

# LR-X100CG

Standard Model, M8 Connector Type (Guarded Cable), 100mm range

*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

## Specifications

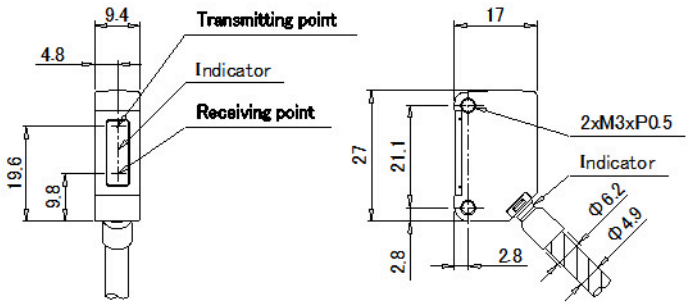
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|---|---|---|
| Model | | LR-X100CG |
| Type | | M8 Connector Type*1 |
| Detecting Distance | | 25.0 to 100.0 mm 0.98" to 3.94" |
| Standard Detectable Deviation | | 1.0 mm 0.04" |
| Display Resolution | | 0.1 mm 0.004" |
| Spot Size | | Approx. 0.3 mm × 2 mm 0.012" × 0.08"<br>(at a detecting distance of 100 mm 3.94") |
| Response Time | | 500 µs*2/1 ms/3 ms/10 ms/200 ms Selectable |
| Light Source | Type | Green laser (505 nm) |
| | Laser Class | Class 1 Laser Product (IEC60825-1, FDA (CDRH), Part1040.10*3) |
| IO-Link | | Specification v1.1/COM2 (38.4 kbps) |
| Functions | Timer Function | Timer OFF/Off-delay/On-delay/One-shot/On-Off delay/On-delay One-shot |
| I/O | Control Output | NPN open collector/PNP open collector, N.O./N.C selectable. *4<br>30 VDC or lower, 50 mA or lower, Residual voltage 2 V or lower |
| | External Input | External Set/Laser OFF/Zero Shift/Hold Reset/Gyro Alert RST selectable *4<br>Short circuit current - NPN: 1 mA or lower, PNP: 2 mA or lower<br>Input time 3 ms or more ON, 20 ms or more OFF<br>(25 ms or more ON, 25 ms or more OFF when External Set is selected only) |
| Protection Circuit | | Protection against reverse power connection, protection against output overcurrent,<br>protection against output surge, protection against reverse output connection |
| Power supply | Power voltage | 16 to 30 VDC (including 10% ripple (P-P) or less), class 2 |
| | Power consumption | During normal operation: 970 mW (38 mA or lower at 24 V, 53 mA or lower at 16 V) (Excluding Load Current)<br>ECO ON/ALL: 821 mW (32 mA or lower at 24 V, 44 mA or lower at 16 V) (Excluding Load Current) |
| Environmental resistance | Enclosure rating | IP65/IP67 (IEC60529) |
| | Ambient light | Incandescent lamp: 16000 lux or less<br>Sunlight: 16000 lux or less |
| | Ambient temperature | -10°C to +50°C 14°F to + 122°F (no freezing) |
| | Relative humidity | 35 to 85% RH (no condensation) |
| | Vibration resistance | 10 to 500 Hz; Power Spectral Density: 0.816 G²/Hz for X, Y and Z axes |
| | Shock resistance | 1000 m/s² (100G) 6 times each for X, Y, and Z axes |
| Material | | Head Case: SUS316L; Head Lens Cover: PSU<br>Head Gasket: FKM (lens cover), EVM (cable)<br>Cable: PVC; Metal Jacket: SUS304<br>Amplifier Case: PBT; Amplifier Display, Indicator: PAR; Amplifier Gasket: NBR; Button: POM<br>Amplifier M8 Connector: SUS303 |
| Accessories | | Instruction manual, laser warning label |
| Weight | | Approx. 45 g |

*1 Ensure the cable length is 30 m 98.4' or less for the M8 connector type. Ensure the cable length is 20 m 65.6' or less when connecting via IO-Link.
*2 If 500 µs is selected, the following limitations apply.
· Only 2-point calibration can be performed.
· The detection range masking is set during calibration. (Manual setting of the masking range is not supported.)
· Output 2 is limited to an alarm output for errors and gyro issues, and standard/area cannot be used.
*3 Classification performed based on IEC60825-1 standards in accordance with FDA (CDRH) Laser Notice No. 56.
*4 The I/O can be selected from the following combinations. Control output × 2, Control output + External input

# Dimensions

* Download CAD file or product manual for larger image/text and more detail.

**Sensor head** LR-X50CG_X100CG_X250CG




**Amplifier**

