


BPS Series

Slim photoelectric sensor for long sensing distance

■ Features

- Easy to mount by Flat type
- Realization of 3m sensing distance as small size
- Protection structure IP67(IEC standard)



 Please read "Caution for your safety" in operation manual before using.



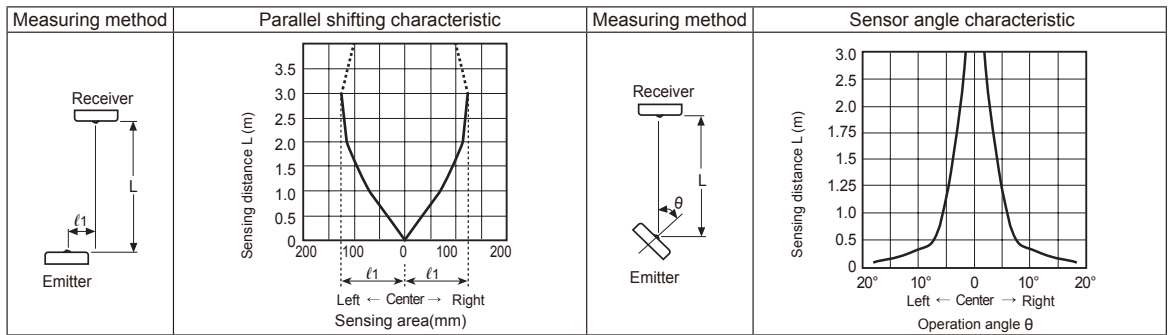
■ Specifications

Model	NPN open collector output	BPS3M-TDT	BPS3M-TDTL
	PNP open collector output	BPS3M-TDT-P	BPS3M-TDTL-P
Sensing type		Through-beam	
Sensing target		Opaque materials of Min. ø5mm	
Operation mode		Dark ON	Light ON
Sensing distance		3m	
Response time		Max. 1ms	
Power supply		12-24VDC ±10%(Ripple P-P : Max. 10%)	
Current consumption		Max. 20mA	
Light source		Infrared LED(850nm)	
Control output		NPN or PNP open collector output ●Load voltage: Max. 30VDC ●Load current: Max. 100mA ●Residual voltage - NPN: Max. 1V, PNP: Max. 2.5V	
Protection circuit		Reverse polarity protection, Output short-circuit protection	
Indicator		Emitter : Power indicator(red LED), Receiver : Operation indicator(red LED)	
Insulation resistance		Min. 20MΩ(at 500VDC megger)	
Noise resistance		±240V the square wave noise(pulse width:1μs) by the noise simulator	
Dielectric strength		1,000VAC 50/60Hz for 1minute	
Vibration		1.5mm amplitude or 300m/s ² at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours	
Shock		500m/s ² (approx. 50G) in each of X, Y, Z directions for 3 times	
Environment	Ambient illumination	Sunlight : Max. 11,000lx , Incandescent lamp : Max. 3,000lx (Receiver illumination)	
	Ambient temperature	-25 to 65°C, storage : -25 to 70°C	
	Ambient humidity	35 to 85%RH, storage : 35 to 90%RH	
Protection		IP67(IEC standard)	
Material		Case : PC	
Cable		ø3, 3-wire, Length : 2m(Emitter of through-beam type : ø3, 2-wire, Length : 2m) (AWG24, Core diameter : 0.08mm, Number of cores : 40, Insulator out diameter : ø1)	
Approval		CE	
Unit weight		Approx. 66g	

※The temperature or humidity mentioned in Environment indicates a non freezing or condensation environment.

