

Discontinuation Notice of Cylindrical Photoelectric Sensor E3FN series.**Product Discontinuation**

Cylindrical Photoelectric Sensor

**Model E3FN-P18KDR1-WP-BL, -CL**
Model E3FN-P18KDR3T-WP-BL, -CL
Model E3FN-P18KR2-WP-BD, -CD**Recommended Replacement**

Photoelectric Sensor

Model E3FA-DP11, -DN11
Model E3FA-DP12, -DN12
Model E3FA-RP11, -RN11**[Discontinuation date]**

The end of March, 2014.

[Caution on recommended replacement]

- 1) Pay attention to the Load current & Residual voltage (About details, please see **[Characteristics]**).
- 2) Light-on or Dark-on is fixed with E3FN series.
And Light-on or Dark-on can be selected by wiring with E3FA series.
- 3) The light source is different: E3FN series are infrared LED, and E3FA series are Red LED.
Please pay attention to the detection function.
- 4) The body length is different.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
E3FA-DP11, -DN11	--	*	**	*	*		*
E3FA-DP12, -DN12	--	*	**	*	*		*
E3FA-RP11, -RN11	--	*	**	*	*		*

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

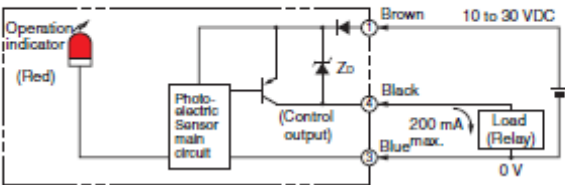
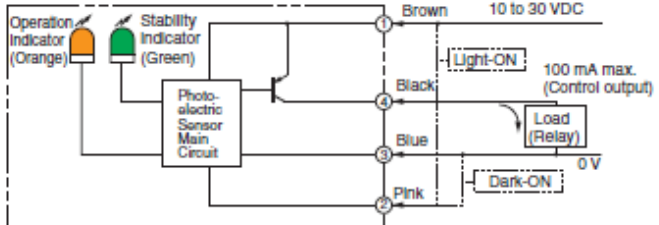
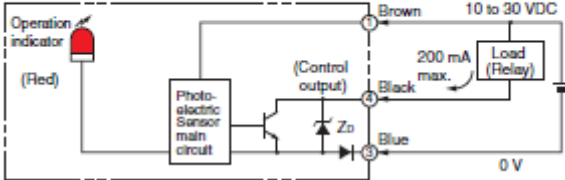
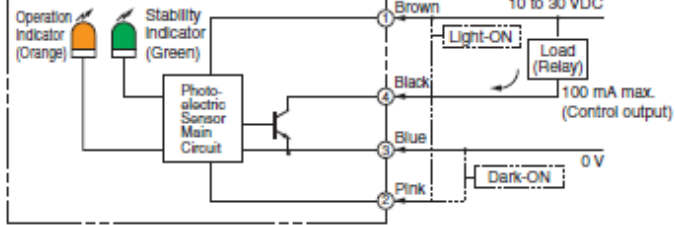
[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
E3FN-P18KDR1-WP-BL 2M	E3FA-DP11 2M
E3FN-P18KDR1-WP-CL 2M	E3FA-DN11 2M
E3FN-P18KDR3T-WP-BL 2M	E3FA-DP12 2M
E3FN-P18KDR3T-WP-CL 2M	E3FA-DN12 2M
E3FN-P18KR2-WP-BD 2M	E3FA-RP11 2M
E3FN-P18KR2-WP-CD 2M	E3FA-RN11 2M

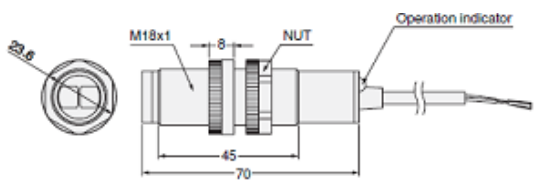
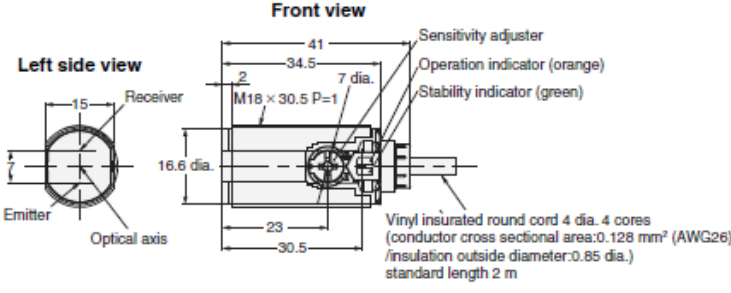
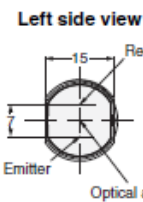
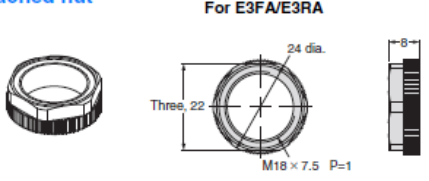
[Body color]

