

Discontinuation Notice of Photoelectric Sensor E3G-L series

Product Discontinuation

Recommended Replacement



E3G-L series



E3Z-LS series

Discontinuation date : The end of March, 2012

Caution on recommended replacement

- Dimensions are different.
Please refer to "Dimensions" and "Mounting dimensions".
- Light source (wavelength) and Sensing range are different.
Please refer to "Characteristics".
- Methods of the distance setting are different.
E3G-L: Teaching (in NORMAL or ZONE mode)
E3Z-LS: 5-turn endless adjuster

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
E3Z-LS	*	--	*	*	*	*	--

** : Fully compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

Product Discontinuation and recommended replacement

Product discontinuation Model	Recommended replacement Model
E3G-L11 2M	E3Z-LS63 2M
E3G-L12	E3Z-LS83 2M
E3G-L15	E3Z-LS68
E3G-L16	E3Z-LS88
E3G-L31 2M	E3Z-LS61 2M
E3G-L32 2M	E3Z-LS81 2M
E3G-L35	E3Z-LS66
E3G-L36	E3Z-LS86

Body color

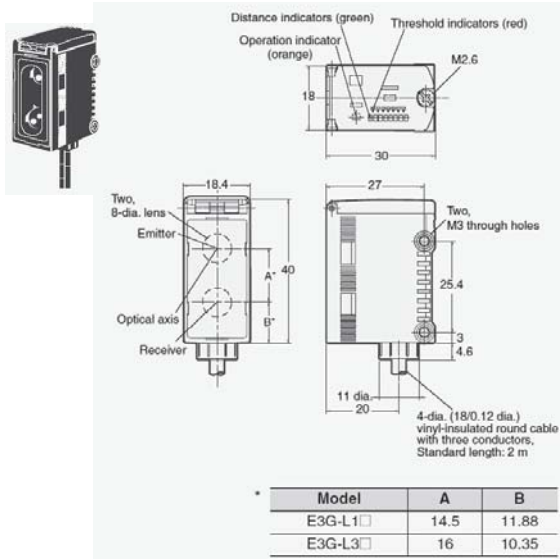
Product discontinuation E3G-L series	Recommended replacement E3Z-LS series
Black	Black

