

LR-X100

Standard Model, Cable Type, 100mm range

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

Specifications

Model		LR-X100
Type		Cable Type
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" (at a detecting distance of 100 mm 3.94")
Response Time		500 µs*1/1 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*2)
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. *3 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 *3 Short circuit current - NPN: 1 mA or lower, PNP: 2 mA or lower Input time 3 ms or more ON, 20 ms or more OFF (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, 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) 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 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 G^2/Hz for X, Y and Z axes
	Shock resistance	1000 m/s^2 (100G) 6 times each for X, Y, and Z axes
Material		Head Case: SUS316L; Head Lens Cover: PSU Head Gasket: FKM (lens cover), EVM (cable) Cable: PVC Amplifier Case: PBT; Amplifier Display, Indicator: PAR; Amplifier Gasket: NBR; Button: POM
Accessories		Instruction manual, laser warning label
Weight		Approx. 90 g

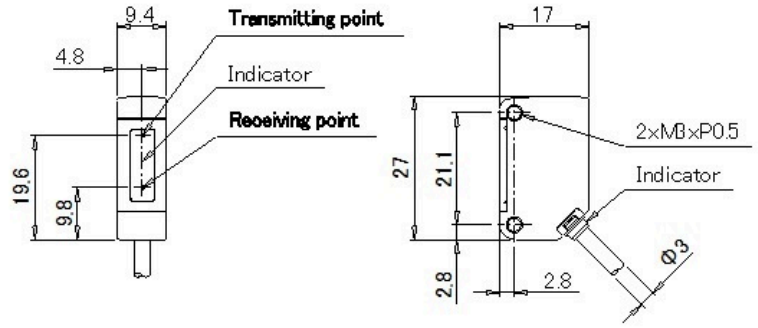
*1 If 500 µs is selected, the following limitations apply.
· Only 2-point calibration can be performed.
· The detection range masking is set during calibration. (Manual setting of the masking range is not supported.)
· Output 2 is limited to an alarm output for errors and gyro issues, and standard/area cannot be used.
*2 Classification performed based on IEC60825-1 standards in accordance with FDA (CDRH) Laser Notice No. 56.
*3 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.

LR-X50_X100_X250

Sensor head



Amplifier

