

# Channel ACTION ALERT!

**OMRON**

**NO: PH-139**  
**DATE: August 2010**

**PRODUCT: E3X-NT/-NV-NVG Sensors**  
**TYPE: Discontinuation Notice**

**E3X-NT/E3X-NV/E3X-NVG Fiber-Optic Sensor Amplifiers were Discontinued July 2010; Use E3X-SD or E3X-DA Series**

Product Discontinuation	Recommended Replacement
E3X-NT series E3X-NV series E3X-NVG series	E3X-SD series E3X-DA**V series E3X-DA-S series

Omron discontinued these older series of fiber-optic sensor amplifiers due to low sales volume. Help users migrate to easier-to-use models with digital displays that also offer greater stability.

**Discontinuation date: The end of July, 2010**

## Caution on applying recommended replacements

The recommended replacements for E3X-NT/NV/NVG series provide a teaching function and a digital display for easier setup and use. The specifications of the replacements have been enhanced and the detection is more stable.

Please use the recommended replacements.

1. Migrating from E3X-NVG21 to E3X-DAC\*1-S series, the light source is changed from red LED to white LED.
2. When it is substituted by the E3X-SD series, the residual voltage of the control output increases to 1.5 V max. from 1 V max.
3. When it is substituted by the E3X-DAC-S series, the residual voltage of the control output increases to 2 V max. from 1 V max.
4. The load current for replacement models goes down to 50 mA max. from 100 mA max.

## Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
E3X-SD□1	--	*	*	*	*	*	*
E3X- DA*V	--	--	*	*	*	*	*
E3X-DA*-S	--	--	*	*	*	*	*

\*\* : Fully compatible

\* : The change is a little / Almost compatible

-- : Not compatible

- : No corresponding specification

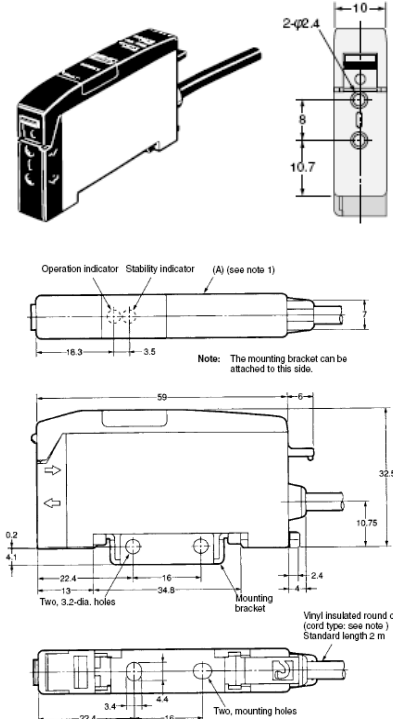
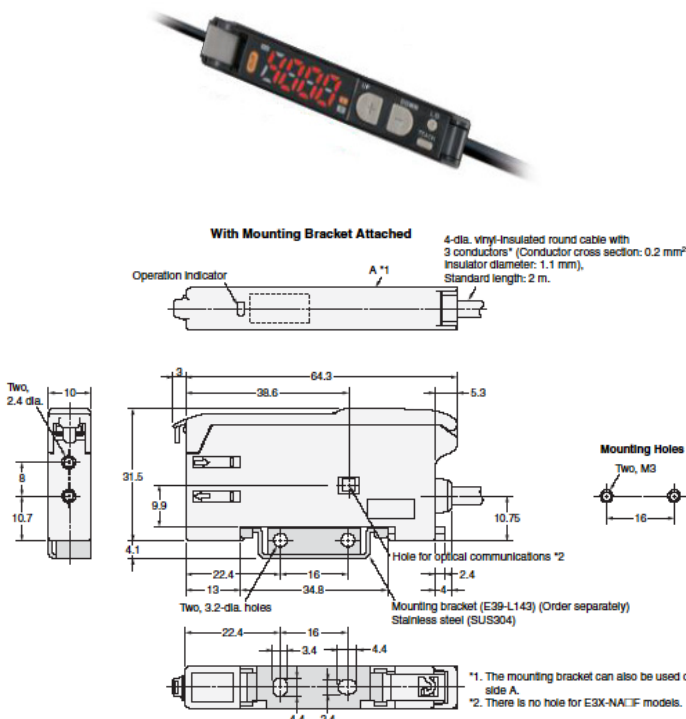
## Product Discontinuation/Recommended Replacement

