

# Built-in Power Supply Photoelectric Sensor

## E3JK <NEW>

### Long-distance Photoelectric Sensor That Supports AC/DC Power Supplies



- Long sensing distance that is approximately 8 times that of our conventional model (for the Through-beam and Diffuse-reflective models). (Through-beam: 40 m, Retro-reflective: 7 m, and Diffuse-reflective: 2.5 m.)
- Improved visibility:
  - A red LED that makes the spot visible.
  - Large indicators that can be seen even from a distance.
- Improved operability. (Enlarged sensitivity adjuster and operation selector)
- Freely selectable power supply input (24 to 240 VDC, 24 to 240 VAC). (Additional types added to the DC type lineup.)



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

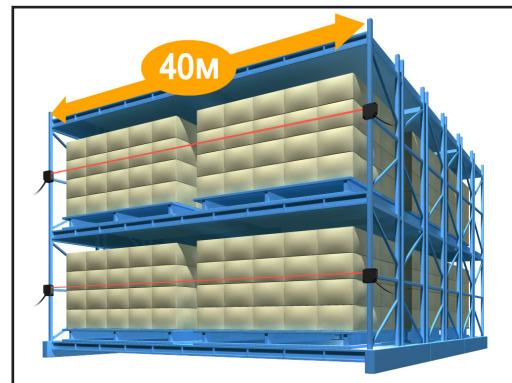
 Refer to the *Safety Precautions* on page 12.

### Applications

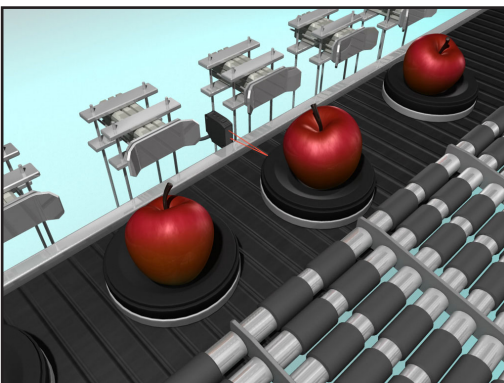
Elevator cage detection



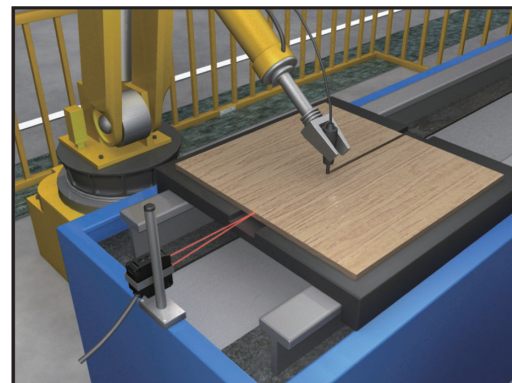
Detection of packages jutting out from their storage location



Pallet detection for agricultural produce conveyors




Workpiece detection for woodworking machines






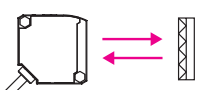

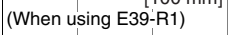
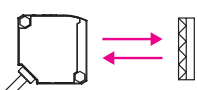

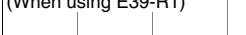
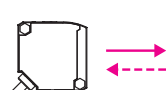


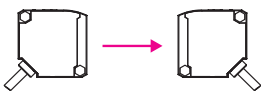


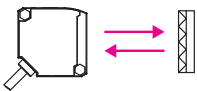

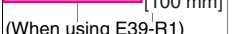
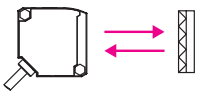


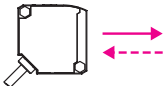

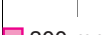
# E3JK

## Ordering Information

### Sensors

 Red light

#### Sensors without Brackets or Reflectors

Power supply voltage	Sensing method	Appearance	Sensing distance	Output configuration	Model	
AC/DC power supply selectable type	Through-beam *1 (Emitter + Receiver)		 40 m	Relay	<b>E3JK-TR11 2M</b>	
			 5 m		<b>E3JK-TR12 2M</b>	
	Retro-reflective without MSR function		 7 m <sup>*3</sup> [100 mm] (When using E39-R1)	Relay	<b>E3JK-RR11 2M</b>	
			 11 m <sup>*3</sup> [100 mm] (When using E39-R2)			
	Retro-reflective with MSR function		 6 m <sup>*3</sup> [100 mm] (When using E39-R1)	Relay	<b>E3JK-RR12 2M</b>	
			 10 m <sup>*3</sup> [100 mm] (When using E39-R2)			
	Diffuse-reflective		 2.5 m	Relay	<b>E3JK-DR11 2M</b>	
			 300 mm		<b>E3JK-DR12 2M</b>	
	DC	Through-beam *1 (Emitter + Receiver)		 40 m	NPN	<b>E3JK-TN11 2M</b>
				 5 m	PNP	<b>E3JK-TP11 2M</b>
NPN					<b>E3JK-TN12 2M</b>	
PNP				<b>E3JK-TP12 2M</b>		
Retro-reflective without MSR function			 7 m <sup>*3</sup> [100 mm] (When using E39-R1)	NPN	<b>E3JK-RN11 2M</b>	
			 11 m <sup>*3</sup> [100 mm] (When using E39-R2)	PNP	<b>E3JK-RP11 2M</b>	
Retro-reflective with MSR function			 6 m <sup>*3</sup> [100 mm] (When using E39-R1)	NPN	<b>E3JK-RN12 2M</b>	
			 10 m <sup>*3</sup> [100 mm] (When using E39-R2)	PNP	<b>E3JK-RP12 2M</b>	
Diffuse-reflective			 2.5 m	NPN	<b>E3JK-DN11 2M</b>	
				PNP	<b>E3JK-DP11 2M</b>	
			 300 mm	NPN	<b>E3JK-DN12 2M</b>	
				PNP	<b>E3JK-DP12 2M</b>	

\*1. Through-beam Sensors are sold in sets that include both the Emitter and Receiver.

\*2. A Reflector is not included. Purchase a Reflector separately to match the intended use of the Sensor.

\*3. Values in parentheses indicate the minimum required distances between the Sensors and Reflectors.