

LR-ZB100CN

KEYENCE CORPORATION · LR-Z series

FEATURES

Self-contained CMOS laser photoelectric sensor, rectangular, NPN output, m8 connector, 4-pin.

Hardware

Sensor type:

Self-contained CMOS laser photoelectric sensor (U.C.D. distance/contrast detection)

Shape:

Rectangular

Cable connection:

M8 connector, 4-pin

Detecting distance:

35 to 100 mm

Standard detectable deviation:

35 to 50 mm: 1.5 mm; 50 to 100 mm: 3 mm

Display resolution:

2 (0.2 mm)

Spot diameter:

Approx. 2 x 1 mm at 100 mm

Light source:

Red laser, wavelength 660 nm

Laser class:

Class 1 (IEC60825-1; FDA CDRH Part1040.10)

Response time:

1.5 ms / 10 ms / 50 ms selectable

Timer:

OFF / ON-delay / OFF-delay / one-shot

Communication

Built-in ports:

None

Protocols:

IO-Link v1.1 / COM2 (38.4 kbps) on CB/C3P connector-type models

Communication expansion:

None

Electrical

Supply voltage:

10 to 30 VDC, including 10% ripple (P-P), Class 2 or LPS

Power consumption:

450 mW or less (18 mA or less at 24 V; 34 mA or less at 12 V)

Output type:

NPN open collector, applied voltage 30 VDC or less, control current 100 mA or less, residual voltage 1.2 V or less at 10 mA or less

Output operation:

Light-ON / Dark-ON selectable

Environmental

Operating temperature:

-10 to +50 °C (No freezing)

Storage temperature:

-25 to +75 °C (No freezing)

Relative humidity:

35 to 85 % RH (No condensation)

Protection rating:

IP68 (IEC60529), IP69K (DIN40050-9), NEMA 4X / 6P / 13

Physical**Dimensions (H×W×D):**

Not available

Weight:

Approx. 55 g (connector type)

Lifecycle

Active; official Keyence production status confirmed via product/spec page (Last verified: 2026-09)