PRODUCT NEWS

Product Discontinuation Notices

Photomicro Sensors

OMRON

Issue Date
March 3, 2014

No. 2014024CE

Discontinuation Notice of EE-SX91 series.

Product Discontinuation	Recommended Replacement
Compact Pre-wired Photomicrosensor with Built-in Amplifier (Non-modulated)	Ultra-compact Pre-wired Photomicrosensor (Non-modulated)
Model EE-SX91[]-R []M	**Model EE-SX95[]-W []M** **Model EE-SX95[]-R []M**
Model EE-SX91[]P-R []M	**Model EE-SX95[]P-R []M**
Model EE-SX91[]-C1J-R	**No recommended replacement**

[Discontinuation date]

The end of March, 2015

[Caution on recommended replacement]

Standard cable of the EE-SX95 series is not flexible robot cable,
could you please choose robot cable type as necessary on your application.
The models with connectors type aren't lined up by EE-SX95 series.
Therefore could you please consider the usual pre-wired type
for replacement of the EE-SX91-C1J-R type.
Power supply reverse polarity protection is not built in the EE-SX95 series.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen -sions	Wire connection	Mounting Dimensions	Charact -eristics	Operation ratings	Operation methods
EE-SX95[]-W []M	**	**	**	**	*	*	-
EE-SX95[]-R []M	**	**	**	**	*	*	-
EE-SX95[]-P-R []M	**	**	**	**	*	*	-

** : Compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

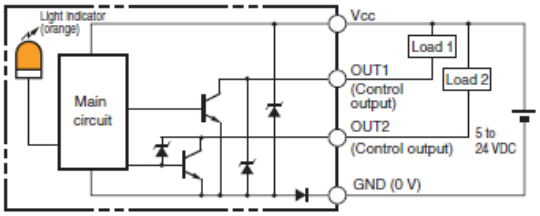
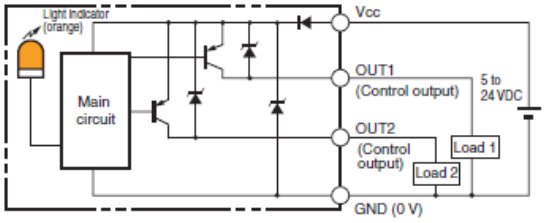
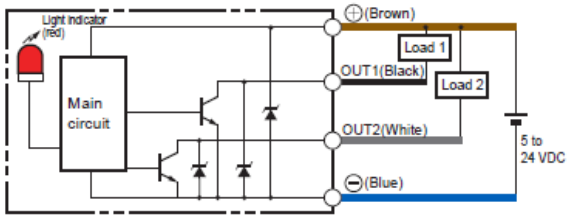
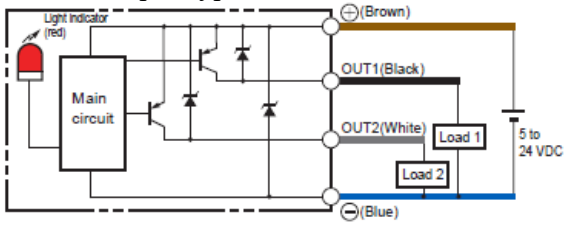
[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
EE-SX910-R 1M	EE-SX950-W 1M
	EE-SX950-R 1M
EE-SX910-R 3M	EE-SX950-R 3M
EE-SX910P-R 1M	EE-SX950P-R 1M
EE-SX910P-R 3M	EE-SX950P-R 3M
EE-SX910-C1J-R 0.3M	No recommended replacement
EE-SX911-R 1M	EE-SX951-W 1M
	EE-SX951-R 1M
EE-SX911-R 3M	EE-SX951-R 3M
EE-SX911P-R 1M	EE-SX951P-R 1M
EE-SX911P-R 3M	EE-SX951P-R 3M
EE-SX911-C1J-R 0.3M	No recommended replacement
EE-SX912-R 1M	EE-SX952-W 1M
	EE-SX952-R 1M
EE-SX912-R 3M	EE-SX952-R 3M
EE-SX912P-R 1M	EE-SX952P-R 1M
EE-SX912P-R 3M	EE-SX952P-R 3M
EE-SX912-C1J-R 0.3M	No recommended replacement
EE-SX913-R 1M	EE-SX953-W 1M
	EE-SX953-R 1M
EE-SX913-R 3M	EE-SX953-R 3M
EE-SX913P-R 1M	EE-SX953P-R 1M
EE-SX913P-R 3M	EE-SX953P-R 3M
EE-SX913-C1J-R 0.3M	No recommended replacement
EE-SX914-R 1M	EE-SX954-W 1M
	EE-SX954-R 1M
EE-SX914-R 3M	EE-SX954-R 3M
EE-SX914P-R 1M	EE-SX954P-R 1M
EE-SX914P-R 3M	EE-SX954P-R 3M
EE-SX914-C1J-R 0.3M	No recommended replacement

