

Product Discontinuation Notices

Photoelectric Sensors

April 1, 2009

No.2009125E

Discontinuation Notice of photoelectric Sensor E3X-NH series

Product Discontinuation



E3X-NH series

Recommended Replacement



**E3X-SD series
E3X-DA-S series**

Discontinuation date : The end of March, 2010

Caution on recommended replacement

- 1) When it is substituted by the E3X-SD series, the residual voltage of the control output becomes it from 1 V max. to 1.5 V max.
- 2) When Auto-tuning (Automatic Sensitivity Compensation) is used, E3X-DA[1AT-S with the ATC function is recommended substitute.
- 3) When timer other than 10 ms are necessary at E3X-NH21 / 51, E3X-DA[1-S with the variable timer function is recommended substitutes.

Difference from discontinued product

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

** : Fully compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

Product Discontinuation and recommended replacement

Product discontinuation		Recommended replacement selection condition	Recommended replacement	
Model	Product code		Model	Product code
E3X-NH11 2M E3X-NH11 5M	E3X 1052E E3X 1056H	When Auto-tuning is unnecessary	E3X-SD11 2M	E3X 7038B
		When Auto-tuning is necessary	E3X-DA11AT-S 2M	E3X 1229C
E3X-NH41 2M E3X-NH41 5M	E3X 1059B E3X 1067C	When Auto-tuning is unnecessary	E3X-SD41 2M	E3X 7039M
		When Auto-tuning is necessary	E3X-DA41AT-S 2M	E3X 1229C
E3X-NH21 2M E3X-NH21 5M	E3X 1061D E3X 1066E	When the timer is used with 10ms	E3X-SD11 2M	E3X 7038B
		When the timer is used excluding 10ms	E3X-DA11-S 2M E3X-DA11-S 5M	E3X 1181E E3X 1208M
		When the timer is used excluding 10ms and Auto-tuning is unnecessary	E3X-DA11AT-S 2M	E3X 1229C
E3X-NH51 2M E3X-NH51 5M	E3X 1062B E3X 1068A	When the timer is used with 10ms	E3X-SD41 2M	E3X 7039M
		When the timer is used excluding 10ms	E3X-DA41-S 2M E3X-DA41-S 5M	E3X 1187D E3X 1512H
		When the timer is used excluding 10ms and Auto-tuning is unnecessary	E3X-DA41AT-S 2M	E3X 1229C
E3X-NH41-M1J 0.3M	E3X 1073H	-	None	-

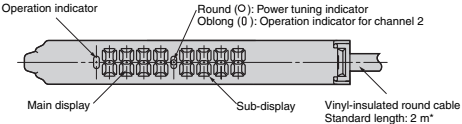
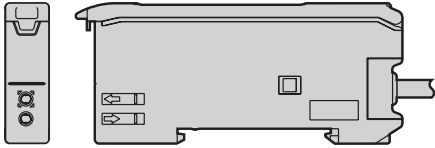
Body color

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
Case ; Light gray	Black

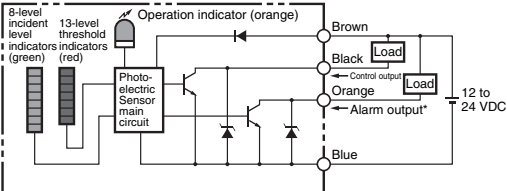
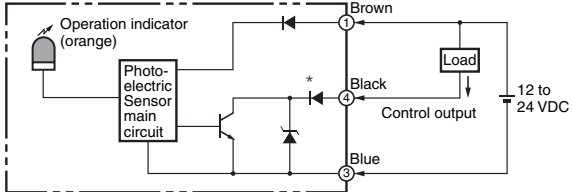
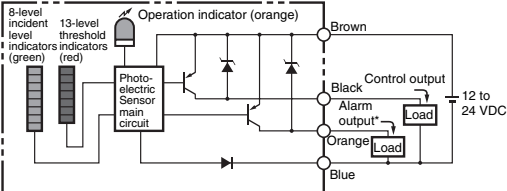
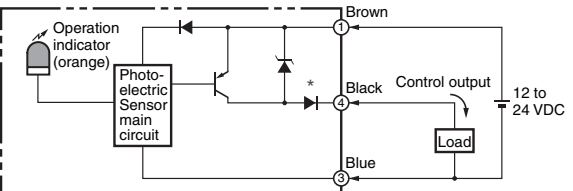
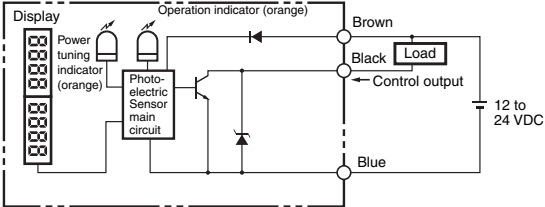
Dimensions

