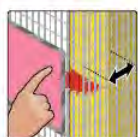


SAFETY LIGHT CURTAIN



Safety light curtains, multiple and signal-beam photoelectric safety switches from SENSONG are ideal for the following safety tasks:

Hazardous point protection



Finger and hand detection
Detects a human finger when workers operate very close to the hazardous point of the machine.



Hand and person detection
Detects hands and prevents start-up while a person is in the hazardous area

Access protection



Single-sided access protection
Approaching persons are detected by identifying the person's body



With differentiation between person and material
Approaching persons are detected by identifying a human body. A distinction is made between humans and material.



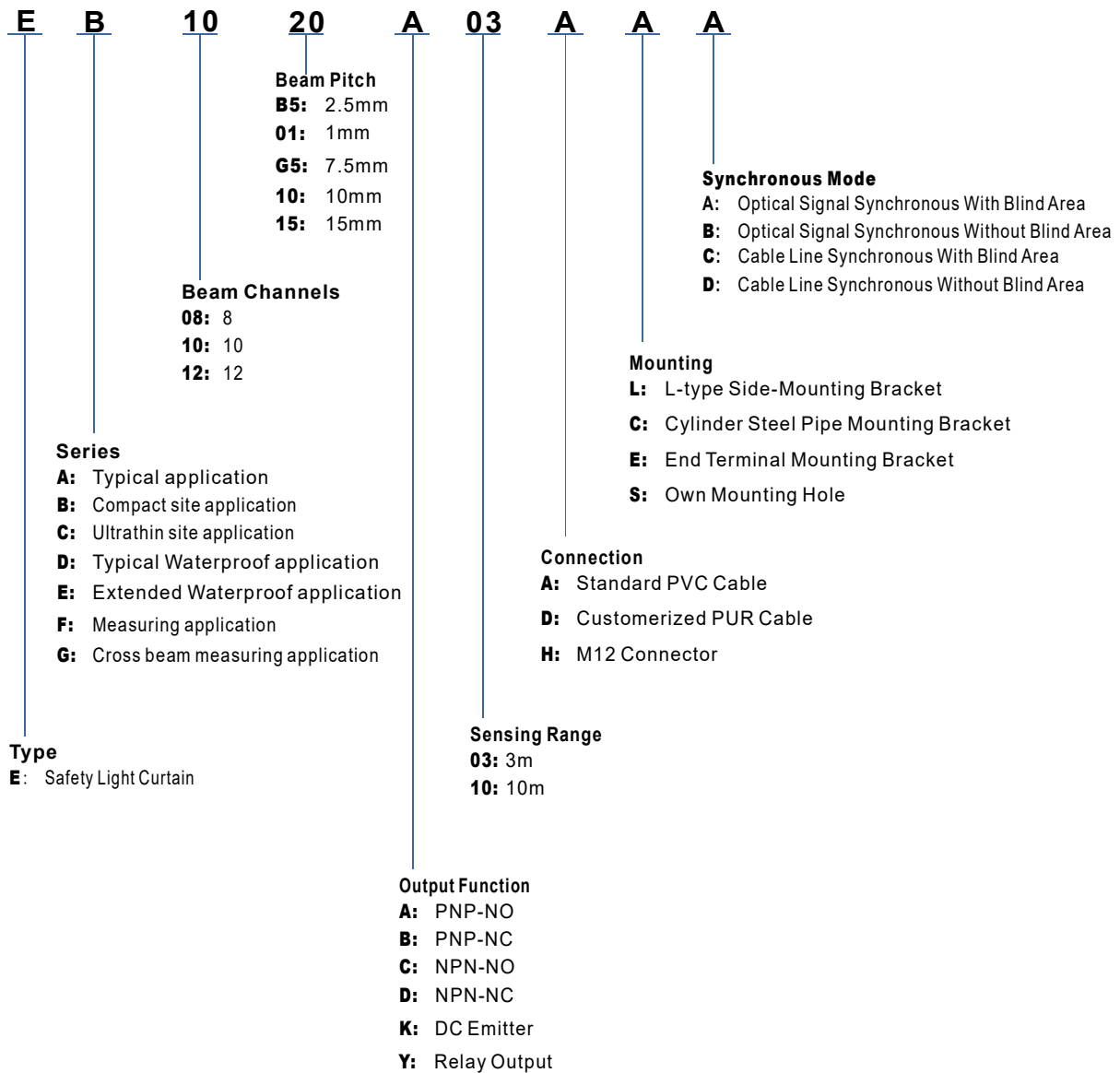
Multi-sided access protection
Approaching persons are detected by identifying the person's body

