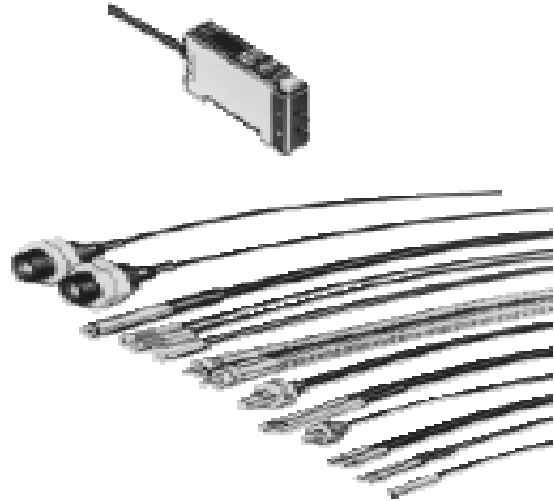


High Performance Amplifier Has Fast Response Time, Longer Sensing Distance and Self-Diagnostic Functions

- Ultra fast 20 μ sec. response time (E3X-F)
- Extended sensing distance (E3X-H)
- User friendly features:
 - 8-turn sensitivity with position indicator
 - IP66 enclosure rating
 - Slim body mounts on DIN rail
- Set-mode blinking light source aids alignment



Ordering Information

■ AMPLIFIERS

Part number	NPN output	E3X-A11	E3X-A21	E3X-F21	E3X-VG11	E3X-VG21
	PNP output	E3X-A41	E3X-A51	E3X-F51	—	—
Type	General-purpose			High-speed	Mark sensing	
Self-diagnostic function	None	Provided	Provided	Provided	None	Provided
Off-delay timer	None	Provided	Provided	Provided	None	Provided
Light source	Red LED				Green LED	

■ HIGH GAIN AMPLIFIERS

Part number	NPN output	E3X-H11
Type	High sensitivity	
Self diagnostic function	None	
Off-delay timer	Provided	
Light source	Red LED	

■ FIBER-OPTIC CABLES

Use E32-series fiber-optic cables. Refer to E32 data sheet in this catalog for specifications.

■ ACCESSORIES

Description		Part number
Cover with adjustment knob	Clear cover with gray knob allows sensitivity adjustment without removing cover. Enclosure rating is reduced to IP50.	E39-G3
Replacement cover	Smoked gray plastic like original cover	E39-G4

Note: Neither cover has any printing, such as part number, voltage or wiring information.

Specifications

Part number		NPN	E3X-A11	E3X-A21	E3X-F21	E3X-VG11	E3X-VG21
		PNP	E3X-A41	E3X-A51	E3X-F51	—	—
Supply voltage		10-30 VDC 10% ripple max.			12-24 VDC±10% 10% ripple max.	10-30 VDC 10% ripple max.	
Current consumption		35 mA max.			40 mA max.		
Required fiber optic cables		All E32-series					
Light source		Pulse-modulated red LED (660 nm)				Pulse-modulated green LED (565 nm)	
Operation mode		Light-ON, Dark-ON or SET modes (switch selectable)					
Sensitivity		8-turn potentiometer with clutch and indicator					
Mutual interference protection		Not provided					
Control output	DC solid-state	Type	NPN — open collector PNP — open collector				
		Max. load	100 mA, 30 VDC max.				100 mA, 40 VDC max.
		Max. ON-state voltage drop	1 VDC max. at 100 mA				
Response time		200 μs max.			ON: 20 μs max. OFF: 30 μs max.	200 μs max.	
Timing functions		—	OFF-delay, 0.01 to 0.1 sec, adjustable; switch selectable			—	OFF-delay, 0.01 to 0.1 sec, adjustable; switch selectable
Alarm output		—	50 mA, 30 VDC max.			—	50 mA, 40 VDC max.
Check input	Input voltage	—	Light OFF: 1.5 V max.			—	Light OFF: 1.5 V max.
Circuit protection		Output short circuit protection, DC power reverse polarity protection					
Indicators		Light received (red LED) and output stability (green LED)					
Materials	Case	Heat-resistant ABS					
	Cover	Polycarbonate					
Mounting		DIN rail track, or on flat surface through holes in bracket (provided)					
Connections	Prewired	3 conductor cable, 2 m (6.5 ft)	5 conductor cable, 2 m (6.5 ft)			3 conductor cable, 2 m (6.5 ft)	5 conductor cable, 2 m (6.5 ft)
Weight		100 g (3.5 oz.) with 2 m cable					
Enclosure rating	IEC	IP66 (with cover on)					
Ambient temperature	Operating	-25° to 55°C with no ice buildup (-13° to 131°F)					
	Storage	-40° to 70°C (-40° to 158°F)					

■ HIGH GAIN AMPLIFIER

Part number		E3X-H11	
Supply voltage		10 - 30 VDC 10% ripple max.	
Current consumption		35 mA max.	
Required fiber optic cables		All E32 series	
Light source		Pulse modulated Red LED (660 nm)	
Operation mode		Light ON, Dark ON	
Sensitivity		8 turn potentiometer	
Control output	DC solid-state	Type	NPN - Open collector
		Max. load	100 mA, 30 VDC
		Max. ON-state voltage drop	1 VDC max. at 100 mA
Response time		1 m sec max.	
Timing functions		OFF DELAY 40 ms Fixed Switch selectable	
Circuit protection		Output short-circuit protection, DC power reverse polarity protection	
Indicators		Light received (Red LED) and output stability (Green LED)	
Materials	Case	Heat resistant ABS	
	Cover	Polycarbonate	
Mounting		DIN rail track, or on flat surface through holes in bracket (provided)	
Connections	Prewired	3 conductor cable 2 m (6.5 ft)	
Weight		100g (3.5 oz) with 2 m cable	
Enclosure ratings	IEC	IP66 (with cover on)	
Ambient temperature	Operating	-25° to -55°C with no icing build-up (-13° to 131°F)	
	Storage	-40° to 70°C (-40° to 158°F)	