Product discontinuation Model E3FN series	Recommendable replacement Model E3FA series
Light green 	Black 

[Wire connection]

Product discontinuation Model E3FN series	Recommendable replacement Model E3FA series
<p>PNP E3FN-P18KDR1-WP-BL, E3FN-P18KDR3T-WP-BL, E3FN-P18KR2-WP-BD</p> 	<p>PNP E3FA-DP11, E3FA-DP12, E3FA-RP11 Diffuse-reflective Models, Retro-reflective Models, Transparent detected with P-opaqing function.</p> 
<p>NPN E3FN-P18KDR1-WP-CL, E3FN-P18KDR3T-WP-CL, E3FN-P18KR2-WP-CD</p> 	<p>NPN E3FA-DN11, E3FA-DN12, E3FA-RN11 Diffuse-reflective Models, Retro-reflective Models, Transparent detected with P-opaqing function.</p> 

[Dimensions]

Product discontinuation Model E3FN series	Recommendable replacement Model E3FA series
	<p>Front view</p>  <p>Left side view</p>  <p>Attached nut</p> <p>For E3FA/E3RA</p>  <p>Vinyl insulated round cord 4 dia. 4 cores (conductor cross sectional area:0.128 mm² (AWG26) /insulation outside diameter:0.85 dia.) standard length 2 m</p>

[Characteristics]

Item	Product discontinuation Model E3FN series	Recommendable replacement Model E3FA series
Sensing distance	E3FN-P18KDR1-WP-BL, -CL: 100 mm E3FN-P18KDR3T-WP-BL, -CL: 300 mm E3FN-P18KR2-WP-BD, -CD: 2 m	E3FA-DP11, -DN11: 100 mm E3FA-DP12, -DN12: 300 mm E3FA-RP11, -RN11: 0.1 to 4 m
Power supply voltage	10 to 30 VDC	10 to 30 VDC
Output type	PNP or NPN open collector	PNP or NPN open collector
Control output	Load current: 200 mA max. Residual voltage: 2.0 V max.	Load current: 100 mA max. Residual voltage: 3.0 V max.
Current consumption	20 mA max	25 mA max.
Light source	Infrared LED	Red LED (624 nm)
Indicator	Operation indicator (red)	Operation indicator (orange) Stability indicator (green)
Response time	10 ms max.	0.5 ms
Operation mode	Light-ON or Dark-ON fixed	Light-ON/Dark-ON selectable by wiring
Protection circuits	Reversed power supply polarity protection, Output short-circuit protection, Reversed output polarity protection	Reversed power supply polarity protection, Output short-circuit protection and Reversed output polarity protection
Ambient temperature range	-25 to 55°C	Operating: -25 to 55°C
Degree of protection	IEC60529: IP67, EN60947-5-2: EMC	IEC: IP67, DIN 40050-9: IP69K
Materials	Case: ABS, Cable holder: PC, Lens: PC	Case and Nut: ABS, Adjuster: POM Lens and Display: PMMA

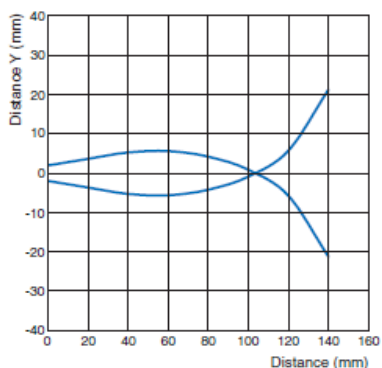
[Operation ratings]

**Product discontinuation
Model E3FN series**

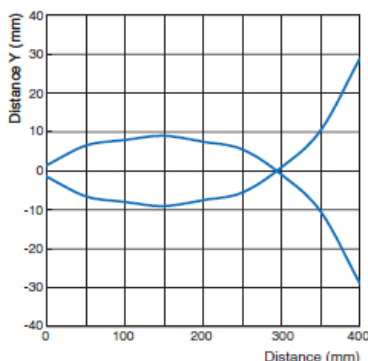
**Recommendable replacement
Model E3FA series**

Operating Range (typical)