Product discontinuation	How to select the replacement	Recommended replacements
E3X-NT11 2M	—	E3X-SD21 2M
E3X-NT11 5M	—	E3X-SD21 5M
E3X-NT41 2M	—	E3X-SD51 2M
E3X-NT41 5M	—	E3X-SD51 5M
E3X-NT21 2M E3X-NT21 5M	When timer or remote teaching input function is unnecessary.	E3X-SD21 2M E3X-SD21 5M
	When timer or remote teaching input function is necessary.	E3X-DA21-S 2M E3X-DA21-S 5M
E3X-NT51 2M E3X-NT51 5M	When timer or remote teaching input function is unnecessary.	E3X-SD51 2M E3X-SD51 5M
	When timer or remote teaching input function is necessary.	E3X-DA51-S 2M
E3X-NT11-M1J 0.3M	—	—
E3X-NT41-M1J 0.3M	—	—
E3X-NV21 2M	—	E3X-DA11V 2M
E3X-NVG21 2M	—	E3X-DAC21-S 2M

## Body color

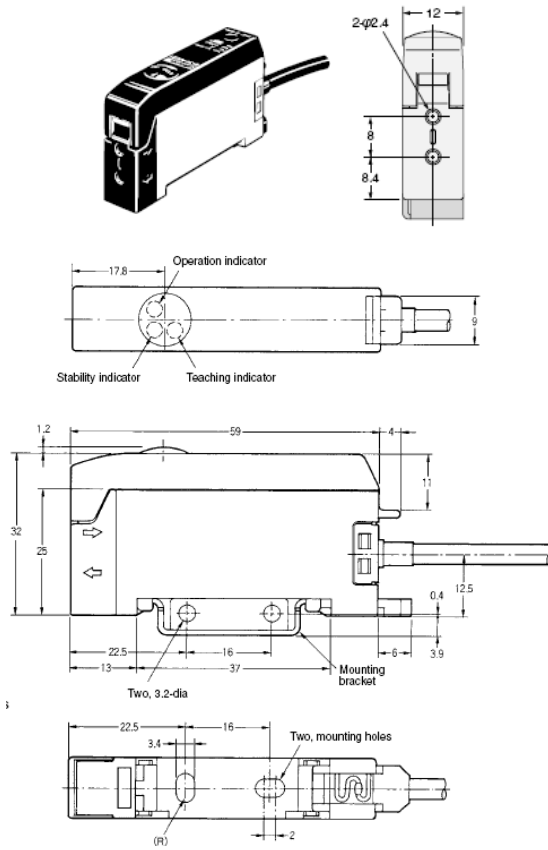
Product discontinuation E3X-NT/NV/NVG series	Recommended replacement E3X-SD/DAV/DA-S series
Case: Light gray	Black

## Dimensions

Product discontinuation E3X-NT/NV/NVG series	Recommended replacement E3X-SD/DAV/DA-S series
<p><b>E3X-NT series</b></p> 	<p><b>E3X-SD series</b></p>  <p>*1. The mounting bracket can also be used on side A. *2. There is no hole for E3X-NA11F models.</p>

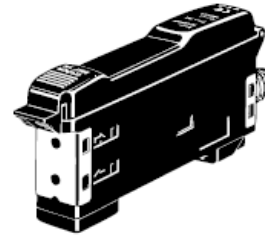
**Product discontinuation  
E3X-NT/NV/NVG series**

