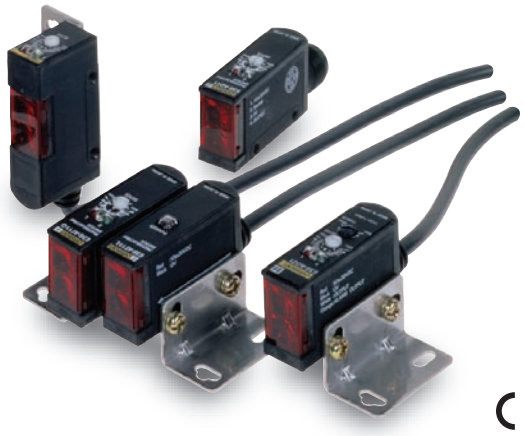
E3S-A

CSM_E3S-A_DS_E_10_2



Be sure to read *Safety Precautions* on page 10.

Ordering Information

Built-in Amplifier Photoelectric Sensors

Red light Infrared light

Sensing method	Appearance	Connection method	Sensing distance	Functions	Model	
					NPN output	PNP output
Through-beam Sensors *1	Horizontal	Pre-wired	7 m	---	**E3S-AT11 2M** Emitter E3S-AT11-L Receiver E3S-AT11-D	**E3S-AT31 2M** Emitter E3S-AT31-L Receiver E3S-AT31-D
				Timer Turbo Self Diagnosis External Diagnosis	**E3S-AT21 2M** Emitter E3S-AT21-L Receiver E3S-AT21-D	**E3S-AT41 2M** Emitter E3S-AT41-L Receiver E3S-AT41-D
		Connector (M12)		---	**E3S-AT16** Emitter E3S-AT16-L Receiver E3S-AT16-D	**E3S-AT36** Emitter E3S-AT36-L Receiver E3S-AT36-D
	Vertical	Pre-wired		---	**E3S-AT61 2M** Emitter E3S-AT61-L Receiver E3S-AT61-D	**E3S-AT81 2M** Emitter E3S-AT81-L Receiver E3S-AT81-D
				Timer Turbo Self Diagnosis External Diagnosis	**E3S-AT71 2M** Emitter E3S-AT71-L Receiver E3S-AT71-D	**E3S-AT91 2M** Emitter E3S-AT91-L Receiver E3S-AT91-D
		Connector (M12)		---	**E3S-AT66** Emitter E3S-AT66-L Receiver E3S-AT66-D	**E3S-AT86** Emitter E3S-AT86-L Receiver E3S-AT86-D
Retro-reflective Sensors	Horizontal	Pre-wired	2 m (100 mm) *2	---	**E3S-AR11 2M**	**E3S-AR31 2M**
				Timer Turbo Self Diagnosis External Diagnosis	**E3S-AR21 2M**	**E3S-AR41 2M**
		Connector (M12)		---	**E3S-AR16**	**E3S-AR36**
	Vertical	Pre-wired		---	**E3S-AR61 2M**	**E3S-AR81 2M**
				Timer Turbo Self Diagnosis External Diagnosis	**E3S-AR71 2M**	**E3S-AR91 2M**
		Connector (M12)		---	**E3S-AR66**	**E3S-AR86**

*1. Through-beam Sensors are normally sold in sets that include both the Emitter and Receiver.
Orders for individual Emitters and Receivers are accepted.
*2. Values in brackets are the minimum required distance between the Sensor and Reflector.

Sensing method	Appearance	Connection method	Sensing distance	Functions	Model	
					NPN output	PNP output
Diffuse-reflective Sensors	Horizontal 	Pre-wired	100 mm (wide view)	---	E3S-AD13 2M	E3S-AD33 2M
				Timer, Self Diagnosis	E3S-AD23 2M	E3S-AD43 2M
			200 mm	---	E3S-AD11 2M	E3S-AD31 2M
				Timer, Turbo, Self Diagnosis	E3S-AD21 2M	E3S-AD41 2M
			700 mm	---	E3S-AD12 2M	E3S-AD32 2M
				Timer, Turbo, Self Diagnosis	E3S-AD22 2M	E3S-AD42 2M
		Connector (M12)	100 mm (wide view)	---	E3S-AD18	E3S-AD38
			200 mm		E3S-AD16	E3S-AD36
			700 mm		E3S-AD17	E3S-AD37
	Vertical 	Pre-wired	100 mm (wide view)	---	E3S-AD63 2M	E3S-AD83 2M
				Timer, Self Diagnosis	E3S-AD73 2M	E3S-AD93 2M
			200 mm	---	E3S-AD61 2M	E3S-AD81 2M
				Timer, Turbo, Self Diagnosis	E3S-AD71 2M	E3S-AD91 2M
			700 mm	---	E3S-AD62 2M	E3S-AD82 2M
				Timer, Self Diagnosis	E3S-AD72 2M	E3S-AD92 2M
		Connector (M12)	100 mm (wide view)	---	E3S-AD68	E3S-AD88
			200 mm		E3S-AD66	E3S-AD86
			700 mm		E3S-AD67	E3S-AD87

Accessories (Order Separately)

Insert-type Long Slit

Slit width	Sensing distance	Minimum sensing object (typical)	Model	Quantity	Remarks
0.5 mm × 11.1 mm	500 mm	0.2-mm dia.	E39-S46	1 of each for Emitter/ Receiver (4 Slits total)	Slits can be used with the E3S-AT□□ Through-beam Sensor.➜Page 10
1 mm × 11.1 mm	1.1 m	0.4-mm dia.			
2 mm × 13.6 mm	2.5 m	0.8-mm dia.		1 of each for Emitter/ Receiver (2 Slits total)	

Mutual Interference Prevention Filters

Sensing distance	Model	Quantity	Remarks
2.4 m	E39-E6	2 of each for Emitter/Receiver (4 Filters total)	Can be used with the E3S-AT□□ Through-beam Sensor. ➜ Page 11

Reflectors/Other Accessories

Name	Sensing distance (typical)	Model	Quantity	Remarks
Reflectors	2 m (100 mm) * (rated value)	E39-R1	1	Provided with E3S-AR□□ Retro-reflective Sensor.
Small Reflectors	1.3 m (100 mm) *	E39-R3	1	---
	600 mm (70 mm) *	E39-R4	1	---
Tape Reflectors	450 mm (100 mm) *	E39-RS1	1	Enables MSR function.
	700 mm (100 mm) *	E39-RS2	1	
	900 mm (100 mm) *	E39-RS3	1	
Optical Axis Confirmation Reflector	---	E39-R5	1	Used to check optical axis for the E3S-AT□□ Through-beam Sensor.

Note: When using any Reflector other than the provided one, use a sensing distance of approximately 0.7 times the typical value as a guide.
*Values in brackets are the minimum required distance between the Sensor and Reflector.