



## LR-ZB250AP

Rectangular w/ cable Type, 250 mm



## SPECIFICATIONS

Model	LR-ZB250AP	
Type	Distance based laser sensor	
Shape	Rectangular	
Output	PNP	
Cable connection	2 m cable	
Detectable distance	35 to 250 mm (215 to 0) <sup>1</sup>	
Standard detectable deviation	35 to 180 mm: 9 mm 180 to 250 mm: 25 mm	
Display resolution	1 to 3 (1 to 3 mm)	
Spot diameter	Approx. 2.4 × 1.2 mm at 250 mm	
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 <sup>2</sup> )
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
Rating	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)
Specifications	Control output	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	Input time calibration: 35 ms or more ON, 35 ms or more OFF Laser emission stop: 2 ms or more ON, 20 ms or more OFF Short-circuit current NPN: 1 mA or less/PNP: 2 mA or less
Environmental resistance	Enclosure rating	IP68 (IEC60529), IP69K (DIN40050-9), NEMA 4X, 6P, 13 (NEMA250), ECOLAB <sup>3</sup> , Diversy <sup>3</sup>
	Insulation resistance	20 MΩ or more (500 VDC)
	Ambient light	Incandescent lamp: 2,000 lux or less Sunlight: 4,000 lux or less <sup>4</sup>
	Ambient temperature	-10 to +50 °C (No freezing)
	Storage temperature	-25 to +75 °C (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, 2 hours in each of the X, Y, and Z directions
Shock resistance	1,000 m/s <sup>2</sup> , 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	
Accessories	Instruction Manual, Certification/Identification label (FDA)	
Weight	Approx. 110 g (Including cable)	

<sup>1</sup> 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.  
<sup>2</sup> The laser classification for FDA (CDRH) is implemented based on IEC60825-1 in accordance with the requirements of Laser Notice No.50.  
<sup>3</sup> Have passed resistance tests with cleaning agents from multiple manufactures.  
<sup>4</sup> When the response time is 10 ms

Dimensions

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

LR-ZB100N/ZB100P/ZB250N/ZB250P