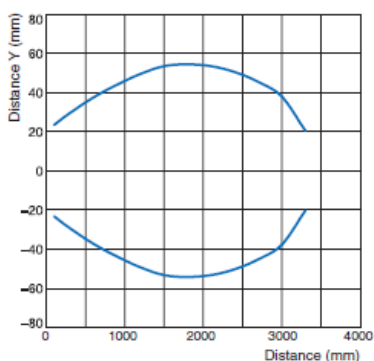
E3FN-P18KDR1



E3FN-P18KDR3T

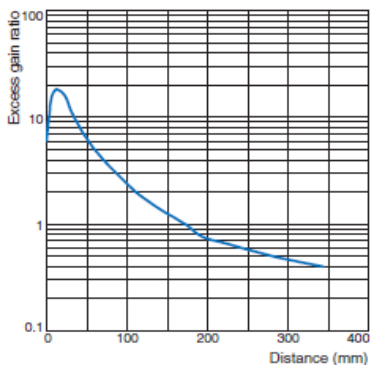


E3FN-P18KR2

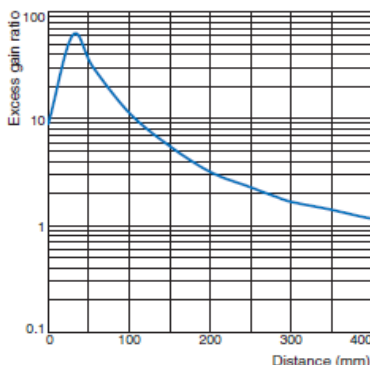


Excess Gain Ratio vs. Set Distance (Typical)

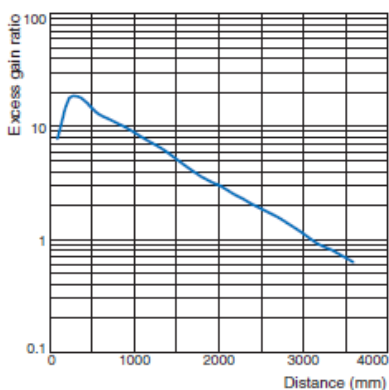
E3FN-P18KDR1



E3FN-P18KDR3T

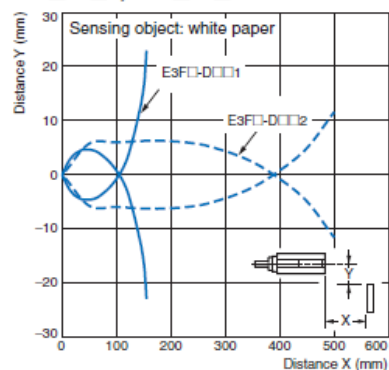


E3FN-P18KR2

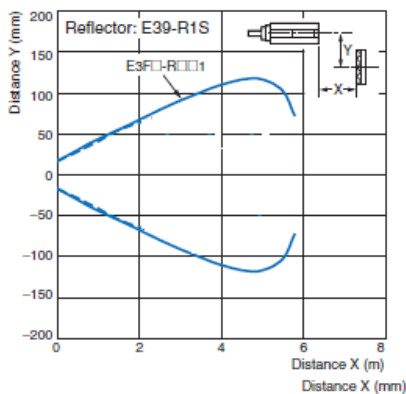


Operating Range

**Diffuse-reflective Models
E3F□-D□1, E3F□-D□2**

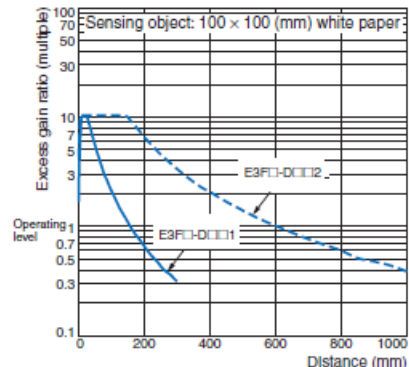


**Retro-reflective Models
E3F□-R□1**

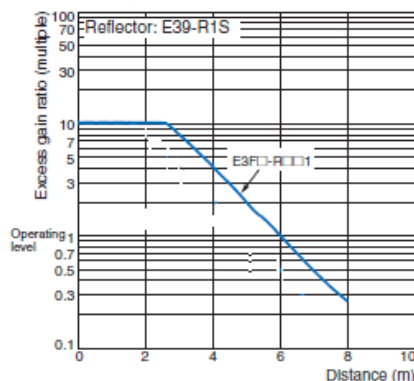


Excess Gain vs. Distance


**Diffuse reflective Models
E3F□-D□1, E3F□-D□2**



**Retro-reflective Models
E3F□-R□1**



[Operation methods]

<p>Product discontinuation Model E3FN series</p>	<p>Recommendable replacement Model E3FA series</p>
<p>Sensitivity adjustment without an adjuster</p>	<p>Sensitivity adjustment One-turn adjuster</p>  <p>The diagram shows a black cylindrical sensor with a threaded top section. A central screw is labeled 'Sensitivity adjuster'. Below the screw, there are two small indicator lights: a green one labeled 'Stability indicator (Green)' and an orange one labeled 'Operation indicator (Orange)'. The sensor has 'OMRON E3FA-D113' and 'CC' printed on it.</p>

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.