



NEW!



Basic Features	Working Principle	Photoelectric Sensor			
	Housing Style	Square			
	Optical Working Principle	Background suppression diffuse reflection			
	Detection Range	5~100mm	5~150mm	5~300mm	5~300mm
	Setting distance	25-100mm	25~150mm	25~300mm	25~300mm
	Spot Size	Approx. 6*65mm (at 100mm)	Approx. Ø3mm (at 150mm)	Approx. Ø8mm (at 300mm)	Approx. Ø16mm (at 300mm)
	Light Source	Red LED 630nm(modulated)	Red LED 660nm(modulated)		Red LED 630nm(modulated)
	Indicator Light	Operation Indicator: Green; Action Indicator: Red			
	Sensitivity Adjustment	6-turn Potentiometer			
Electrical data	Switching Mode	L.on (light-on action)/D.on (dark-on action) switchable			
	Output Mode	NPN or PNP collector open			
	Response Time	≤1ms			
	Switching Frequency	≤500Hz			
	Repeatability	≤5%Sr			
	Hysteresis	≤5%(Matte White Paper)			
	Operating Voltage	10~30VDC±10%			
	Current Consumption	≤20mA			
	Residual Voltage	≤1.5V(Load current ≤100mA)			
	Load Current	≤100mA (30VDC)			
	Insulation Resistance	Insulation Resistance between Power Terminal and Housing ≥ 20MΩ(500VDC)			
	Withstand Voltage	1000VAC (50/60Hz)			
	Protection Circuit	Reverse Polarity Protection/Short Circuit Protection/Surge Protection			
	Environmental conditions	Operating Temperature	-25℃~+55℃(No Freezing)		
Storage Temperature		-30℃~70℃(No Freezing)			
Operating Humidity		35~85%RH(No Condensation)			
Storage Humidity		35~95%RH(No Condensation)			
Ambient Light		Incandescent Lamp ≤ 3000 Lux; LED≤600Lux; Sunlight ≤ 10000 Lux			
Vibration Resistance		10~50Hz, amplitude 0.5mm, 2 hours each in X/Y/Z axes			
Protection Rating		IP67			
Mechanical data	Maximum Tightening Torque	≤0.5N			
	Connection Method	M8/4-pin Connector			
	Dimensions	31*20*11mm			
	Material	PC+ ABS(Housing); PMMA (Lens)			
	Weight	Approx. 10g			
	Accessories	Screwdriver, Bracket, Screws and Nuts			
Model	NPN	ESB-BL10ANE	ESB-BS15ANE	ESB-BS30ANE	ESB-BE30ANE
	PNP	ESB-BL10APE	ESB-BS15APE	ESB-BS30APE	ESB-BE30APE

- Fiber Optic
- Slot Sensors
- Photoelectric
- Laser
- Proximity
- Displacement
- Magnetic
- Contact
- Area
- Ultrasonic
- AI Image
- Code Readers
- Vibration
- Temperature
- RFID
- Safety door lock
- Pressure Switch
- Communication
- Accessories

Guidance

Photoelectric

- Cylindrical
- IP69K high protection type
- Square
- Flat type
- Thin type
- BGS
- Color/Mark Detection
- TOF type

Reflectors

- Reflectors



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Basic Features	Working Principle	Photoelectric Sensor	
	Housing Style	Square	
	Optical Working Principle	Background suppression diffuse reflection	
	Detection Range	5~300mm	5~300mm
	Setting distance	25~300mm	25~300mm
	Spot Size	Infrared red light(Approx. Ø16mm at 300mm)	Approx. Ø18mm (at 300mm)
	Light Source	Infrared LED 940nm(modulated)	Blue LED 470nm(modulated)
	Indicator Light	Operation Indicator: Green; Action Indicator: Red	
	Sensitivity Adjustment	6-turn Potentiometer	
Electrical data	Switching Mode	L.on (light-on action)/D.on (dark-on action) switchable	
	Output Mode	NPN or PNP collector open	
	Response Time	≤1ms	
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Mechanical data	Maximum Tightening Torque	≤0.5N	
	Connection Method	M8/4-pin Connector	
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	Weight	Approx. 10g	
	Accessories	Screwdriver, Bracket, Screws and Nuts	
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	PNP	ESB-BV30APE	ESB-BY30APE

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Slot Sensors

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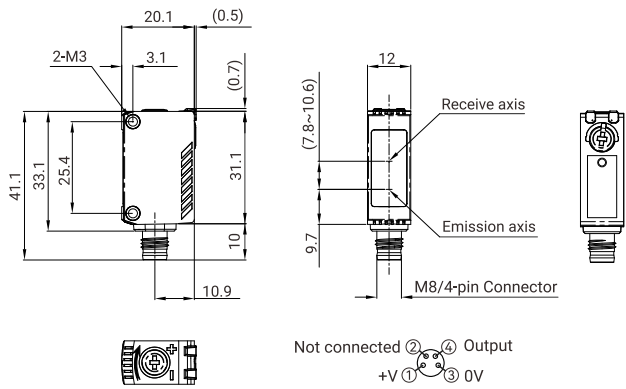
BGS

Color/Mark Detection

TOF type

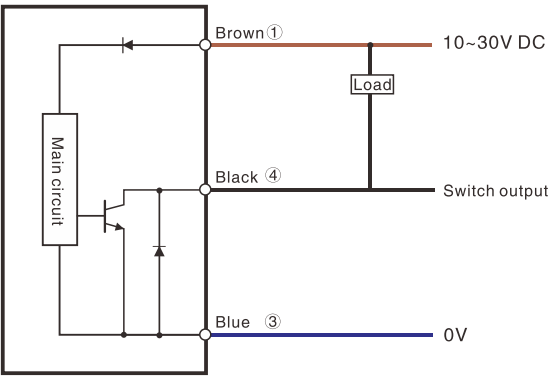
Reflectors

Reflectors

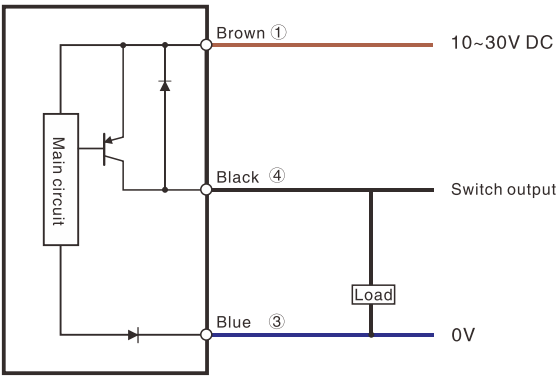


Circuit diagram

NPN Output



PNP Output



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