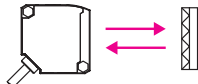
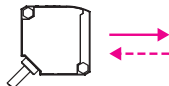


Sensors

 Red light

Sensors with Brackets and Reflectors (The model numbers contain ("-C."))

Power supply voltage	Sensing method	Appearance	Sensing distance	Output configuration	Model
AC/DC power supply selectable	Through-beam *1 (Emitter + Receiver)		 40m	Relay	E3JK-TR11-C 2M
			 5m		E3JK-TR12-C 2M
	Retro-reflective without MSR function		 7m *2 [100mm] (When using E39-R1)		E3JK-RR11-C 2M
			 11m [100mm] (When using E39-R2)		
	Retro-reflective with MSR function		 6m *2 [100mm] (When using E39-R1)		E3JK-RR12-C 2M
			 10m [100mm] (When using E39-R2)		
	Diffuse-reflective		 2.5m		E3JK-DR11-C 2M
			 300mm		E3JK-DR12-C 2M

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

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

Accessories (Order Separately)

Reflectors (A Reflector is required for Retro-reflective Sensors.) [Refer to Dimensions on page 14.]

The E39-R1 is enclosed with Sensors with model numbers that contain "-C."

Name	Sensing distance (rated value)		Model	Quantity
Reflectors	E3JK-R□11	7 m [100 mm] *	E39-R1	1
	E3JK-R□12	6 m [100 mm] *		
	E3JK-R□11	9 m [100 mm] *	E39-R1S	1
	E3JK-R□12	7 m [100 mm] *		
	E3JK-R□11	11 m [100 mm] *	E39-R2	1
	E3JK-R□12	10 m [100 mm] *		

Note: Refer to Engineering Data on page 9 for details.

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

Mounting Bracket [Refer to Dimensions on page 14.]

A Mounting Bracket is enclosed with Sensors with model numbers that contain "-C."

Appearance	Model	Quantity
	E39-L40	1

Note: 1. When using a Through-beam Sensor, order one Mounting Bracket for the Receiver and one for the Emitter.

2. For details, refer to Mounting Brackets on E39-L/E39-S/E39-R which can be accessed from your OMRON website.

E3JK

Ratings and Specifications

Sensing method		Through-beam		
Item	Model	E3JK-TR11-□	E3JK-TN11	E3JK-TP11
Sensing distance		40 m		
Standard sensing object		Opaque: 17-mm dia. min.		
Differential travel		—		
Directional angle		Both Emitter and Receiver 3° min.		
Light source (wavelength)		Red LED (624 nm)		
Power supply voltage		24 to 240 VDC ±10%, ripple (p-p): 10% max. 24 to 240 VAC ±10%, 50/60 Hz	10 to 30 VDC, including ripple (p-p): 10%	
Power consumption	DC	3 W max. (Emitter 1.5 W max. Receiver 1.5 W max.)	40 mA max. (Emitter 25 mA max. Receiver 15 mA max.)	
	AC	3 W max. (Emitter 1.5 W max. Receiver 1.5 W max.)	—	
Control output		Relay output SPDT, 250 VAC, 3 A max. (cosφ= 1), 5 VDC, 10 mA min., Light-ON/Dark-ON selectable	Load power supply voltage: 30 V max., Load current: 100 mA max., Residual voltage: 3 V max., open-collector output (NPN/PNP output depending on model), Light-ON/Dark-ON selectable	
Life expectancy (relay output)	Mechanical	50,000,000 times min. (switching frequency: 18,000 times/h)		
	Electrical	100,000 times min. (switching frequency: 1,800 times/h)		
Response time		20 ms max.	1 ms max.	
Sensitivity adjustment		One-turn adjuster Receiver (E3JK-T□□□-D) only		
Ambient illumination (Receiver side)		Incandescent lamp: 3,000 lx max., Sunlight: 11,000 lx max.		
Ambient temperature range		Operating: -25°C to 55°C, Storage: -40°C to 70°C (with no icing or condensation)		
Ambient humidity range		Operating: 35% to 85%, Storage: 35% to 95% (with no condensation)		
Insulation resistance		20 MΩ min. at 500 VDC		
Dielectric strength		1,500 VAC, 50/60 Hz for 1 min		
Vibration resistance	Destruction	10 to 55 Hz with a 1.5 mm double amplitude for 2 hours each in X, Y, and Z directions		
	Malfunction	10 to 55 Hz with a 1.5 mm double amplitude for 2 hours each in X, Y, and Z directions		
Shock resistance	Destruction	500 m/s ² for 3 times each in X, Y, and Z directions		
	Malfunction	100 m/s ² for 3 times each in X, Y, and Z directions	500 m/s ² for 3 times each in X, Y, and Z directions	
Degree of protection		IEC 60529 IP64		
Connection method		Pre-wired (standard length: 2 m)		
Weight (packed state)		Approx. 350 g	Approx. 300 g	
Material	Case	ABS (Acrylonitril Butadiene Styrene)		
	Lens/Display window	Methacrylic resin		
	Adjuster	POM		
	Cable	PVC		
Bending radius of cable		R18		
Accessories		Instruction manual and Mounting Bracket (E3JK-TR11-C only)		