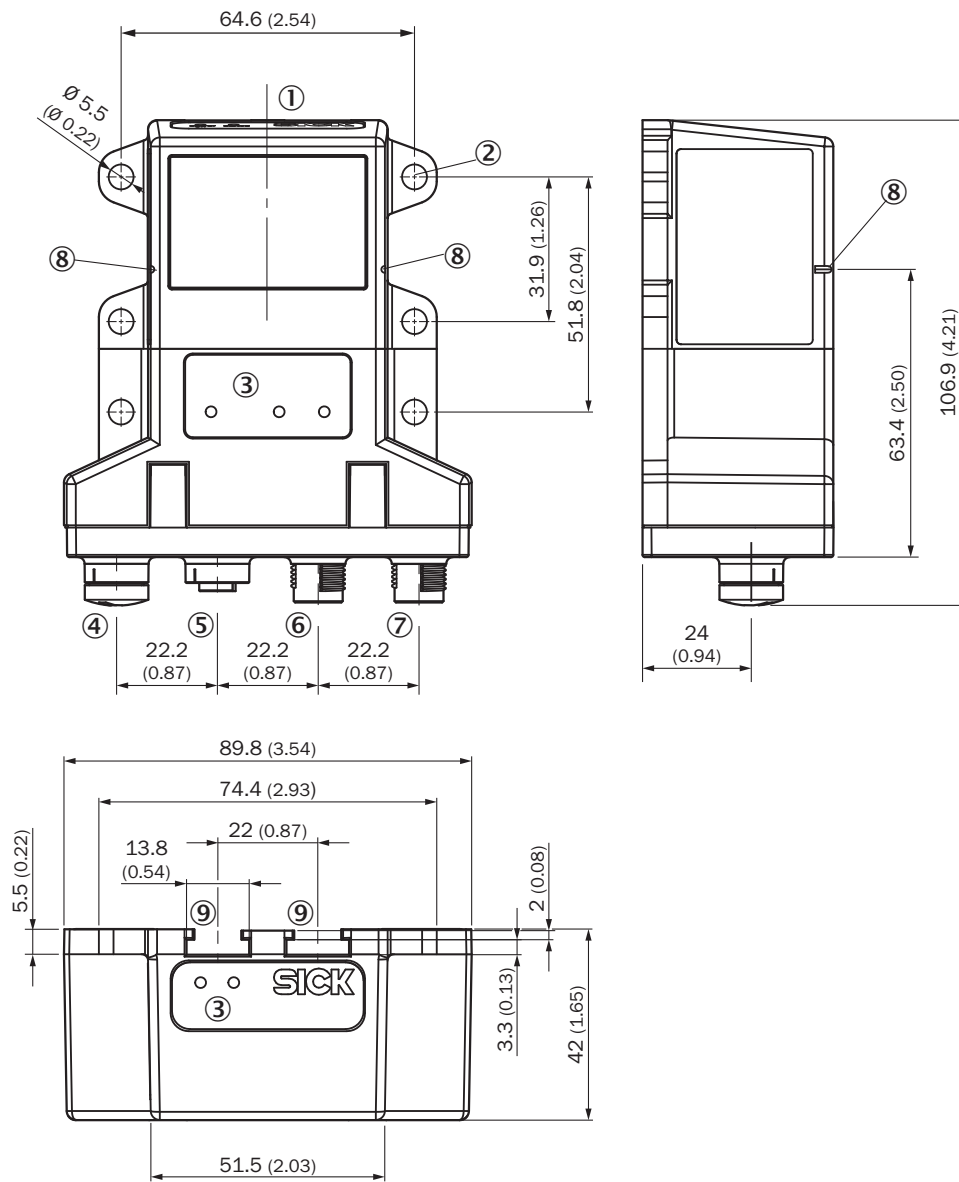
¹⁾ Temperatures < -20 °C with 5 min warm up time.

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

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

Dimensional drawing (Dimensions in mm (inch))

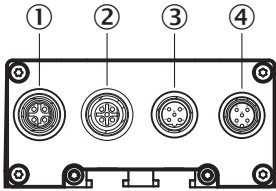
OLM200, PROFIBUS



- ① Reference axis position measurement
- ② Fixing hole
- ③ Status LED [status]
- ④ Ethernet connection M12, 4-pin
- ⑤ Fieldbus connection M12, 5-pin (e. g., PROFIBUS out)
- ⑥ Fieldbus connection M12, 5-pin (e.g. PROFIBUS in)
- ⑦ Connector M12, 5-pin
- ⑧ Adjustment aid (slot)
- ⑨ T-slot

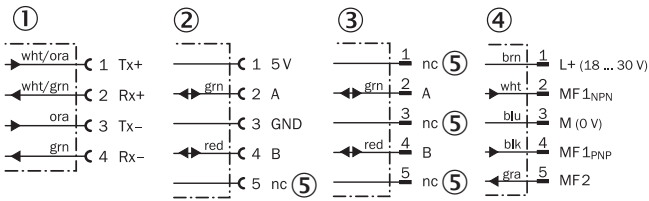
Connection type

Socket 1 x M12, 4-pin 1 x M12, 5-pin connector 1 x M12, 5-pin



- ① Ethernet connection M12, 4-pin
- ② Fieldbus connection M12, 5-pin (e. g., PROFIBUS out)
- ③ Fieldbus connection M12, 5-pin (e.g. PROFIBUS in)
- ④ Connector M12, 5-pin

Connection diagram








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

- ① Ethernet connection M12, 4-pin
- ② Fieldbus connection M12, 5-pin (e. g., PROFIBUS out)
- ③ Fieldbus connection M12, 5-pin (e.g. PROFIBUS in)
- ④ Connector M12, 5-pin
- ⑤ Not assigned

Recommended accessories

Other models and accessories → www.sick.com/OLM200

	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 Head B: cable Cable: PROFIBUS DP, PUR, halogen-free, shielded, 5 m	DOL-1205-G05MQ	6026006
	Head A: female connector, M12, 5-pin, angled, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, shielded, 5 m	DOL-1205-W05MQ	6041423
	Head A: male connector, M12, 5-pin, angled, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, shielded, 5 m	STL-1205-W05MQ	6041426

	Brief description	Type	Part no.
	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
	Head A: male connector, M12, 4-pin, straight, B-coded Cable: PROFIBUS DP, terminal resistor	STE-END-Q	6021156

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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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