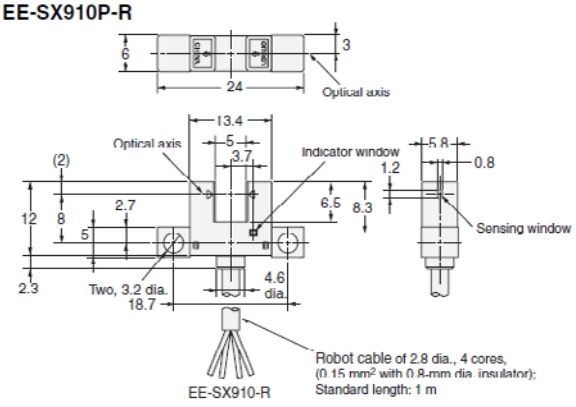
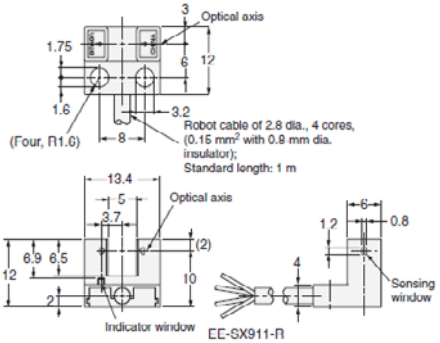
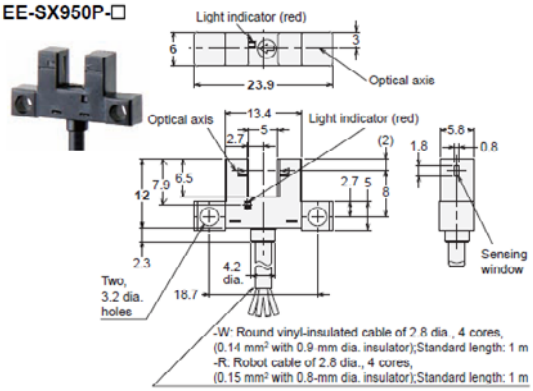
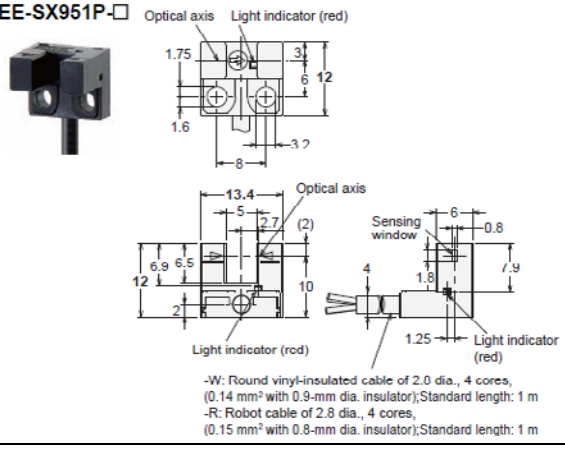
[Body color]

