

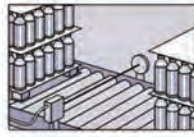
Introduction (for B19470 ~ B19501) :

In comparison to other types of sensors, photoelectric sensors can detect objects from relatively far away. They also provide accurate results, fast. Unlike some other types of sensors, they do not require contact with another object. This improves reliability and can pretty much detect almost any kind of item, regardless of its materials.

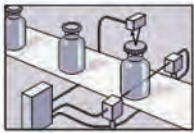
Applications:



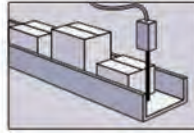
Verifying objects in clear bottles



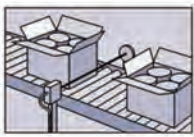
Flow of pallets carrying bottles



Detecting caps on bottles



Detecting items of varying height



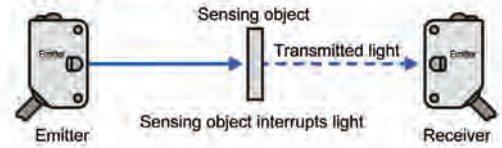
Counting cartons



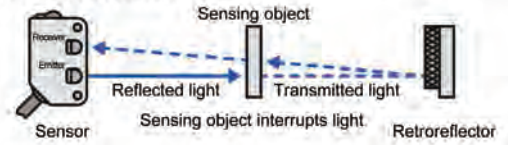
Car wash

Main types of photoelectric sensors:

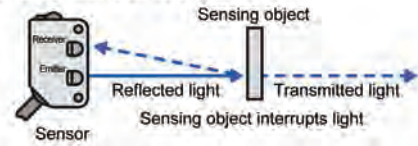
Through-beam sensors



Retro-reflective sensors

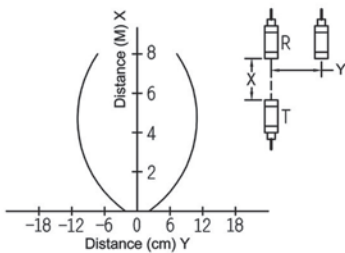


Diffuse-reflective sensors

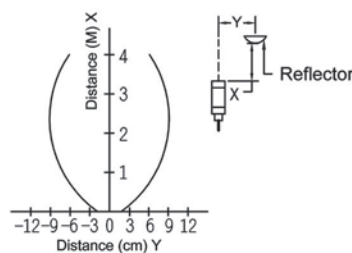


Parallel sensing range:

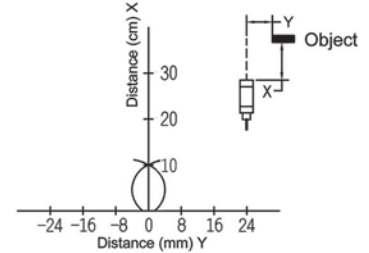
B19470 Sensing range



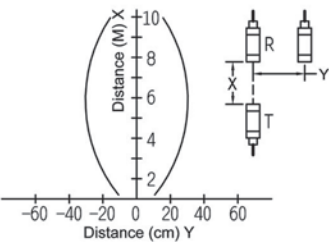
B19471 Sensing range



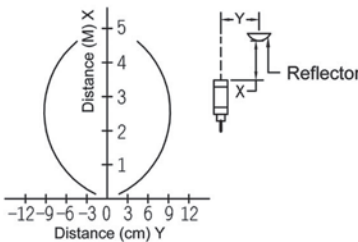
B19472 Sensing range



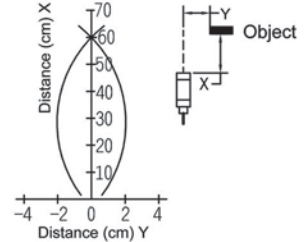
B19480 Sensing range



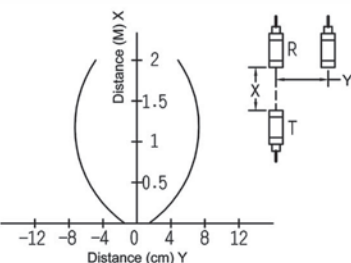
B19481 Sensing range



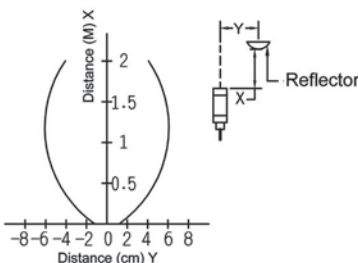
B19482 Sensing range



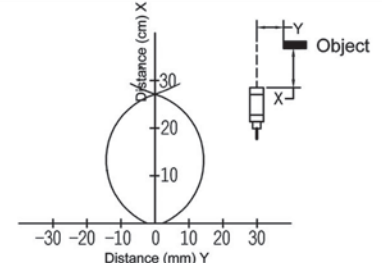
B19490 Sensing range



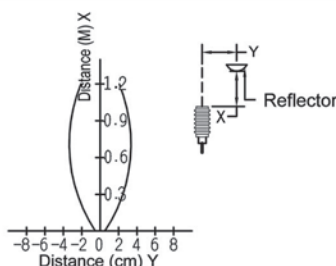
B19491 Sensing range



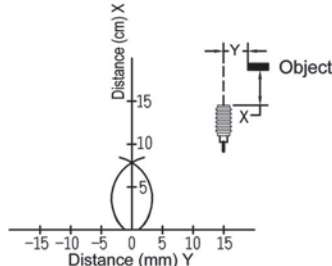
B19492 Sensing range



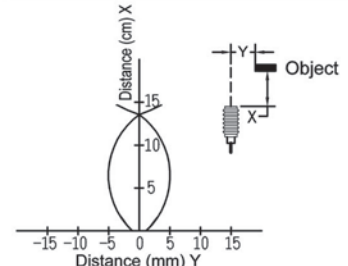
B19500 Sensing range



B19501A Sensing range

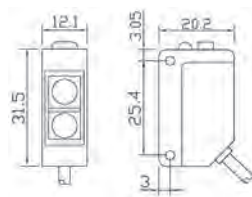
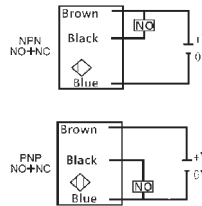


B19501B Sensing range



- B19470** x Photoelectric sensor through-beam (2M)
B19471 x Photoelectric sensor retro-reflective W/reflector (2M)
B19472 x Photoelectric sensor diffuse-reflective (2M)

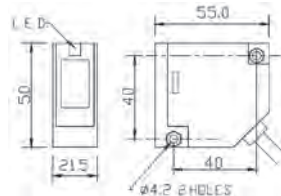
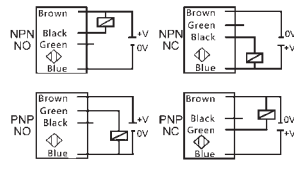
Output Item No. A: NPN NO/NC
B: PNP NO/NC



Item No.	B19470	B19471	B19472
Sensing distance	8M	3M	10cm
Standard sensing object	Opaque 15mm	Opaque 75mm	White paper 80x80mm
Operating voltage	DC 12~24V		
Response time	< 5ms		
Load current	< 100mA		
Operation indicator	Red LED		
Light source	Infrared LED		
Enclosure protection	IEC IP65		
Ambient temperature	-20°C~55°C		
Circuit protection	Reversed polarity protection Short circuit protection		
Ambient illumination	Lamplight < 3000 Lux Sunlight < 10000 Lux		
With light on and dark on two functions			

- B19480** x Photoelectric sensor through-beam (2M)
B19481 x Photoelectric sensor retro-reflective W/reflector (2M)
B19482 x Photoelectric sensor diffuse-reflective (2M)

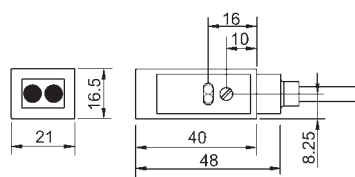
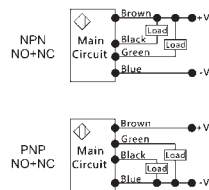
Output Item No. A: NPN NO B: NPN NC
C: PNP NO D: PNP NC



Item No.	B19480	B19481	B19482
Sensing distance	10M	4M	70cm
Standard sensing object	Opaque 20mm	Opaque 70mm	White paper 30x30cm
Operating voltage	DC 12~24V		
Response time	< 10ms		
Load current	< 200mA		
Operation indicator	Red LED		
Light source	Infrared LED		
Enclosure protection	IEC IP65		
Ambient temperature	-20°C~55°C		
Circuit protection	Reversed polarity protection Short circuit protection		
Ambient illumination	Lamplight < 3500 Lux Sunlight < 11000 Lux		
Exclusive innovation of 4 in 1 switch output functions			

- B19490** x Photoelectric sensor through-beam (2M)
B19491 x Photoelectric sensor retro-reflective W/reflector (2M)
B19492 x Photoelectric sensor diffuse-reflective (2M)

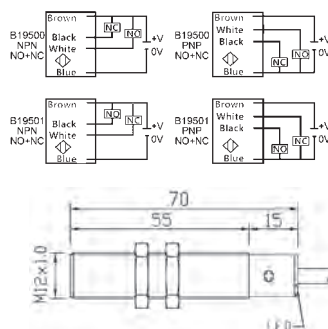
Output Item No. A: NPN NO/NC
B: PNP NO/NC



Item No.	B19490	B19491	B19492
Sensing distance	2M	2M	30cm
Standard sensing object	Opaque 10mm	Opaque 50mm	White paper 12x12cm
Operating voltage	DC 12~24V		
Response time	< 5ms		
Load current	< 200mA		
Operation indicator	Red LED		
Light source	Infrared LED		
Enclosure protection	IEC IP65		
Ambient temperature	-20°C~55°C		
Circuit protection	Reversed polarity protection		
Ambient illumination	Lamplight < 3000 Lux Sunlight < 10000 Lux		
With light on and dark on two functions			

- B19500** x Photoelectric sensor retro-reflective W/reflector (2M)
B19501 x Photoelectric sensor diffuse-reflective (2M)

Output Item No. A: NPN NO/NC
B: PNP NO/NC



Item No.	B19500	B19501A	B19501B
Sensing distance	1.2M	8M	15cm
Standard sensing object	Opaque 30mm	White paper 80x80mm	
Operating voltage	DC 12~24V		
Response time	< 5ms		
Load current	< 100mA		
Operation indicator	Red LED		
Light source	Infrared LED		
Enclosure protection	IEC IP65		
Ambient temperature	-20°C~55°C		
Circuit protection	Short circuit protection		
Ambient illumination	Lamplight < 3000 Lux Sunlight < 10000 Lux		
With light on and dark on two functions			