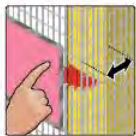


SAFETY LIGHT CURTAIN



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.



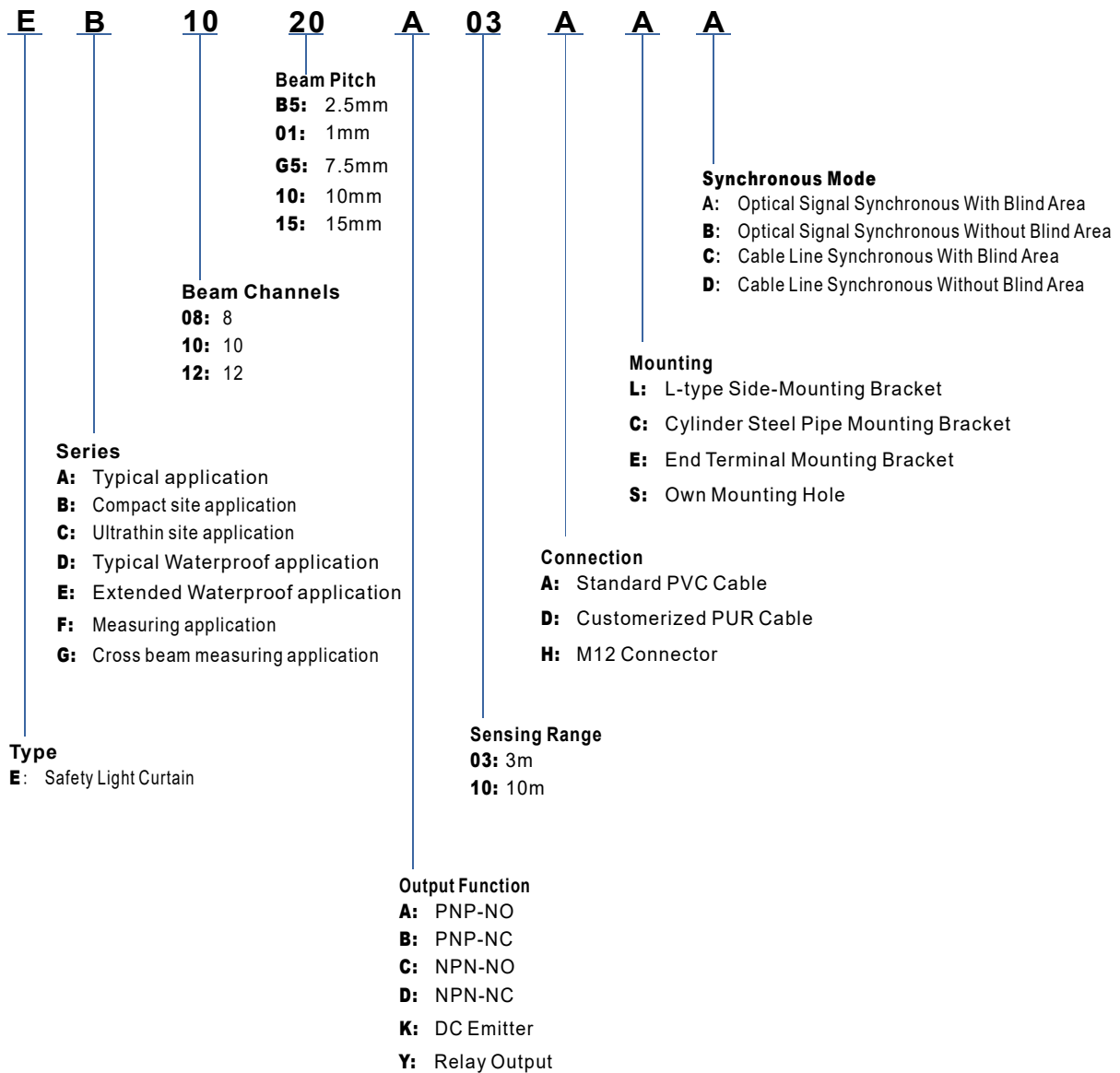
Multi-sided access protection
Approaching persons are detected by identifying the person's body

Hazardous area protection



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

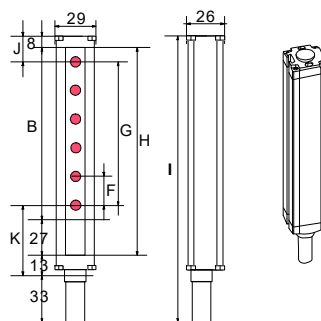
SELECTION GUIDE FOR SAFETY LIGHT CURTAIN





Features

- Up to 500 Beam channels
- Less than 10 mm Beam pitch
- 60 ... 2000mm Sensing height
- 1 ... 5m 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

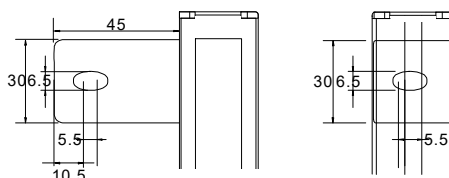
Protection Height $G = (L-1) \times F$ mm
Overall Height $I = L \times F + 81$ mm
Upper Blind Height $J = F/2 + 8$ mm
Lower Blind Height $K = F/2 + 40$ mm

(Unit: mm)

