



MLG05W-0333I12501

MLG-2 WebChecker

MEASURING AUTOMATION LIGHT GRIDS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|-------------------|----------|
| MLG05W-0333I12501 | 1108966 |

Other models and accessories → www.sick.com/MLG-2_WebChecker

Detailed technical data

Features

| | |
|---|--|
| Device version | Web guiding |
| Sensor principle | Sender/receiver |
| Minimum object length | 4 mm ¹⁾ |
| Beam separation | 5 mm |
| Resolution | 0.1 mm |
| Cycle time | 32 µs per beam |
| Repeatability | 6 µm ²⁾ |
| Accuracy | ± 0.3 mm ³⁾ |
| Type of synchronization | Cable |
| Number of beams | 180 |
| Total measuring field width | 1,345 mm |
| Measuring field width detailed | |
| Measuring field width (connection side) | 445 mm |
| Blind zone (medium range) | 455 mm |
| Measuring field width (head side) | 445 mm |
| Software features (default) | |
| Q ₁ /C | Alarm, general |
| Q ₂ | Standard teach-in |
| Interface RS-485 | System status, edge 1 ... 10, function 1 ... 5 |

¹⁾ See graphic: product definition.

²⁾ 1 sigma, 0% object transmission (sensor internal value).

³⁾ For opaque objects and exact alignment of sender/receiver.

| | |
|-------------------------------|---|
| Baud rate RS-485 | 115.2 kBaud |
| Application | Standard mode |
| Included with delivery | 1 × sender 1 × receiver 4/6 × QuickFix brackets (6 × QuickFix brackets for monitoring heights above 2 m) 1 × Quick Start Guide |

¹⁾ See graphic: product definition.

²⁾ 1 sigma, 0% object transmission (sensor internal value).

³⁾ For opaque objects and exact alignment of sender/receiver.

Mechanics/electronics

| | |
|--|--|
| Light source | LED, Infrared light |
| Wave length | 850 nm |
| Supply voltage V_s | DC 19.2 V ... 28.8 V ¹⁾ |
| Power consumption sender | 64 mA ²⁾ |
| Power consumption receiver | 156 mA ²⁾ |
| Ripple | < 5 V _{pp} |
| Output current I_{max} | 100 mA |
| Output load, capacitive | 100 nF |
| Output load, Inductive | 1 H |
| Initialization time | < 1 s |
| Switching output | Push-pull: PNP/NPN |
| Dimensions (W x H x D) | 34 mm x 1,429.4 mm x 30.6 mm |
| Connection type | Male connector M12, 5-pin, 0.22 m Male connector M12, 8-pin, 0.27 m M12 female connector, 4-pin, D-coded, 0.19 m |
| Housing material | Aluminum |
| Indication | LED |
| Enclosure rating | IP65, IP67 ³⁾ |
| Circuit protection | U _v connections, reverse polarity protected Output Q short-circuit protected Interference pulse suppression |
| Protection class | III |
| Weight | 2.959 kg |
| Front screen | PMMA |
| Option | None |
| UL File No. | NRKH.E181493 |

¹⁾ Without load.

²⁾ , Without load with 24 V.

³⁾ Operating in outdoor condition only with a external protection housing.

Performance

| | |
|----------------------|---------------------|
| Maximum range | 3.5 m ¹⁾ |
|----------------------|---------------------|

¹⁾ No reserve for environmental issue and deterioration of the diode.

²⁾ With resistive load.

| | |
|------------------------|-----------------------|
| Minimum range | ≥ 0.2 m |
| Operating range | 2.5 m |
| Response time | 36.7 ms ²⁾ |

¹⁾ No reserve for environmental issue and deterioration of the diode.

²⁾ With resistive load.

Communication interface

| | |
|------------------------|----------------------------------|
| IO-Link | ✓, IO-Link V1.1 |
| Data transmission rate | 230,4 kbit/s (COM3) |
| Maximum cable length | 20 m |
| Cycle time | 14 ms |
| VendorID | 26 |
| DeviceID HEX | 80022F |
| DeviceID DEC | 8389167 |
| Process data length | 32 Byte (TYPE_2_V) ¹⁾ |
| Serial | ✓, RS-485 |
| Data transmission rate | 1.2 kbit/s ...921.6 kbit/s |
| Inputs/outputs | RS-485 + 2 x Q (IO-Link) |
| Digital output | Q ₁ , Q ₂ |
| Number | 2 |
| Digital input | Q ₂ |
| Number | 1 |

¹⁾ With an IO-Link master with V1.0, fall back to interleaved mode (consisting of TYPE_1_1 (ProcessData) and TYPE_1_2 (On-request Data)).