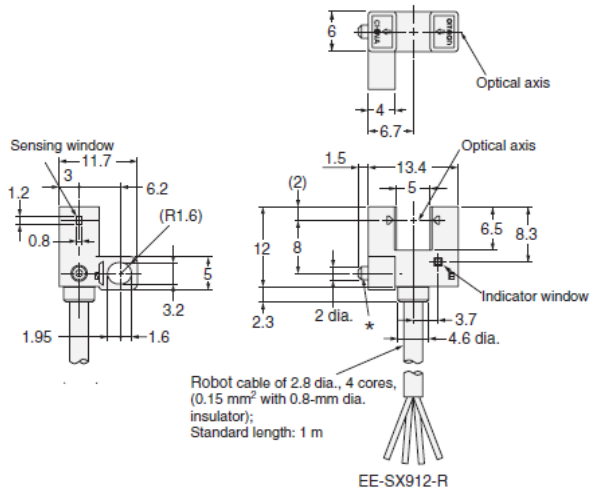
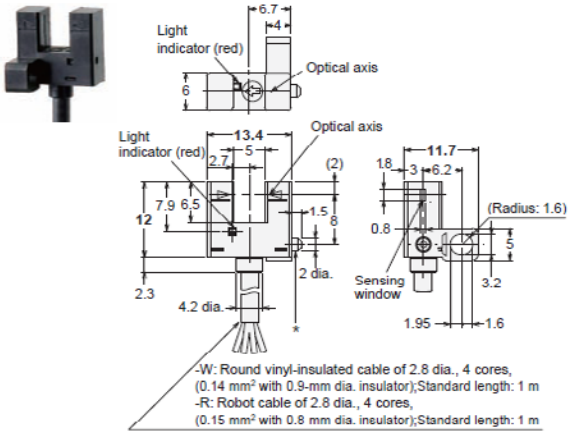
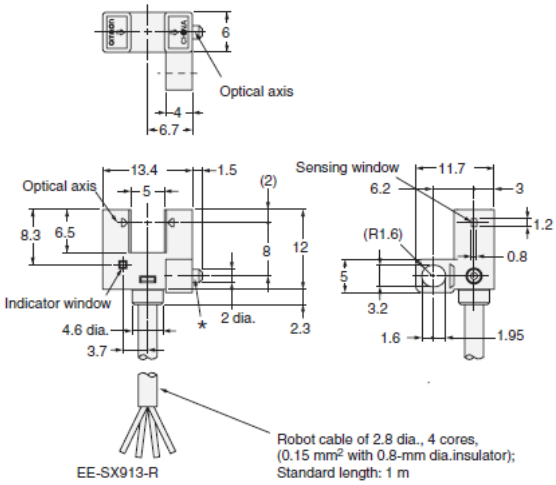
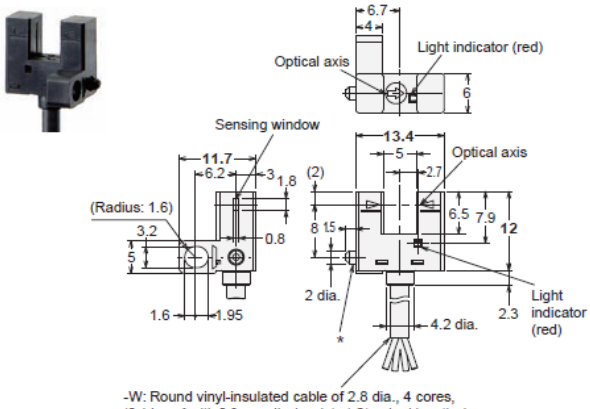
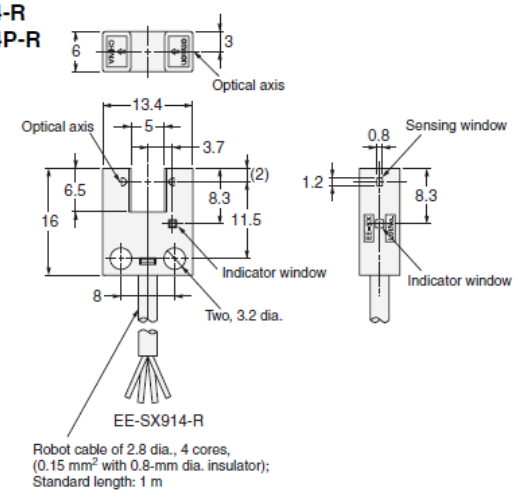
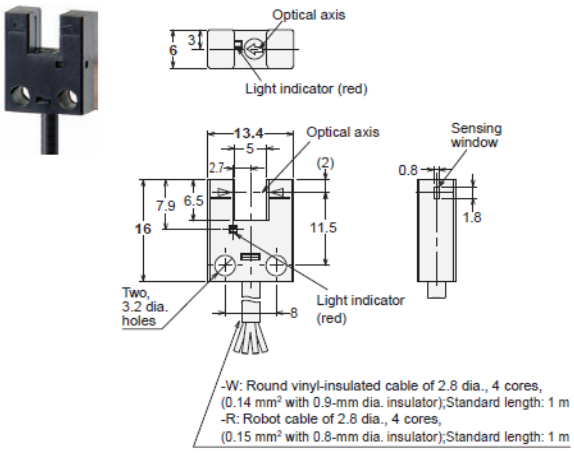
Product discontinuation Model EE-SX91 Series	Recommendable replacement Model EE-SX95 Series
Color: Black 	**Color: Black（Compatible）** 

