

Selection Guide

PHOTO SENSOR(BJ SERIES)

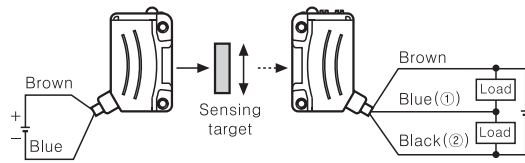
Specifications

Model	NPN open collector output	BJ15M-TDT	BJ10M-TDT	BJ3M-PDT	BJ1M-DDT	BJ300-DDT
	PNP open collector output	BJ15M-TDT-P	BJ10M-TDT-P	BJ3M-PDT-P	BJ1M-DDT-P	BJ300-DDT-P
Appearances						
Type	Transmitted beam		Retroreflective	Diffuse reflective		
Sensing distance	15m	10m	(★)0.1~3m (MS-2A)	1m	300mm	
Sensing target	Opaque material over ϕ 15mm		Opaque material over ϕ 75mm	Non glossy white paper 300×300mm	Non glossy white paper 100×100mm	
Hysteresis	—————		—————	Max. 20% at sensing distance		
Response time	Max. 1ms					
Power supply	12~24VDC \pm 10% (Ripple P-P : Max. 10%)					
Current consumption	Emitter:Max.25mA, Receiver:Max.20mA			Max. 30mA		
Light source	Infrared LED (850nm)	Red LED (660nm)	Red LED (660nm)	Infrared LED (850nm)	Red LED (660nm)	
Sensitivity adjustment	Short rotator volume (210°)					
Operation mode	Light ON/Dark ON Selectable					
Control output	NPN open collector output \Rightarrow Load voltage:Max. 30VDC, Load current:Max. 100mA, Residual voltage:Max. 1VDC PNP open collector output \Rightarrow Output voltage:Min. (Power voltage:-2.5)VDC, Load current:Max. 100mA					
Protection circuit	Reverse polarity protection, Short-circuit protection			Reverse polarity protection, Short-circuit protection, Interference prevention function		
Indicator	Operation indicator : Red, Stable indicator : Green (Emitter of power indicator for transmitted beam:Red)					
Connection	Outgoing cable					

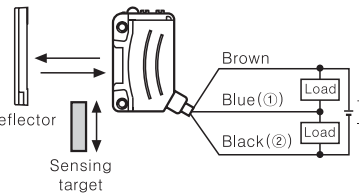
※ (★) The sensing distance is lengthened as 0.1~4m, 0.1~5m individually when using the optional reflector MS-2S, MS-3S.

Connections

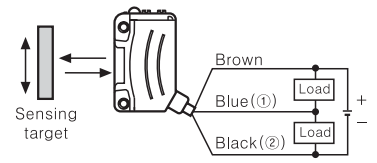
● Transmitted beam



● Retroreflective



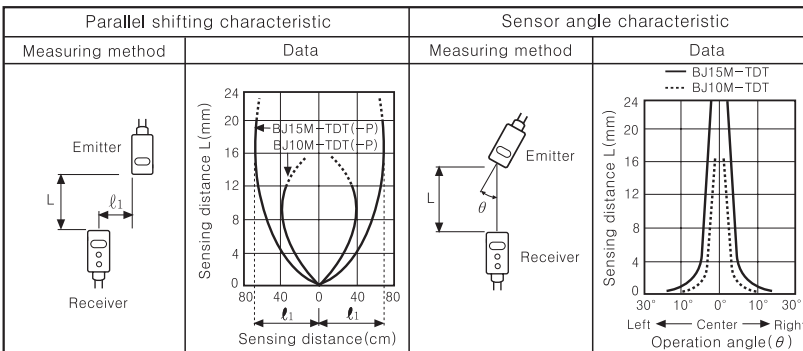
● Diffuse reflective



Feature data

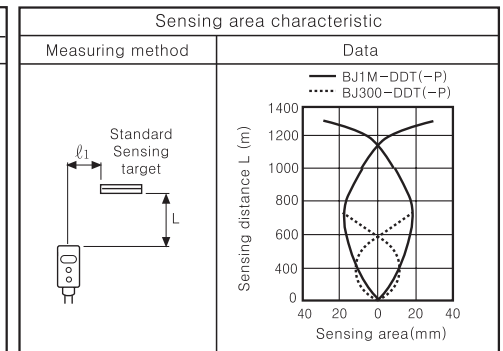
○ Transmitted beam

● BJ15M-TDT / BJ15M-TDT-P / BJ10M-TDT / BJ10M-TDT-P



○ Diffuse reflective

● BJ300-DDT / BJ300-DDT-P / BJ1M-DDT / BJ1M-DDT-P



○ Polarized retroreflective

● BJ3M-PDT / BJ3M-PDT-P

