



**Features**

- Up to 500 Beam channels
- Less than 10 mm Beam pitch
- 60 ... 5000mm Sensing height
- 1 ... 30m Sensing Range
- Built-in electric protection
- 15°C ... +65°C operating temperature
- Cable version
- M12 connector version
- IP66 protection

B: Beam plate length  
 F: Beam pitch  
 H: Panel height  
 L: Beam channel number

Protection Height  $G=(L-1)\times F$  mm  
 Overall Height  $I=L\times F+81$  mm  
 Upper Blind Height  $J=F/2+8$  mm  
 Lower Blind Height  $K=F/2+40$  mm

(Unit: mm)

**Specifications**

Beam pitch	20mm									
Beam channels	4	6	8	10	12	14	16	...		
Sensing height	60mm	100mm	140mm	180mm	220mm	260mm	300mm	...		
Cable version	Emitter	EA0420K03ALA EA0620K03ALA EA0820K03ALA EA1020K03ALA EA1220K03ALA EA1420K03ALA EA1620K03ALA ...								
		Receiver	NPN-NO	EA0420C03ALA	EA0620C03ALA	EA0820C03ALA	EA1020C03ALA	EA1220C03ALA	EA1420C03ALA	EA1620C03ALA
	NPN-NC		EA0420D03ALA	EA0620D03ALA	EA0820D03ALA	EA1020D03ALA	EA1220D03ALA	EA1420D03ALA	EA1620D03ALA	...
	PNP-NO		EA0420A03ALA	EA0620A03ALA	EA0820A03ALA	EA1020A03ALA	EA1220A03ALA	EA1420A03ALA	EA1620A03ALA	...
	PNP-NC	EA0420B03ALA	EA0620B03ALA	EA0820B03ALA	EA1020B03ALA	EA1220B03ALA	EA1420B03ALA	EA1620B03ALA	...	
Relay SPDT	EA0420Y03ALA	EA0620Y03ALA	EA0820Y03ALA	EA1020Y03ALA	EA1220Y03ALA	EA1420Y03ALA	EA1620Y03ALA	...		
M12 connector	Emitter	EA0420K03HLA EA0620K03HLA EA0820K03HLA EA1020K03HLA EA1220K03HLA EA1420K03HLA EA1620K03HLA ...								
		Receiver	NPN-NO	EA0420C03HLA	EA0620C03HLA	EA0820C03HLA	EA1020C03HLA	EA1220C03HLA	EA1420C03HLA	EA1620C03HLA
	NPN-NC		EA0420D03HLA	EA0620D03HLA	EA0820D03HLA	EA1020D03HLA	EA1220D03HLA	EA1420D03HLA	EA1620D03HLA	...
	PNP-NO		EA0420A03HLA	EA0620A03HLA	EA0820A03HLA	EA1020A03HLA	EA1220A03HLA	EA1420A03HLA	EA1620A03HLA	...
	PNP-NC	EA0420B03HLA	EA0620B03HLA	EA0820B03HLA	EA1020B03HLA	EA1220B03HLA	EA1420B03HLA	EA1620B03HLA	...	
Relay SPDT	EA0420Y03HLA	EA0620Y03HLA	EA0820Y03HLA	EA1020Y03HLA	EA1220Y03HLA	EA1420Y03HLA	EA1620Y03HLA	...		
Beam pitch	1mm,2mm,5mm,10mm,15mm,20mm,30mm,40mm,60mm									
Sensing range	10m Standard(1 ... 30m customized sensing range)									
Sensing object	Φ15mm or more opaque object(<15mm sensing object can also be customized)									
Supply voltage	12 to 24V DC ±10% Ripple p-p 10% or less									
Sensing mode	Through beam									
Synchronous mode	Optical Signal Synchronous or Cable Line Synchronous									
Output	NPN	NPN open-collector transistor, Max. Load current:100mA; Voltage Drop: <1.5V								
	PNP	PNP open-collector transistor, Max. load current:100mA; Voltage Drop: <1.5V								
	Relay	Relay SPDT, 5A/250VAC, 5A/30VDC								
Output operation	ON when all beams are received, OFF when one or more beams are interrupted.									
Short-circuit protection	Built-in									
Response time	10ms or less									
Indicator	Emitter	Power indicator: green LEDX2(light up when the power is ON; If emitter is off that is indicated by the number of LEDs lighting up)								
	Receiver	Operation indicator: Red LED(lights up when one or more beams are interrupted), Stable indicator: Green LED(lights up when all beams are stable received)								
Protection	IP66									
Interference prevention function	Incorporated									
Ambient temperature	-15°C ... +65°C									
Ambient humidity	35 to 85% RH									
Ambient illuminance	Sunlight: 10,000L x at the light -receiving face, Incandescent light: 3,000 x at the light-receiving face									
EMC immunity	RFI>10V/m(in 30-1000MHZ), EFT>1KV, ESD>4KV(contact)									
Voltage withstand ability	1,000 V AC for one min. between all supply terminals connected together and enclosure									
Insulation resistance	>100 MΩ									
Vibration resistance	10 to 150 Hz frequency, 0.75 mm 0.030 in amplitude in X, Y and Z directions for two hours each									
Shock resistance	490m/s <sup>2</sup> , acceleration(50G approx) in X, Y and Z directions for three times each									
Emitting	Infrared LED									
Material	Aluminum Enclosure, Polyester lens									
Connection	2m PVC Cable / M12 Connector									
Weight (g)	Approx. 240g ... 570g									

Mounting brackets

(Unit: mm)