

Photoelectric sensor

EQ-500 series

Adjustable Range Reflective Photoelectric Sensor Amplifier Built-in Multi-voltage

EQ-500 series



FEATURES

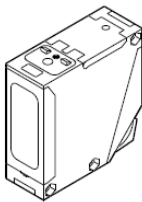
The sensor functions with power supplies from 24 to 240V AC and 12 to 24V DC. With the multivoltage type, a wide product range is available for customers. The relay output assures a high switching capacity. IP67 protection permits use in dusty or splashy environments.

- **Long sensing range:** An adjustable range to 1 m or 2.5 m easily to installation.
- **BGS/FCS function :** Can be separated Background and object with same or close color and glossy surface
- **Flexible output :** This series have 2 type are relay 1a output and NPN/PNP output.
- **Timer Function built-in :** Can setting an ON-delay/OFF-delay timer approx. 0.1 to 5 sec by order model EQ-5□□T
- **IP67 degree of protection :** Red LED stronger for use in dust, dirt and some water splashes.
- **Easy to set adjuster with indicator:** Equipped with a 2-turn adjuster with indicator, making it easy to set for short or long distances.
- **Screw terminal block type :** Cabling enabled by way of a terminal block that eliminates waste.
- **Light-ON/dark-ON modes :** Can select output operation mode by Switchable

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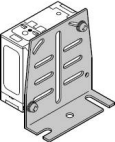
EQ-500 series

SPECIFICATIONS

Type		Appearance	Sensing range	Model no.	Supply voltage	Output	Timer function	
Multi-voltage			0.1 to 2.5 m	EQ-501	24-240 V AC ±10 % or 12 to 240 V DC ±10 %	Relay contact 1a	-----	
	With Timer			EQ-501T			ON-delay/OFF-delay timer (Timer period: 0.1 to 5 sec.)	
			EQ-502	-----				
	With Timer		EQ-502T	ON-delay/OFF-delay timer (Timer period: 0.1 to 5 sec.)				
DC-voltage				0.1 to 2.5 m	EQ-511	12 to 24 V DC ±10 %	NPN open-collector transistor PNP open-collector transistor (Equipped with 2 outputs)	-----
	With Timer				EQ-511T			ON-delay/OFF-delay timer (Timer period: 0.1 to 5 sec.)
				EQ-512	-----			
	With Timer			EQ-512T	ON-delay/OFF-delay timer (Timer period: 0.1 to 5 sec.)			

OPTIONS

- Sensor mounting bracket

Type	Appearance	Model no.	Description
Sensor mounting bracket		MS-EQ5-01	Foot/back angled mounting bracket

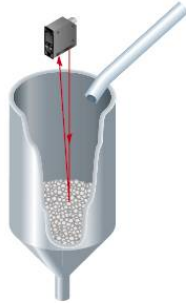
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APPLICATIONS

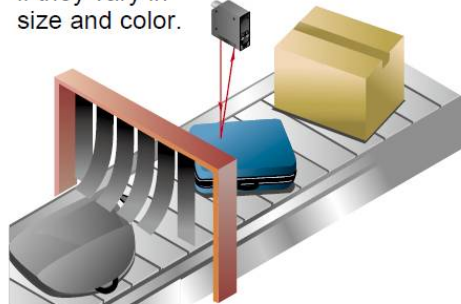
Level check within the hopper

The distance to the object can be set to enable residual amount sensing in the hopper regardless of color.



Confirmation of the passage of packages on a conveyor belt

Can accurately detect packages even if they vary in size and color.

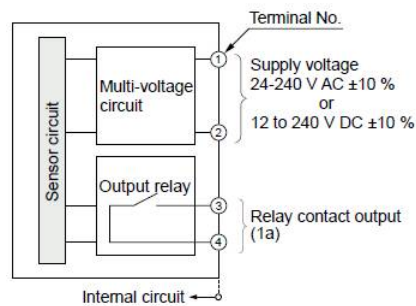


I/O CIRCUIT AND WIRING DIAGRAMS

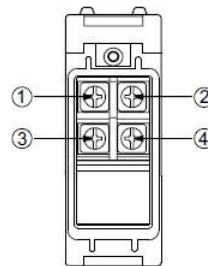
• NPN output type

For EQ-501 (T) EQ-502 (T)

I/O circuit diagram



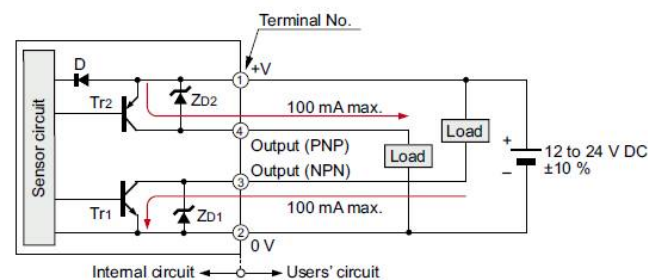
Terminal arrangement diagram



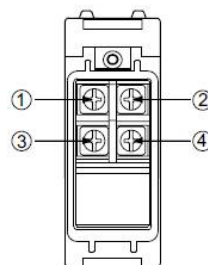
• PNP output type

For EQ-511(T) EQ-512(T)

I/O circuit diagram



Terminal arrangement diagram



Symbols ... D: Reverse supply polarity protection diode
ZD1, ZD2: Surge absorption zener diode
Tr1: NPN output transistor
Tr2: PNP output transistor