**E3X-NV/NVG series**

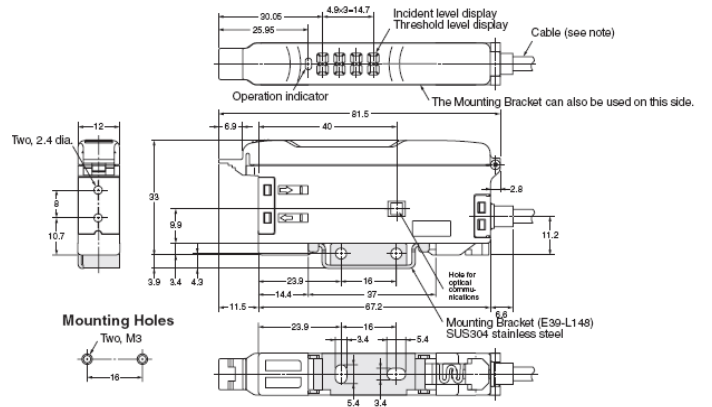


**Recommended replacement  
E3X-SD/DAV/DA-S series**

**E3X-DAV series**



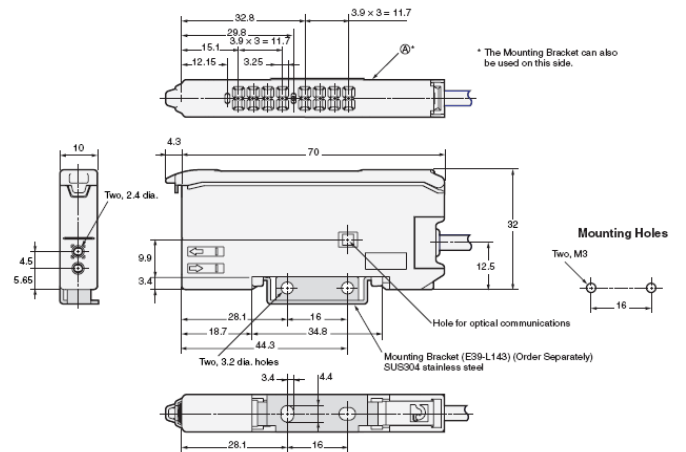
**With Mounting Bracket Attached**