Ambient data

| | |
|--------------------------------------|--|
| Shock resistance | Continuous shocks 10 g, 16 ms, 1000 shocks Single shocks 15 g, 11 ms 3 per axle |
| Vibration resistance | Sinusoidal oscillation 10-150 Hz 5 g |
| Ambient light immunity | 100,000 lx |
| Ambient operating temperature | -30 °C ... +55 °C |
| Ambient temperature, storage | -40 °C ... +70 °C |

Smart Task

| | |
|------------------------|-------------|
| Smart Task name | Base logics |
|------------------------|-------------|

Classifications

| | |
|---------------------|----------|
| ECLASS 5.0 | 27270910 |
| ECLASS 5.1.4 | 27270910 |
| ECLASS 6.0 | 27270910 |
| ECLASS 6.2 | 27270910 |
| ECLASS 7.0 | 27270910 |
| ECLASS 8.0 | 27270910 |
| ECLASS 8.1 | 27270910 |
| ECLASS 9.0 | 27270910 |
| ECLASS 10.0 | 27270910 |

| | |
|-----------------------|----------|
| ECLASS 11.0 | 27270910 |
| ECLASS 12.0 | 27270910 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |
| ETIM 8.0 | EC002549 |
| UNSPSC 16.0901 | 39121528 |

Dimensional drawing (Dimensions in mm (inch))

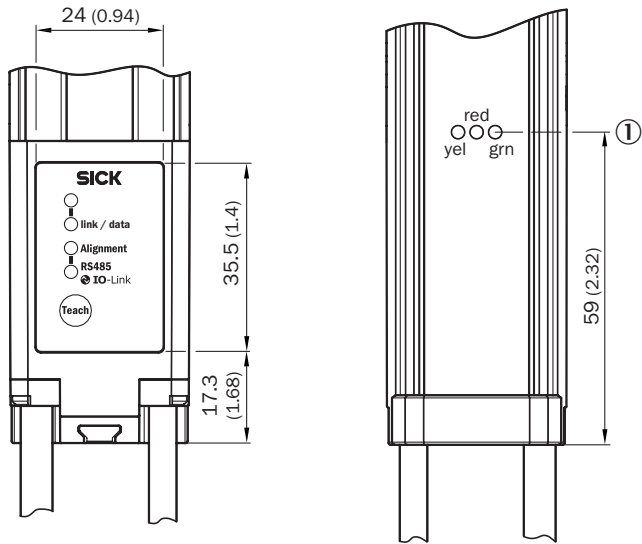
Dimensional drawing



- ① First beam
- ② Last beam
- ③ Total measuring field width (see technical data)
- ④ Beam separation
- ⑤ Optical axis
- ⑥ Status indicator: green, yellow, red LEDs
- ⑦ Connection

Adjustments

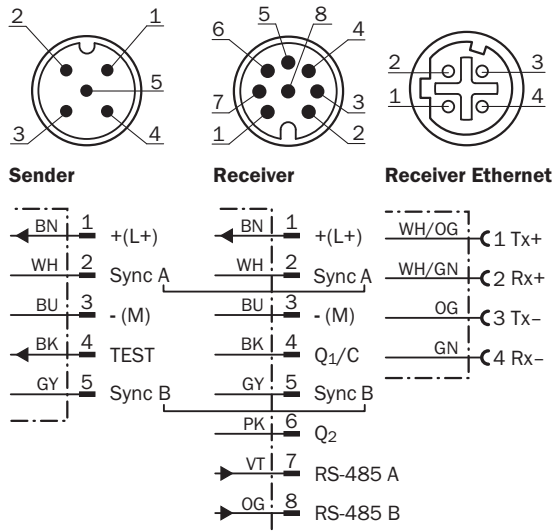
Adjustments



① Status indicator: green, yellow, red LEDs

Connection type and diagram

MLG-2 WebChecker



Connection diagram

T-piece



Product definition









- ① Operating range
- ② Total measuring field width
- ③ Measuring field width (head side)
- ④ Blind zone (medium range)
- ⑤ Measuring field width (connection side)
- ⑥ Sender
- ⑦ Receiver
- ⑧ Beam separation
- ⑨ Minimum object length

Recommended accessories

Other models and accessories → www.sick.com/MLG-2_WebChecker

| | Brief description | Type | Part no. |
|---|---|---------------|----------|
| Distributors | | | |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 5-pin, A-coded • Connection type head B: Female connector, M12, 8-pin, A-coded • Connection type head C: Male connector, M12, 8-pin, A-coded • Note: Male connector M12, 8-pin, to 1 x female connector M12, 8-pin, to 1 x female connector M12, 5-pin, for connecting of a PLC | SB0-02F12-SM1 | 6053172 |

| | Brief description | Type | Part no. |
|---|--|--------------------|----------|
| Plug connectors and cables | | | |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 8-wire, PVC • Description: Sensor/actuator cable, special color code, shielded • Connection systems: Flying leads | DOL-1208-G05MF | 6020664 |
|  | <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: Sensor/actuator cable • Cable: 2 m, 5-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot | YF2A15-020UB5M2A15 | 2096009 |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 8-pin, straight, A-coded • Connection type head B: Male connector, M12, 8-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 2 m, 8-wire, PUR, halogen-free • Description: Sensor/actuator cable, shielded • Application: Zones with oils and lubricants, Drag chain operation | YF2A28-020UA6M2A28 | 2096105 |
|  | <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, PROFINET, shielded • Application: Drag chain operation, Zones with oils and lubricants | YM2D24-020PN1MRJA4 | 2106182 |
| Sensor Integration Gateway | | | |
|  | <ul style="list-style-type: none"> • Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • Logic editor: yes • Communication interface: IO-Link, USB, Ethernet, PROFINET, REST API • Product category: IO-Link Master | SIG200-0A0412200 | 1089794 |
|  | <ul style="list-style-type: none"> • Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • Logic editor: yes • Communication interface: IO-Link, USB, Ethernet, REST API • Product category: IO-Link Master | SIG200-0A0G12200 | 1102605 |

SICK AT A GLANCE

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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.”

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