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
<p>Operation indicator (orange)</p> <p>Threshold indicators (red)</p> <p>Incident level indicators (green)</p> <p>* The mounting bracket can be attached to this side.</p> <p>Two, 2.4 dia.</p> <p>Two, 3.2-dia. holes</p> <p>Mounting bracket (removable), stainless steel (SUS 304)</p> <p>Two, mounting holes</p>	<p>E3X-SD series</p> <p>4-dia. vinyl-insulated round cable with 3 conductors* (Conductor cross section: 0.2 mm², Insulator diameter: 1.1 mm), Standard length: 2 m.</p> <p>Operation indicator</p> <p>Mounting Holes Two, M3</p> <p>Hole for optical communications *2</p> <p>Mounting bracket (E39-L143) (Order separately) Stainless steel (SUS304)</p> <p>*1. The mounting bracket can also be used on side A.</p> <p>*2. There is no hole for E3X-NAC/F models.</p>

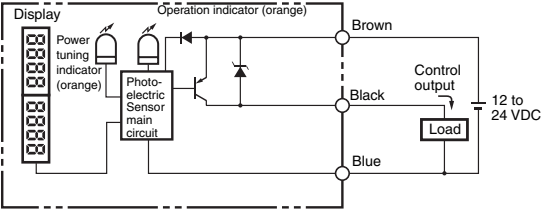
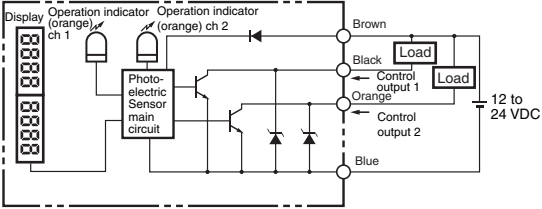
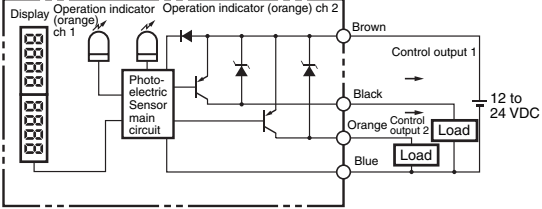
Dimensions

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
	<p data-bbox="874 389 1085 421">E3X-DA-S series</p>  

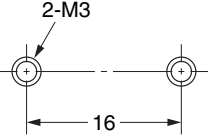
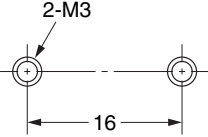
Wire Connection

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
<p data-bbox="245 1014 478 1046">E3X-NH11 / NH21</p> 	<p data-bbox="874 1014 1005 1046">E3X-SD11</p> 
<p data-bbox="245 1305 478 1337">E3X-NH41 / NH51</p> 	<p data-bbox="874 1312 1005 1344">E3X-SD41</p> 
	<p data-bbox="874 1612 1034 1644">E3X-DA11-S</p> 

Wire Connection

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
	<p style="text-align: center;">E3X-DA41-S</p>  <p style="text-align: center;">E3X-DA11AT-S</p>  <p style="text-align: center;">E3X-DA41AT-S</p> 

Mounting dimensions

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
<p>1) Din track mounting</p> <p>2) Screw mounting</p> 	<p>1) Din track mounting</p> <p>2) Screw mounting</p> 

