

E3S-A

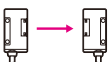
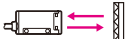


 Be sure to read *Safety Precautions* on page 10.

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	Horizontal 	Pre-wired	 7 m			---	E3S-AT11	E3S-AT31
		Connector (M12)				 Turbo  External Diagnosis	E3S-AT21	E3S-AT41
	Vertical 	Pre-wired				---	E3S-AT16	E3S-AT36
		Connector (M12)				---	E3S-AT61	E3S-AT81
		Pre-wired				 Turbo  External Diagnosis	E3S-AT71	E3S-AT91
		Connector (M12)				---	E3S-AT66	E3S-AT86
Retro-reflective Sensors	Horizontal 	Pre-wired	 2 m (100 mm) *1			---	E3S-AR11	E3S-AR31
		Connector (M12)				 Turbo  External Diagnosis	E3S-AR21	E3S-AR41
	Vertical 	Pre-wired				---	E3S-AR16	E3S-AR36
		Connector (M12)				---	E3S-AR61	E3S-AR81
		Pre-wired				 Turbo  External Diagnosis	E3S-AR71	E3S-AR91
		Connector (M12)				---	E3S-AR66	E3S-AR86

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 *2	E3S-AD33
				Timer Self Diagnosis	E3S-AD23	E3S-AD43
			200 mm	---	E3S-AD11	E3S-AD31
				Timer Turbo Self Diagnosis	E3S-AD21	E3S-AD41
			700 mm	---	E3S-AD12	E3S-AD32
				Timer Turbo Self Diagnosis	E3S-AD22	E3S-AD42
		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 *2	E3S-AD83
				Timer Self Diagnosis	E3S-AD73	E3S-AD93
			200 mm	---	E3S-AD61	E3S-AD81
				Timer Turbo Self Diagnosis	E3S-AD71	E3S-AD91
			700 mm	---	E3S-AD62	E3S-AD82
				Timer Self Diagnosis	E3S-AD72	E3S-AD92
		Connector (M12)	100 mm (wide view)	---	E3S-AD68	E3S-AD88
			200 mm		E3S-AD66	E3S-AD86
			700 mm		E3S-AD67	E3S-AD87

*1. Values in brackets are the minimum required distance between the Sensor and Reflector.

*2. The following models are available with 200-mm sensing distances: E3S-AD14 and E3S-AD64.

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.		1 of each for Emitter/Receiver (2 Slits total)	
2 mm × 13.6 mm	2.5 m	0.8-mm dia.			

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.