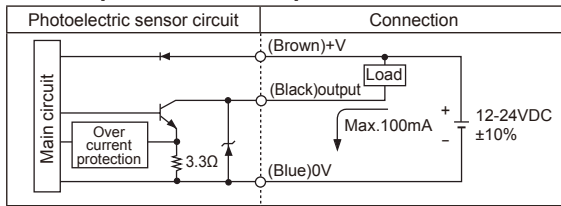
Slim and Amplifier Built-in type

Feature data

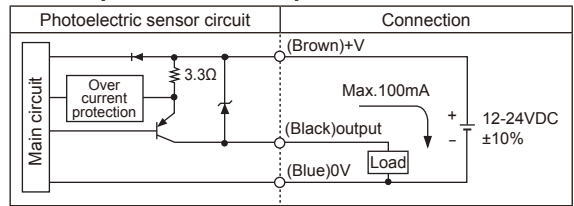


Control output diagram

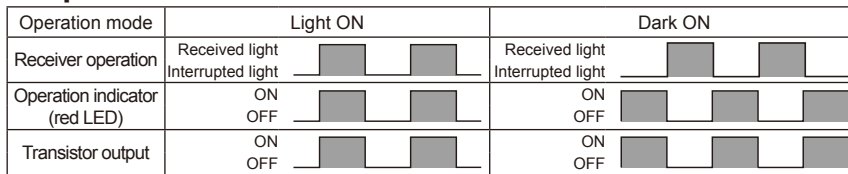
• NPN open collector output



• PNP open collector output

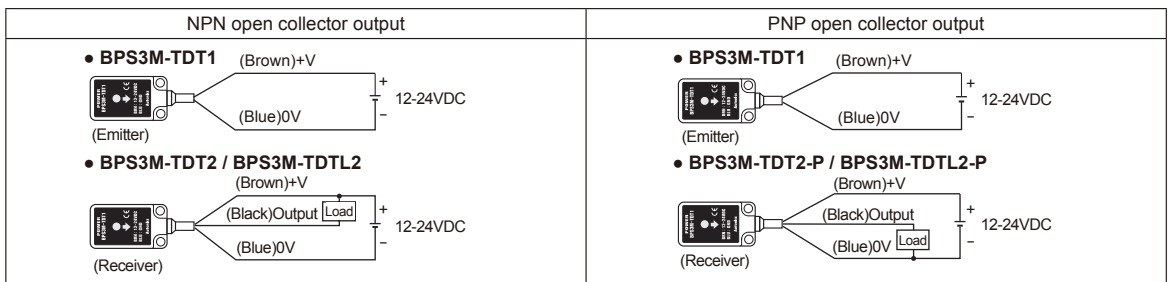


Operation mode

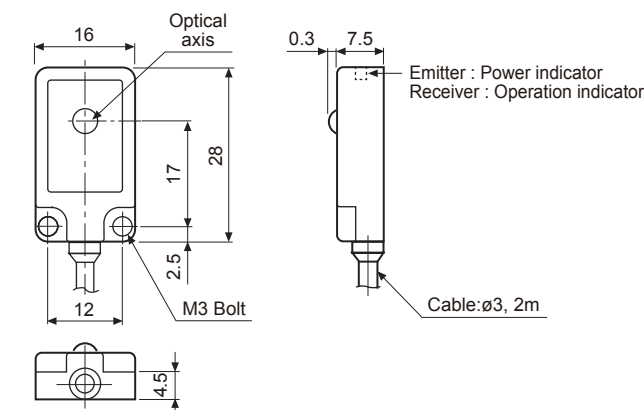


※If the control output terminal is short-circuited or overcurrent condition exists, the control output turns OFF due to protection circuit.
 ※Dark ON mode is standard and Light ON(Received light: ON) mode is customizable.

Connections

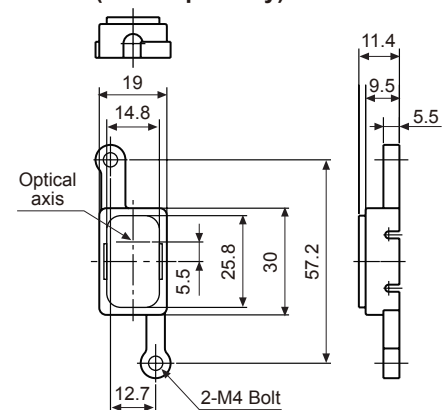


Dimensions



• Cover(sold separately)

(unit: mm)



(A)	Photo electric sensor
(B)	Fiber optic sensor
(C)	Door/Area sensor
(D)	Proximity sensor
(E)	Pressure sensor
(F)	Rotary encoder
(G)	Connector/Socket
(H)	Temp. controller
(I)	SSR/ Power controller
(J)	Counter
(K)	Timer
(L)	Panel meter
(M)	Tacho/ Speed/ Pulse meter
(N)	Display unit
(O)	Sensor controller
(P)	Switching mode power supply
(Q)	Stepper motor& Driver&Controller
(R)	Graphic/ Logic panel
(S)	Field network device
(T)	Software
(U)	Other