Specifications

Beam pitch			10mm							
Beam channels			8	12	16	20	24	28	32	...
Sensing height			70mm	110mm	150mm	190mm	230mm	270mm	310mm	...
Cable version	Emitter		EB0810K03ALA	EB1210K03ALA	EB1610K03ALA	EB2010K03ALA	EB2410K03ALA	EB2810K03ALA	EB3210K03ALA	...
	Receiver	NPN-NO	EB0810C03ALA	EB1210C03ALA	EB1610C03ALA	EB2010C03ALA	EB2410C03ALA	EB2810C03ALA	EB3210C03ALA	...
		NPN-NC	EB0810D03ALA	EB1210D03ALA	EB1610D03ALA	EB2010D03ALA	EB2410D03ALA	EB2810D03ALA	EB3210D03ALA	...
		PNP-NO	EB0810A03ALA	EB1210A03ALA	EB1610A03ALA	EB2010A03ALA	EB2410A03ALA	EB2810A03ALA	EB3210A03ALA	...
		PNP-NC	EB0810B03ALA	EB1210B03ALA	EB1610B03ALA	EB2010B03ALA	EB2410B03ALA	EB2810B03ALA	EB3210B03ALA	...
		Relay SPDT	EB0810Y03ALA	EB1210Y03ALA	EB1610Y03ALA	EB2010Y03ALA	EB2410Y03ALA	EB2810Y03ALA	EB3210Y03ALA	...
M12 connector	Emitter		EB0810K03HLA	EB1210K03HLA	EB1610K03HLA	EB2010K03HLA	EB2410K03HLA	EB2810K03HLA	EB3210K03HLA	...
	Receiver	NPN-NO	EB0810C03HLA	EB1210C03HLA	EB1610C03HLA	EB2010C03HLA	EB2410C03HLA	EB2810C03HLA	EB3210C03HLA	...
		NPN-NC	EB0810D03HLA	EB1210D03HLA	EB1610D03HLA	EB2010D03HLA	EB2410D03HLA	EB2810D03HLA	EB3210D03HLA	...
		PNP-NO	EB0810A03HLA	EB1210A03HLA	EB1610A03HLA	EB2010A03HLA	EB2410A03HLA	EB2810A03HLA	EB3210A03HLA	...
		PNP-NC	EB0810B03HLA	EB1210B03HLA	EB1610B03HLA	EB2010B03HLA	EB2410B03HLA	EB2810B03HLA	EB3210B03HLA	...
Beam pitch			10mm,15mm,20mm,30mm,40mm,60mm							
Sensing range			3m Standard(1 ... 5m 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			IP65							
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							

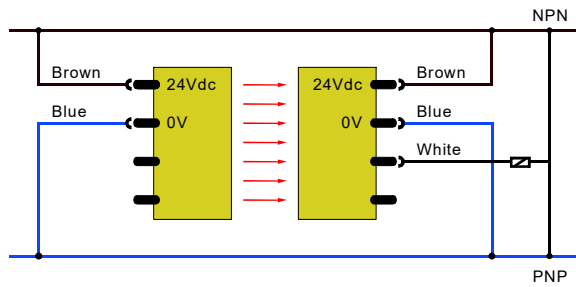
Mounting brackets



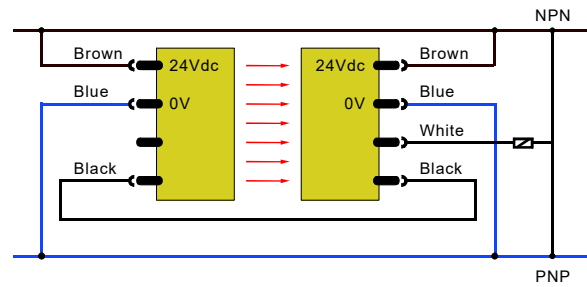
(Unit: mm)

WIRING DIAGRAM FOR SAFETY LIGHT CURTAIN

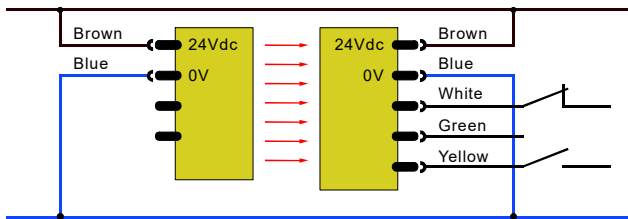
Optical Signal Synchronous



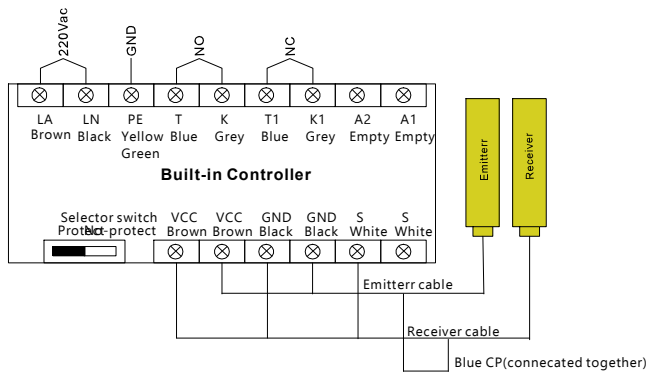
Cable Line Synchronous



Relay Output



Built-in Controller Wiring



External Controller Wiring

