AUTOMATION TRADER

LR-X100

Industrial automation components

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Manufacturer	Keyence
Catalog number	lr-x100
Category	Industrial automation components
Product type	Industrial automation components
Status	Active product

Technical specification

Brand	Keyence
Part Number	LR-X100
Product Type	Laser Sensor
Detection Range	25.0 to 100.0 mm
Standard Detectable Deviation	1.0 mm
Display Resolution	0.1 mm
Light Source	Green laser (505 nm)
Laser Class	Class 1 Laser Product (IEC60825-1, FDA (CDRH) Part1040.10)
Spot Size	Approx. 0.3 mm × 2 mm
Response Time	500 µs, 1 ms, 3 ms, 10 ms, 200 ms (Selectable) µs/ms
IO-Link Specification	v1.1/COM2 (38.4 kbps)
Enclosure Rating	IP65/IP67 (IEC60529)

Description

The Keyence LR-X100 is a compact laser sensor designed for precise distance measurement in industrial automation applications. With a detection range of 25.0 to 100.0 mm (0.98" to 3.94"), it offers high accuracy with a standard detectable deviation of 1.0 mm (0.04") and a display resolution of 0.1 mm (0.004").

The sensor features a green laser light source operating at 505 nm, classified as a Class 1 Laser Product under IEC60825-1 and FDA (CDRH) Part1040.10 standards. Its spot size is approximately 0.3 mm

× 2 mm (0.012" × 0.08") at a detecting distance of 100 mm (3.94").

The LR-X100 provides selectable response times of 500 µs, 1 ms, 3 ms, 10 ms, and 200 ms, catering to various application needs. It supports IO-Link Specification v1.1/COM2 (38.4 kbps) for seamless integration into automation systems.

The sensor is housed in a durable enclosure rated IP65/IP67, ensuring reliable performance in harsh industrial environments. It operates within an ambient temperature range of -10°C to +50°C (14°F to +122°F) and a relative humidity range of 35% to 85% RH (non-condensing).

The LR-X100 is constructed with materials such as SUS316L for the head case and PSU for the head lens cover, providing robustness and longevity. Accessories include an instruction manual and a laser warning label.

For detailed specifications and additional information, please refer to the official Keyence product page.