Hazardous area protection



Person detection
Approaching and present persons are detected by identifying legs in the scanning range

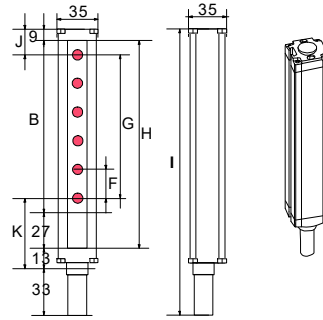
SELECTION GUIDE FOR SAFETY LIGHT CURTAIN





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

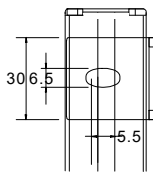
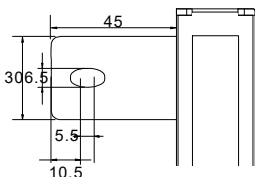


B: Beam plate length
F: Beam pitch
H: Panel height
L: Beam channel number

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)

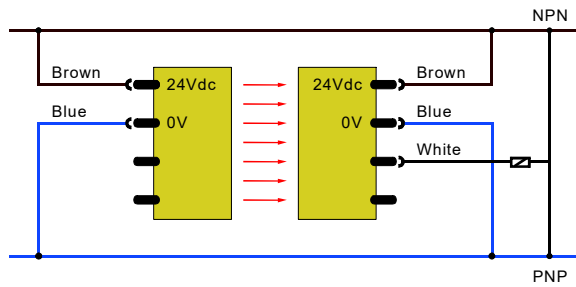
Specifications

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	...
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℃ ... +65℃							
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/s2, 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			<div></div>							
			(Unit: mm)							

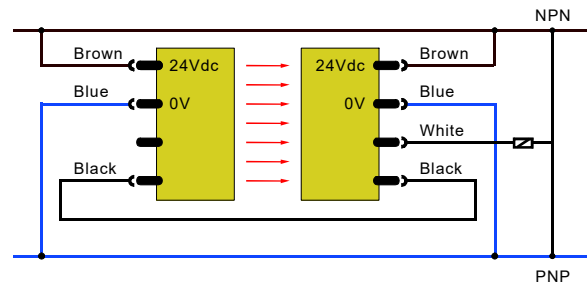
(Unit: mm)

WIRING DIAGRAM FOR SAFETY LIGHT CURTAIN

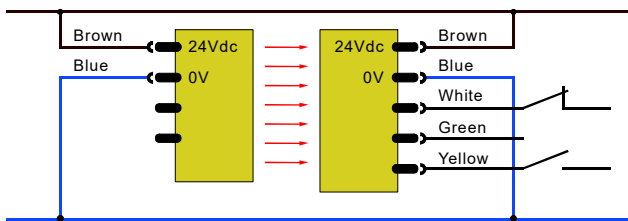
Optical Signal Synchronous



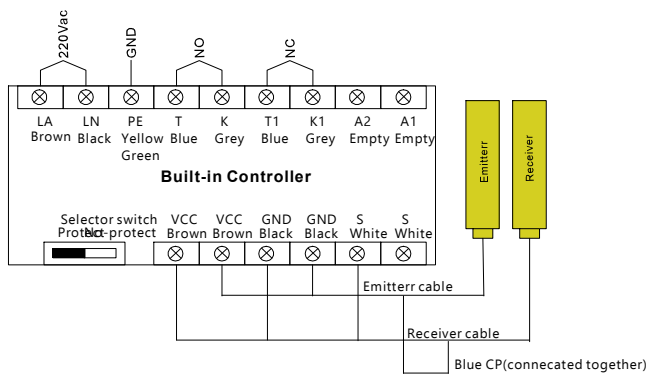
Cable Line Synchronous



Relay Output



Built-in Controller Wiring



External Controller Wiring

