

## Specification

Sensing method	Retroreflective with P-opaquing and MSR functions
NPN output	E3ZM-B61T(-C)/-B66T(-C)
PNP output	E3ZM-B81T(-C)/-B86T(-C)
Sensing distance	100 to 500 mm (Using E39-RP1)
Standard sensing object	500-ml, transparent, round PET bottle (65-mm dia.)
Directional angle	Sensor: 3° to 10°/ Reflector: 30°
Light source (wavelength)	Red LED (650 nm)
Power supply voltage	10 to 30 VDC, including 10% ripple (p-p)
Current consumption	25 mA max.
Control output	Load power supply voltage: 30 VDC max., Load current: 100 mA max. (Residual voltage: 2 V max.) Open-collector output (NPN/PNP output depending on model) Light-ON/Dark-ON switch selectable
Protection circuits	Reversed power supply polarity, Load short-circuit protection, Mutual interference prevention, and Reversed output polarity protection
Response time	Operate or reset: 1 ms max.
Sensitivity adjustment	One-turn adjuster
Ambient illumination	Incandescent lamp: 3,000 lx max., Sunlight: 10,000 lx max.
Ambient temperature range	Operating: -25 to 55°C, Storage: -40 to 70°C (with no icing or condensation)
Ambient humidity range	Operating: 35% to 85%, Storage: 35% to 95% (with no condensation)
Insulation resistance	20 MΩ min. at 500 VDC
Dielectric strength	1,000 VAC, 50/60 Hz for 1 min
Vibration resistance	Destruction: 10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions
Shock resistance	Destruction: 500 m/s <sup>2</sup> 3 times each in X, Y, and Z directions
Degree of protection	IEC IP67, DIN 40050-9: IP69K
Connection method	Pre-wired cable (standard length: 2 m) or M8 4-pin connector
Indicators	Operation indicator (yellow), Stability indicator (green)
Weight (packed state)	Pre-wired models: Approx. 90 g Connector models: Approx. 40 g
Materials	Case: SUS316L Lens: PMMA (polymethylmethacrylate) Display: PES (polyethersulfone) Sensitivity adjustment and mode selector switch: PEEK (polyetheretherketone) Seals: Fluoro rubber
Accessories	Instruction sheet, Special Reflector (E3ZM-B□□T-C only)