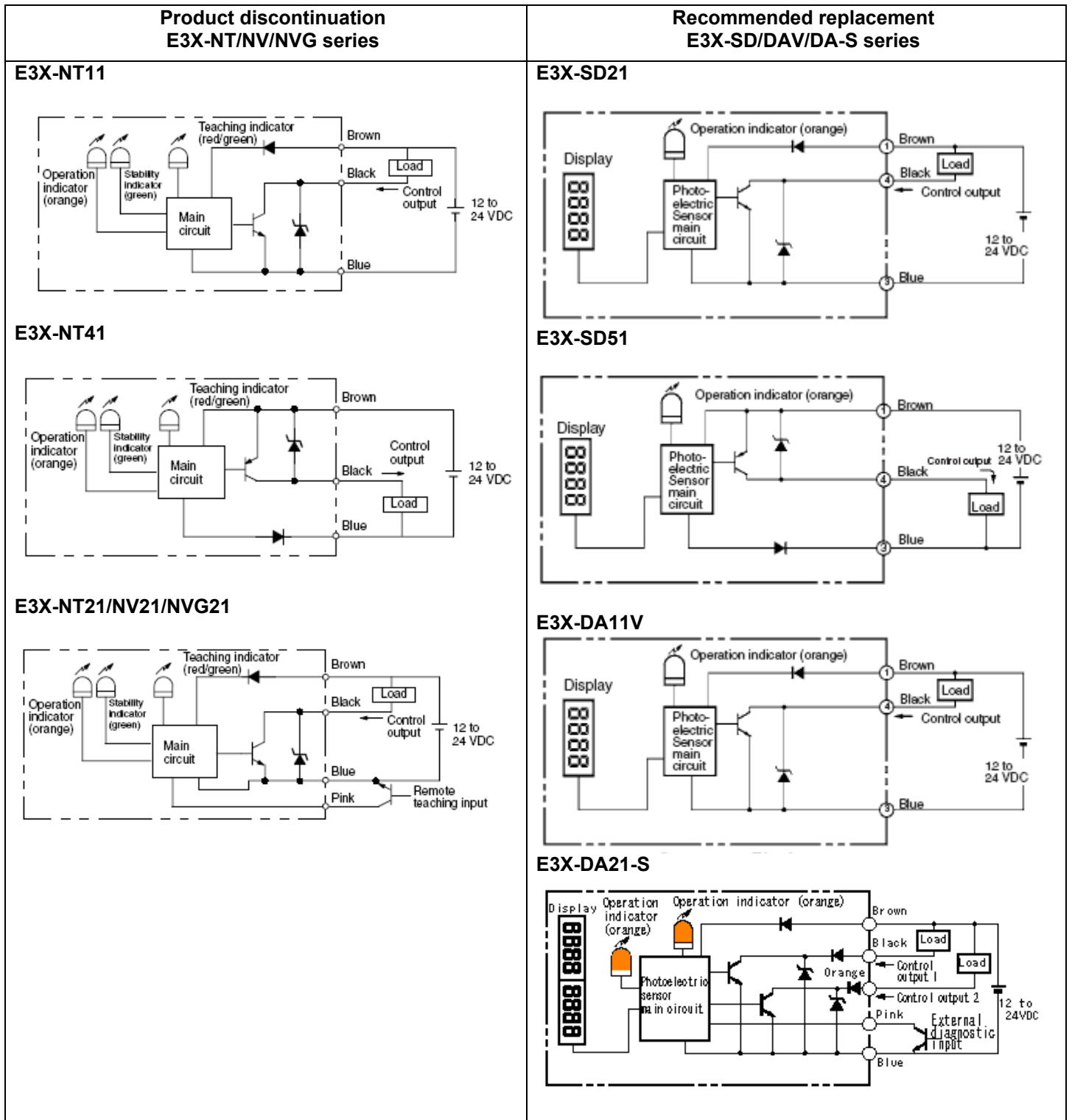
**E3X-DA-S series**

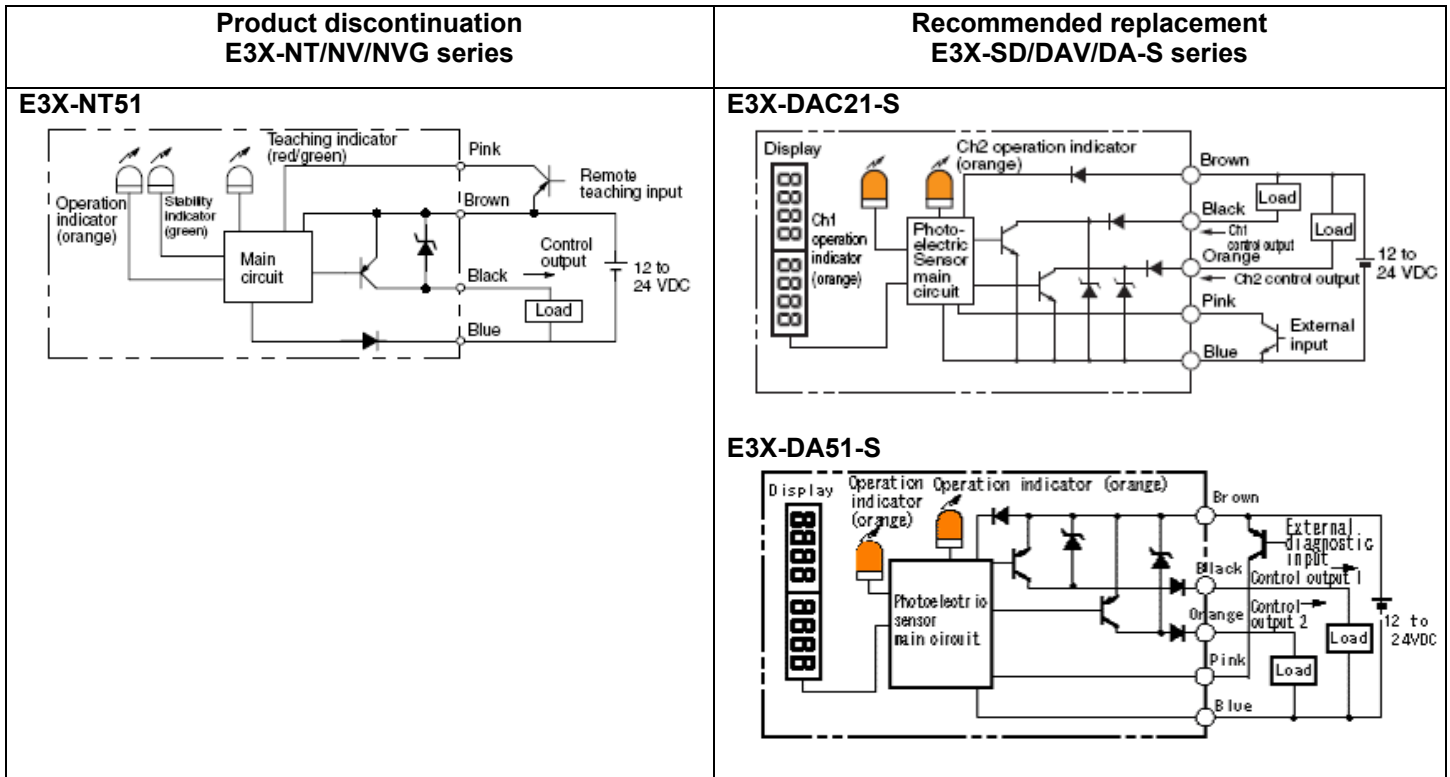


**With Mounting Bracket Attached**

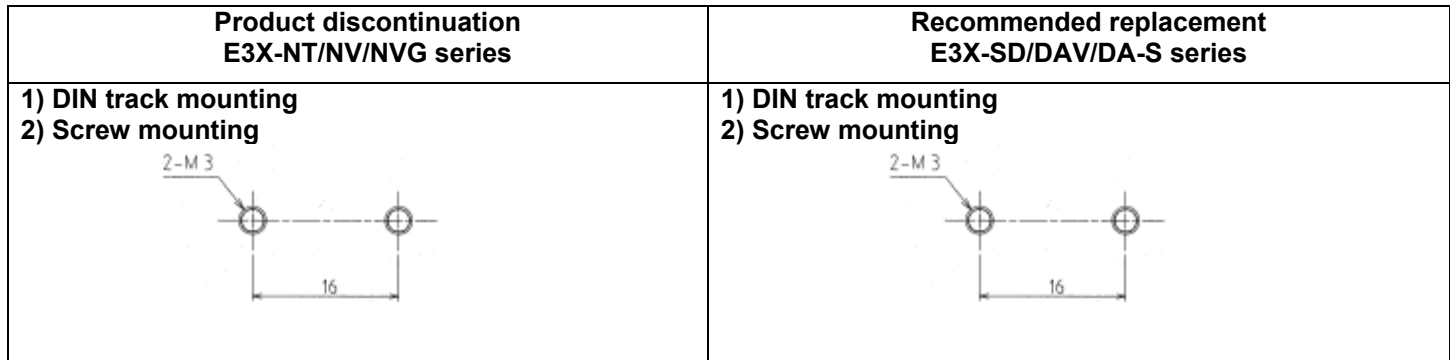


# Wire Connection





### Mounting Dimensions



