Rated Specifications

Model / Item		Through-beam (Slot-type)	Reflective Type
		EE-SPX301, EE-SPX401	EE-SPY301, EE-SPY401 EE-SPY302, EE-SPY402
Detection Distance		3.6 mm (slot width)	5 mm (15×15 mm white paper with 90% reflectivity) *1
StandardDetectableObject		Opaque object of 1×0.5 mm or larger	
Hysteresis Distance		0.05 mm max	0.2 mm max (at detection distance 3 mm, lateral direction)
LightSource(PeakEmission Wavelength)		GaAs Infrared LED (940 nm)	
Indicator Lamp *2		Lights up (red) when light is received	
Power Supply Voltage		DC 5-24 V ±10%, ripple (p-p): 5% max	
Current Consumption		Average: 15 mA max, Maximum: 50 mA max	
Control Output		NPN voltage output, Load power supply DC 5-24 V, Load current: 80 mA max, Off-state current: 0.5 mA max Residual voltage: 1.0 V max (at load current 80 mA) Residual voltage: 0.4 V max (at load current 10 mA)	
Response Frequency *3		500 Hz min	100 Hz min
Ambient Illuminance		luminance on receiving surface: Incandescent lamp / Sunlight: 3,000 lx max each	
AmbientTemperatureRange		Operating: -10 ~ +55 ℃, Storage: -25 ~ +65 ℃ (no icing)	
Ambient Humidity Range		Operating: 5-85%RH, Storage: 5-95%RH (no condensation)	
Vibration (Durability)		10-55 Hz, Amplitude 1.5 mm, X/Y/Z axes, 2 hours each	
Shock (Durability)		500 m/s², X/Y/Z axes, 3 times each	
Protection Structure		IEC Standard IP50	
Connection Method		Connector type (non-solderable)	
Mass		Approx. 2.6 g	
Material	Housing	Polycarbonate (PC)	

*1. The sensor will not operate if the object is too close.

*2. GaAs Red LED (Peak emission wavelength 700 nm)

*3. Response frequency is measured with a rotating circular disc.