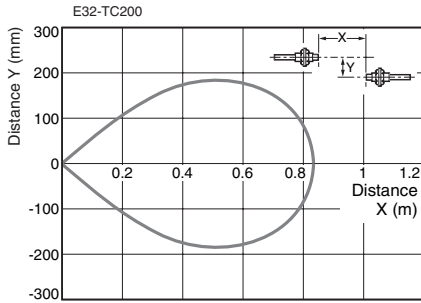
Characteristic

Model Item	NPN output PNP output	Product discontinuation		Recommended replacement		
		E3X-NH11	E3X-NH21	E3X-SD11	E3X-DA11-S	E3X-DA11AT-S
		E3X-NH41	E3X-NH51	E3X-SD41	E3X-DA41-S	E3X-DA41AT-S
Light source (wavelength)	Red LED (680 nm)		Red LED (620 nm)	Red LED (635 nm)		
Power supply voltage	12 to 24 VDC \pm 10 %, ripple (p-p) : 10 % max.					
Power consumption Current consumption	75 mA max.		960 mW max. (current consumption : 40 mA max. at power supply voltage of 24 VDC)	960 mW max. (current consumption : 40 mA max. at power supply voltage of 24 VDC)	1080 mW max. (current consumption : 45 mA max. at power supply voltage of 24 VDC)	
Control output	Load power supply voltage : 26.4 VDC; open collector; load current : 50 mA max.; residual voltage : 1 V max.		Load power supply voltage : 26.4 VDC; open collector; load current : 50 mA max.; residual voltage : 1.5V max.	Load power supply voltage : 26.4 VDC; NPN / PNP open collector; load current : 50 mA max.; residual voltage : 1 V max.		
Response time	Operate or reset : 1 ms max.		Operate or reset : 200 μ s max.	Super-high-speed mode; NPN Operate : 48 μ s, reset : 50 μ s PNP Operate : 53 μ s, reset : 55 μ s High-speed Mode : Operate or reset : 250 μ s Standard mode : Operate or reset : 1 msc; Operate or reset : 4 ms	Super-high-speed mode; Operate or reset : 130 μ s High-speed Mode; Operate or reset : 250 μ s Standard mode; Operate or reset : 1 ms High-resolution mode; Operate or reset : 4 ms	
Sensitivity setting	Teaching or manual method					
Timer function	None	OFF-delay timer 5,10,20,40, 60,80,100 ms	ON / OFF-delay timer : 10 ms (each fixed)	Select from OFF-delay, ON-delay, one-shot, or ON-delay + OFF-delay timer 1 ms to 5 s (1 to 20 ms set in 1-ms increments, 20 to 200 ms set in 5-ms increments, 200 ms to 1 s set in 100-ms increments, and 1 to 5 s set in 1 s-increments)		
Display	Operation indicator (orange LED), 8-level incident level indicator (green LED), 13-level threshold indicator (red LED)		Operation indicator (orange LED), Incident level indicators (green LED)	Operation indicator (orange) Power Tuning indicator (orange)	Operation indicator for channel 1 (orange) Operation indicator for channel 2 (orange)	
Digital display	None		Incident level	Select from incident level + threshold or other 6 patterns		
Sensing Distance	E32- TC200	400 mm		760 mm (Standard mode)		
	E32- DC200	150 mm		300 mm (Standard mode)		
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 Storage : -30 °C to 70 °C (with no icing or condensation)	Operating : Groups of 1 to 2 Amplifiers : -25 °C to 55 °C Groups of 3 to 10 Amplifiers : -25 °C to 50 °C Groups of 11 to 16 Amplifiers : -25 °C to 45 °C Storage : -30 °C to 70 °C (with no icing or condensation)		
Ambient humidity	Operating and storage : 35 % to 85 % (with no condensation)					
Degree of protection	IEC 60529 IP50 (with Protective Cover attached)					
Mate- rials	Case	Polybutylene terephthalate (PBT)				
	Cover	Polycarbonate (PC)				

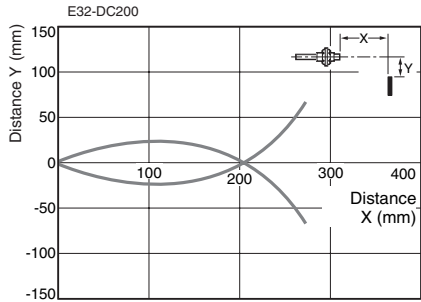
Operation ratings

Product discontinuation E3X-NH series

Parallel Operating Range (Typical)

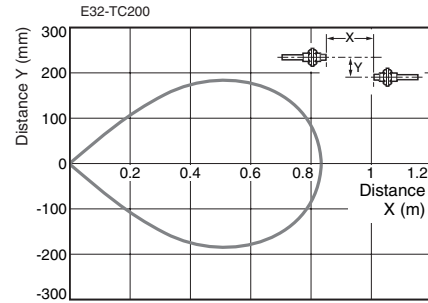


Operating Range (Typical)

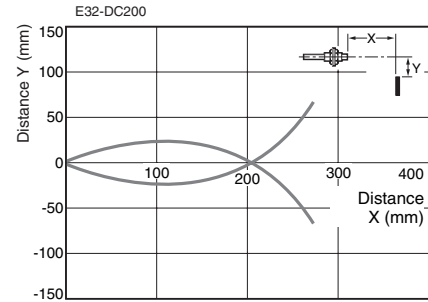


Recommendable replacement E3X-SD / DA-S series

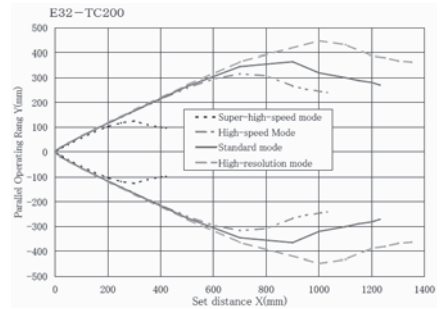
E3X-SD series Parallel Operating Range (Typical)



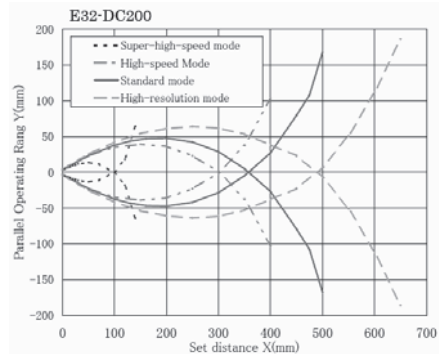
Operating Range (Typical)



E3X-DA-S series Parallel Operating Range (Typical)



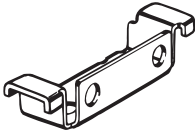
Operating Range (Typical)



Operation methods

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
Operation with slide switch and push-button.	Operation with slide switch and push-button.

Accessories

Product discontinuation E3X-NH series	Recommendable replacement E3X-SD / DA-S series
<p>1) Instruction Manual</p> <p>2) Mounting Bracket ; E39-L143</p> 	<p>1) Instruction Manual</p> <p>2) Mounting Bracket is not attached. Please buy optional E39-L143 when the Mounting Bracket is necessary.</p>