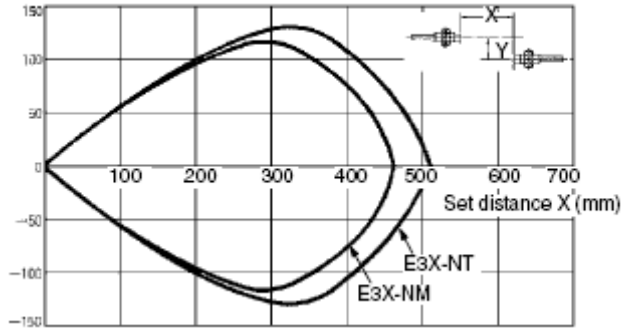
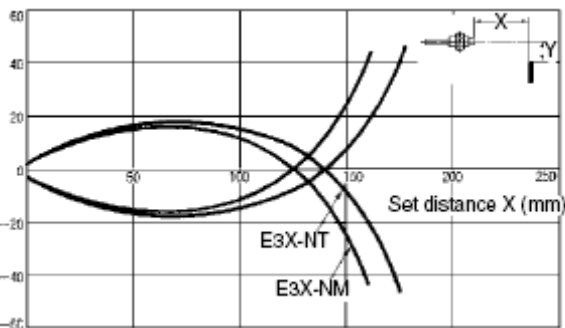

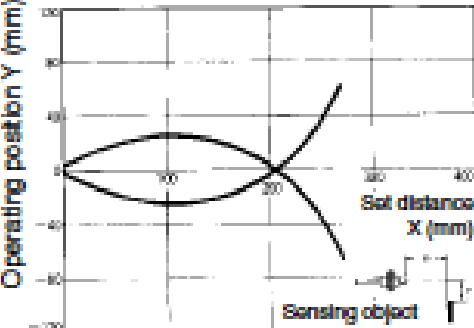
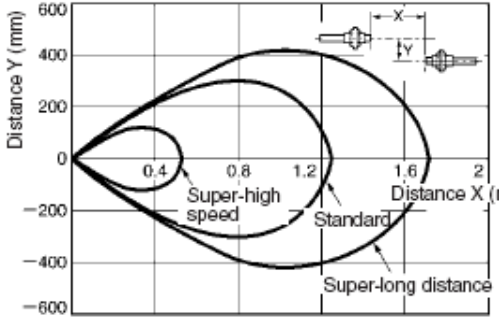
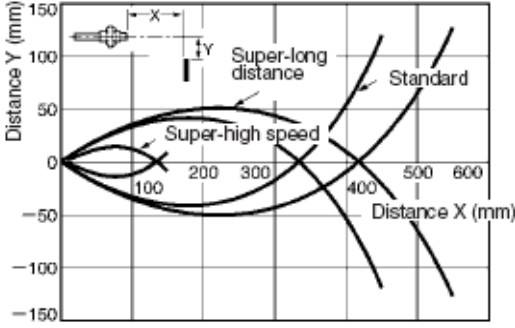
## Characteristics

