

LR-ZB90CB

M18 threaded mount w/ M12 connector type, 90 mm

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

Specifications

Model		LR-ZB90CB
Type		Distance based laser sensor
Appearance		M18 Threaded mount
Output		Bipolar (NPN+PNP)
Cable connection		M12 connector, 4-pin
Detectable distance		25 to 90 mm 0.98" to 3.54" (650 to 0)*1
Standard detectable deviation		25 to 40 mm 0.98" to 1.57": 1.5 mm 0.06" 40 to 90 mm 1.57" to 3.54": 3 mm 0.12"
Display resolution		2 (0.2 mm 0.01")
Spot size		Approx. 2 × 1 mm 0.08" × 0.04" at 90 mm 3.54"
Response time		1.5 ms / 10 ms / 50 ms selectable
Light source	Type	Red laser (660 nm)
	Laser class	Class 1 laser product (IEC60825-1, FDA (CDRH) Part1040.10*2)
Function	Indicator	3-digit 7-segment display (red), output indicator (yellow), DATUM indicator (orange), 1 spot indicator (green)
	Timer	OFF/ON delay/OFF delay/One-shot
Specifications	Power 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)
	Control output	NPN+PNP 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, 2 V or less at 10 to 100 mA
	Protection circuit	Protection against reverse power connection, output overcurrent, output surge, reverse output connection
	Output operation	Light-ON / Dark-ON selectable
	External input	None
Environmental resistance	Enclosure rating	IP68 (IEC60529), IP69K (DIN40050-9), NEMA 4X, 6P, 13 (NEMA250), ECOLAB*3, Diversey*3
	Insulation resistance	20 MΩ or more (500 VDC)
	Ambient light	Incandescent lamp: 4,000 lux or less Sunlight: 8,000 lux or less*4
	Ambient temperature	-10 to +50 °C 14 to 122 °F
	Storage temperature	-25 to +75 °C -13 to 167 °F (No freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Withstand voltage	1,000 VAC, 50/60 Hz, 1 min
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions

	Shock resistance	1,000 m/s², 6 times in each of the X, Y, and Z directions
Material		Case: SUS316L, Display: PES, Lens cover: PMMA with scratch-resistant coating, Packing/Connector ring: FKM, Nut: SUS316L, Lock washer: SUS304
Accompanying items		Instruction Manual, Certification/Identification label (FDA)
Weight		Approx. 75 g

*1 Display readings can be used as a guide for the detecting distance. When the setting value is tuned, the readout shifts. When the value exceeds "-99", "-FF" is displayed.
*2 The laser classification for FDA (CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice.
*3 Have passed resistance tests with cleaning agents from multiple manufactures.
*4 When the response time is 10 ms

Dimensions

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

LR-ZB90CB/ZB240CB