[Wire connection]

Product discontinuation Model EE-SX91 Series	Recommendable replacement Model EE-SX95 Series
Wiring and I/O Circuit Diagrams Brown: Vcc Black: OUT1 White: OUT2 Blue: GND (0V) < NPN Output type >  < PNP Output type >  	**Wiring and I/O Circuit Diagrams** No Alteration Brown: Vcc Black: OUT1 White: OUT2 Blue: GND (0V) < NPN Output type >  < PNP Output type > 

[Mounting dimensions/Outline dimensions]

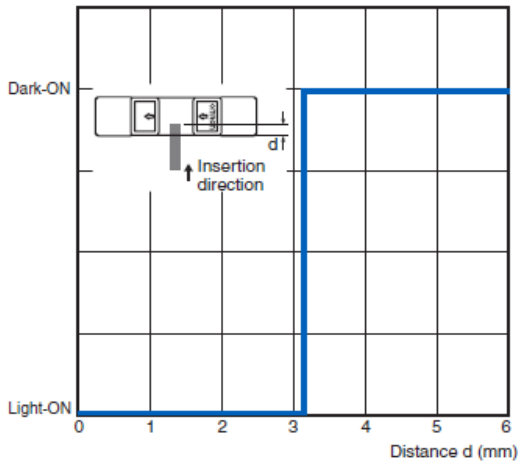
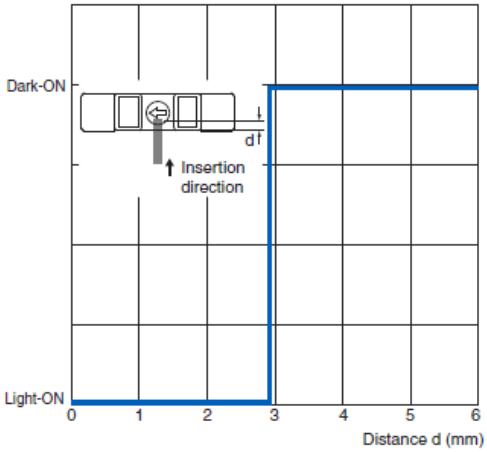
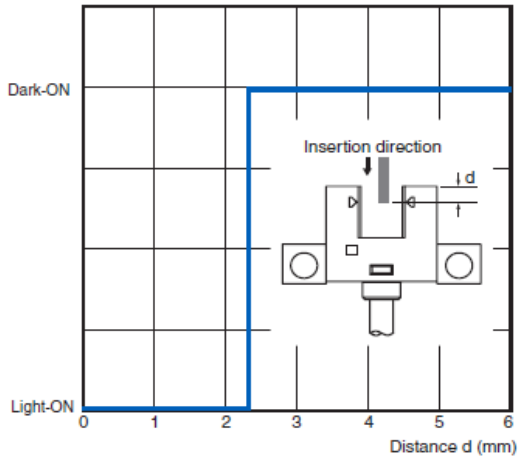
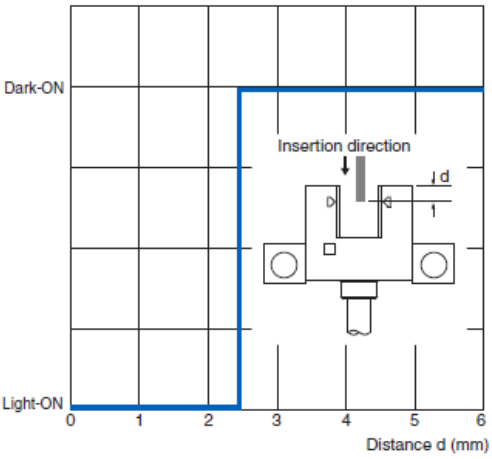
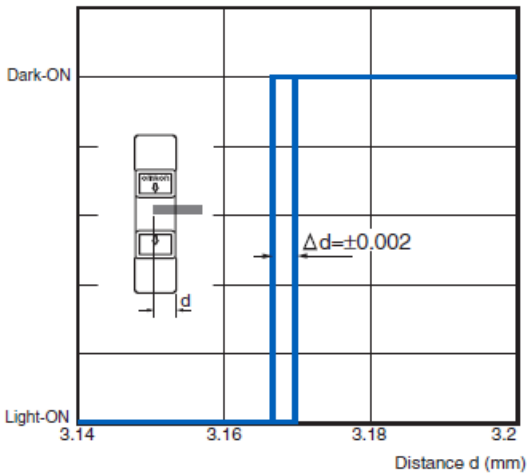
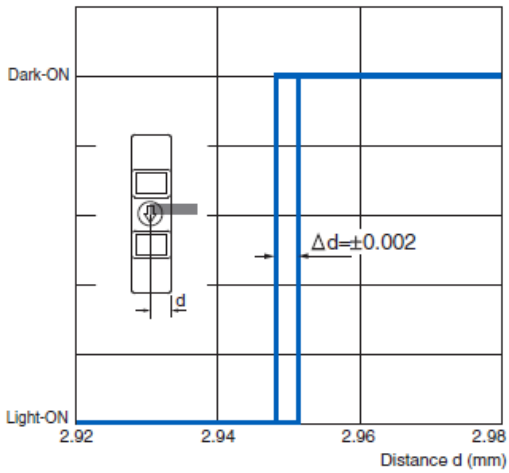
Product discontinuation Model EE-SX91 Series	Recommendable replacement Model EE-SX95 Series
Mounting dimensions/Outline dimensions **EE-SX910-R** **EE-SX910P-R**  **EE-SX911-R** **EE-SX911P-R**  	**Mounting dimensions/Outline dimensions** No alteration except indicator **EE-SX950-□** **EE-SX950P-□**  **EE-SX951-□** **EE-SX951P-□** 

Product discontinuation Model EE-SX91 Series	Recommendable replacement Model EE-SX95 Series
EE-SX912-R **EE-SX912P-R**  * The lug is used to prevent turning. When installing, make a fixed hole of 2.1 to 2.3 mm dia.	**EE-SX952-☐** **EE-SX952P-☐**  * The lug is used to prevent turning. When installing, make a fixed hole of 2.1 to 2.3 mm dia.
EE-SX913-R **EE-SX913P-R**  * The lug is used to prevent turning. When installing, make a fixed hole of 2.1 to 2.3 mm dia.	**EE-SX953-☐** **EE-SX953P-☐**  * The lug is used to prevent turning. When installing, make a fixed hole of 2.1 to 2.3 mm dia.
EE-SX914-R **EE-SX914P-R**  	**EE-SX954-☐** **EE-SX954P-☐** 