Item		Product discontinuation		Recommended replacement	
Model	PNP output	E3X-NT11	E3X-NT21	E3X-SD21	E3X-DA21-S
	PNP output	E3X-NT41	E3X-NT51	E3X-SD51	E3X-DA51-S
Light source (wavelength)		Red LED (680nm)		Red LED (625nm)	
Power supply voltage		12 to 24 VDC $\pm$ 10%, ripple (p-p): 10% max.			
Power consumption Current consumption		50mA max		960mW max (current consumption: 40mA max. at power supply voltage of 24 VDC)	
Control output		Load power supply voltage: 26.4 VDC; open collector; Load current: 100 mA max.; Residual voltage: 1V max.		Load power supply voltage: 26.4 VDC; open collector; Load current: 50 mA max.; Residual voltage: 1.5V max.	
External input		none	have	none	have
Response time		Operate or reset: 200 $\mu$ s max.		Operate or reset: 200 $\mu$ s max.	
Sensitivity setting		Teaching method		Teaching or manual method	
Timer function		none	OFF delay time:40ms	none	Timer type: Timer disabled, OFF delay, ON delay, one-short, OFF delay+ON delay Timer time: 1 ms to 5 s (variable)
Display		Operation indicator (orange LED), Stable indicator (green LED) Teaching indicator (red LED, green LED)		Operation indicator (orange LED), Lon / Don indicator (orange LED), Teaching indicator (orange LED)	
Sensing Distance (E32-DC200)		110mm		300mm	
Ambient temperature		Operating: $-25^{\circ}\text{C}$ to $55^{\circ}\text{C}$ Storage: $-40^{\circ}\text{C}$ to $70^{\circ}\text{C}$ (with no icing or condensation)		Operating: Groups of 1 to 3 Amplifiers: $-25^{\circ}\text{C}$ to $55^{\circ}\text{C}$ Groups of 4 to 11 Amplifiers: $-25^{\circ}\text{C}$ to $50^{\circ}\text{C}$ Groups of 12 to 16 Amplifiers: $-25^{\circ}\text{C}$ to $45^{\circ}\text{C}$ (with no icing or condensation) Storage: $-30^{\circ}\text{C}$ to $70^{\circ}\text{C}$ (with no icing or condensation)	
Degree of protection		IEC 60529 IP50 (with Protective Cover attached)			
Materials	Case	Polybutylene terephthalate (PBT)			
	Cover	Polycarbonate			

