

Ratings and Specifications

Item		Model	E2EY-X4C1	E2EY-X8C1
Sensing distance			4 mm $\pm 10\%$	8 mm $\pm 10\%$
Set distance			0 to 2.8 mm	0 to 5.6 mm
Differential travel			20% max. of sensing distance	
Detectable object			Non-ferrous metal (Does not detect ferrous metal.)	
Standard sensing object			Aluminum: 18 × 18 × 1 mm	Aluminum: 30 × 30 × 1 mm
Response frequency *			70 Hz	
Power supply voltage (operating voltage range)			12 to 24 VDC (10 to 30 VDC), ripple (p-p): 10% max.	
Current consumption			20 mA max.	
Control output	Load current		NPN open-collector output, 100 mA max. (at 30 VDC)	
	Residual voltage		2 V max. (Load current: 100 mA, Cable length: 2 m)	
Indicators			Detection indicator (red)	
Operation mode (with sensing object approaching)			Load ON: NO (Refer to the timing charts under <i>I/O Circuit Diagrams</i> on page 3 for details.)	
Protection circuits			Reverse polarity protection, Load short-circuit protection, Surge suppressor	
Ambient temperature range			Operating/Storage: -10 to 55°C (with no icing or condensation)	
Ambient humidity range			Operating/Storage: 35% to 95% (with no condensation)	
Temperature influence			$\pm 20\%$ max. of sensing distance at 23°C in the temperature range of -10 to 55°C	
Voltage influence			$\pm 2.5\%$ max. of sensing distance at rated voltage in rated voltage $\pm 15\%$ range	
Insulation resistance			50 M Ω min. (at 500 VDC) between current-carrying parts and case	
Dielectric strength			1,000 VAC, 50/60 Hz for 1 minute between current-carrying parts and case	
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: 1,000 m/s ² 10 times each in X, Y, and Z directions	
Degree of protection			IEC 60529 IP67, in-house standards: oil-resistant	
Connection method			Pre-wired Models (Standard cable length: 2 m)	
Weight (packed state)			Approx. 140 g	Approx. 190 g
Materials	Case		Nickel-plated brass	
	Sensing surface		Heat-resistant ABS	
	Clamping nuts		Nickel-plated brass	
	Toothed washer		Zinc-plated iron	
Accessories			---	

* The response frequency is an average value. Measurement conditions are as follows: standard sensing object, a distance of twice the standard sensing object, and a set distance of half the sensing distance.