[Characteristics]

Item		Product discontinuation Model EE-SX91 Series	Recommendable replacement Model EE-SX95 Series
Sensing distance		5 mm (slot width)	5 mm (slot width)
Standard sensing object		Opaque: 1.2 × 0.8 mm min.	Opaque: 1.8 × 0.8 mm min.
Differential distance		0.025 mm max.	0.025 mm max.
Light source		GaAs Infrared LED with a peak wavelength of 940 nm	GaAs Infrared LED with a peak wavelength of 940 nm
Indicator		Light indicator (orange LED)	Light indicator (red LED)
Supply voltage		5 to 24 VDC ±10%, ripple (p-p): 10% max.	5 to 24 VDC ±10%, ripple (p-p): 10% max.
Power supply voltage		5 to 24 VDC ±10%, Ripple (p-p): 10% max.	5 to 24 VDC ±10%, Ripple (p-p): 10% max.
Current consumption		21 mA max.	15 mA max.
Control output		Load power supply voltage: 5 to 24 VDC Load current: 50 mA max. OFF current: 0.5 mA max. 50 mA load current with a residual voltage of 1.0 V max. 5 mA load current with a residual voltage of 0.4 V max.	Load power supply voltage: 5 to 24 VDC Load current: 50 mA max. OFF current: 0.5 mA max. 50 mA load current with a residual voltage of 0.7 V max. 5 mA load current with a residual voltage of 0.4 V max.
Protection circuits		Power supply reverse polarity protection Output reverse polarity protection (only OUT2 on models with NPN output)	Load short circuit protection
Response frequency		1 kHz min. (3 kHz average)	1 kHz min. (3 kHz average)
Ambient illumination		1,000 lx max. with fluorescent light on the surface of the receiver	1,000 lx max. with fluorescent light on the surface of the receiver
Ambient temperature range		Operating: -25 to 55°C Storage: -30 to 80°C (with no icing or condensation)	Operating: -25 to 55°C Storage: -30 to 80°C (with no icing or condensation)
Ambient humidity range		Operating: 5% to 85% Storage: 5% to 95% (with no icing or condensation)	Operating: 5% to 85% Storage: 5% to 95% (with no icing or condensation)
Vibration resistance (Destruction)		10 to 2,000 Hz 0.75-mm single amplitude for 2.5 h (15-min. periods, 10 cycles) each in X, Y, and Z directions	10 to 2,000 Hz 0.75-mm single amplitude for 2.5 h (15-min. periods, 10 cycles) each in X, Y, and Z directions
Shock resistance (Destruction)		500 m/s^2 for 3 times each in X, Y, and Z directions	500 m/s^2 for 3 times each in X, Y, and Z directions
Degree of protection		IEC60529 IP50	IEC60529 IP50
Weight (Packed state)	**Pre-wired**	Approx. 17 g	Approx. 15 g
	Models with Connectors	Approx. 7 g	---
Materials	**Case/Cover**	Polybutylene phthalate (PBT)	Polybutylene phthalate (PBT)
	Emitter/Receiver	Polycarbonate (PC)	Polycarbonate (PC)

[Operation ratings]

Product discontinuation Model EE-SX91 Series	Recommendable replacement Model EE-SX95 Series
Sensing Position Characteristics (Typical)	**Sensing Position Characteristics (Typical)**
	
	
Repeated Sensing Position Characteristics	**Repeated Sensing Position Characteristics**
 Vcc = 24 V, No. of repetitions: 20, Ta = 25°C (Differential distance = 0.025 mm max.)	 Vcc = 24 V, No. of repetitions: 20, Ta = 25°C (Differential travel = 0.025 mm max.)

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.