**Characteristics (continued)**

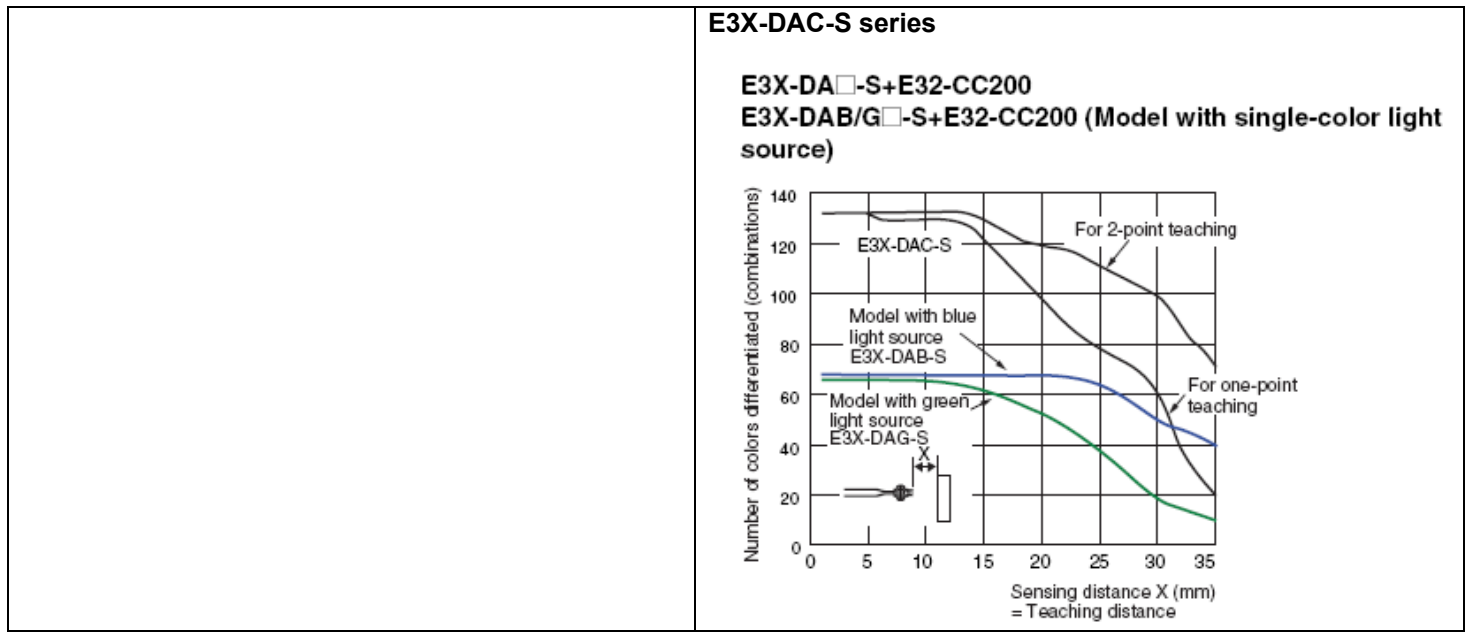
Item		Product discontinuation		Recommended replacement	
Model	PNP output	E3X-NV21	E3X-NVG21	E3X-DA11V	E3X-DAC11-S
Light source (wavelength)		Red LED (680nm)	Green LED (565nm)	Red LED (660nm)	White LED (420~700nm)
Power supply voltage		12 to 24 VDC $\pm$ 10%, ripple (p-p): 10% max.			
Power consumption Current consumption		50mA max		960mW max (current consumption: 40mA max. at power supply voltage of 24 VDC)	
Control output		Load power supply voltage: 26.4 VDC; open collector; Load current: 100mA max.; Residual voltage: 1V max.		Load power supply voltage: 26.4 VDC; open collector; Load current: 50mA max.; Residual voltage: 1V max.	
External input		none	have	none	have
Response time		Operate or reset: 200 $\mu$ s max.		Super-high-speed mode: 0.25 ms for operation and reset respectively Standard mode: 1 ms for operation and reset respectively Super-long-distance mode: 4 ms for operation and reset respectively	
Sensitivity setting		Teaching method		Teaching or manual method	
Timer function		OFF delay timer:40ms		OFF-delay timer: 0 to 200 ms (variable)	
Display		Operation indicator (orange LED), Stable indicator (green LED) Teaching indicator (red LED, green LED)		Operation indicator (orange LED), 7-segment digital display	
Sensing Distance (E32-DC200)		110mm		High-Speed mode: 100mm Standard: 300mm Super-long-distance mode: 400mm	
Ambient temperature		Operating: -25°C to 55°C Storage: -40°C to 70°C (with no icing or condensation)		Operating: Groups of 1 to 3 Amplifiers: -25°C to 55°C Groups of 4 to 11 Amplifiers: -25°C to 50°C Groups of 12 to 16 Amplifiers: -25°C to 45°C (with no icing or condensation) Storage: -30°C to 70°C (with no icing or condensation)	
Degree of protection		IEC 60529 IP66 (with Protective Cover attached)			IEC 60529 IP50 (with Protective Cover attached)
Materials	Case	Polybutylene terephthalate (PBT)			
	Cover	Polycarbonate (PC)			

# Operation Ratings

<p align="center"><b>Product discontinuation</b> <b>E3X-NT/NV/NVG series</b></p>	<p align="center"><b>Recommended replacement</b> <b>E3X-SD/DAV/DA-S series</b></p>
<p><b>Parallel Operating Range (Typical)</b></p> <p><b>E32-TC200</b></p>  <p><b>Operating Range (Typical)</b></p> <p><b>E32-DC200</b></p> 	<p><b>E3X-SD series</b></p> <p><b>Parallel Operating Range (Typical)</b></p> <p><b>E32-TC200</b></p>  <p><b>Operating Range (Typical)</b></p> <p><b>E32-DC200</b></p> 
	<p><b>E3X-DA□□V series</b></p> <p><b>Parallel Operating Range (Typical)</b></p>  <p><b>Operating Range (Typical)</b></p> 



## Operation Ratings (continued)



## Operation Methods

Product discontinuation E3X-NT/NV/NVG series	Recommended replacement E3X-SD/DAV/DAC-S series
Operation with slide switch and push-button.	E3X-DAV/DA-S series Operation with slide switch and push-button. E3X-SD series Operation with push-button.

## Accessories

Product discontinuation E3X-NT/NV/NVG series	Recommended replacement E3X-SD/DAV/DA-S series
1. Instruction Manual 2. Screw mounting (Only E3X-NV series)	1. Instruction Manual