Dimensions / Mounting dimensions

Product discontinuation E3G-L series

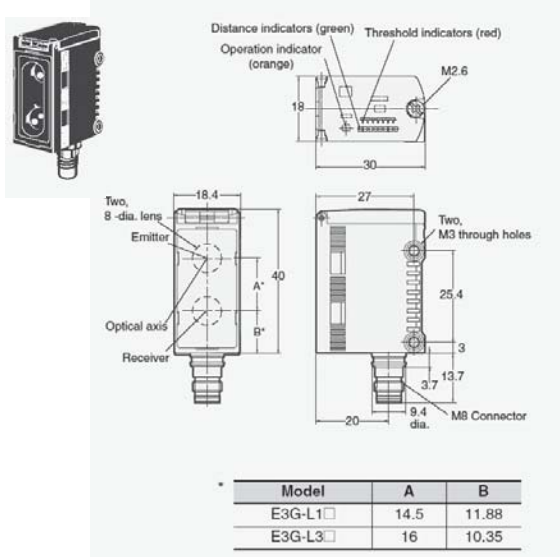
Pre-wired Model

E3G-L11/L31
E3G-L12/L32



Connector Model

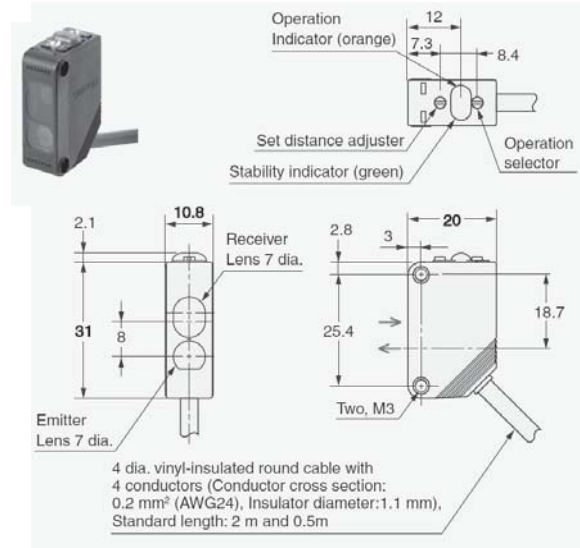
E3G-L15/L35
E3G-L16/L36



Recommended replacement E3Z-LS series

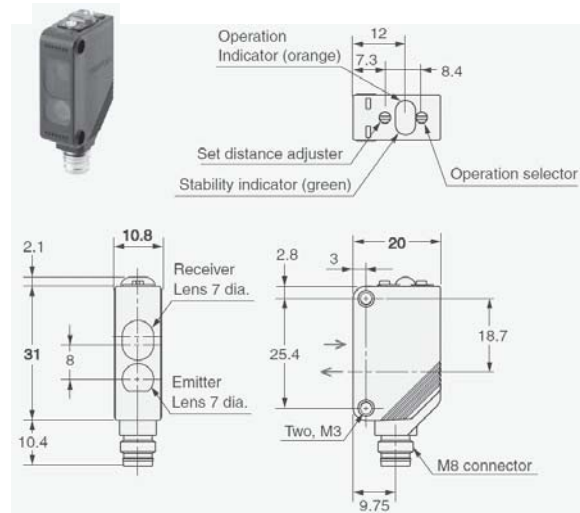
Pre-wired Model

E3Z-LS61/LS81
E3Z-LS63/LS83



Connector Model

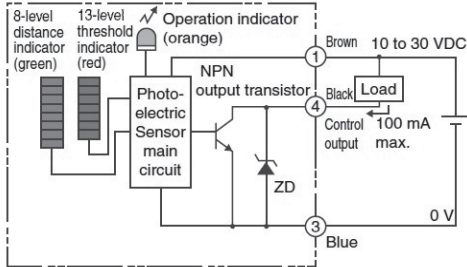
E3Z-LS66/LS86
E3Z-LS68/LS88



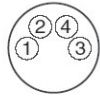
Wire Connection

Product discontinuation E3G-L series

E3G-L[1/L]5 (NPN Output)

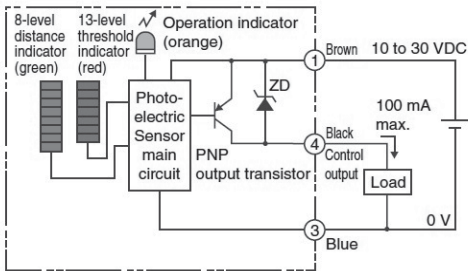


Connector Pin Arrangement

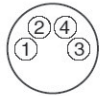


Note: Pin 2 is not used.

E3G-L[2/L]6 (PNP Output)



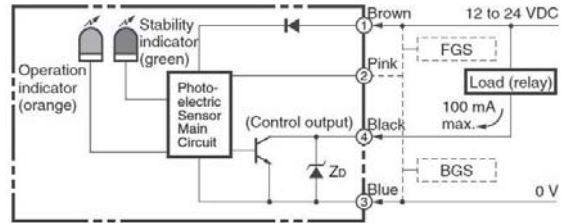
Connector Pin Arrangement



Note: Pin 2 is not used.

Recommended replacement E3Z-LS series

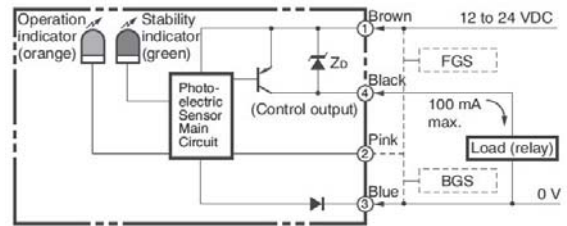
E3Z-LS6[](NPN Output)



Connector Pin Arrangement



E3Z-LS8[](PNP Output)



Connector Pin Arrangement



Characteristics

item		Product discontinuation		Recommended replacement	
Model	NPN output	E3G-L11/L15	E3G-L31/L35	E3Z-LS63/LS68	E3Z-LS61/LS66
	PNP Output	E3G-L12/L16	E3G-L32/L36	E3Z-LS83/LS88	E3Z-LS81/LS86
Sensing range	5 to 50 mm (50×50mm white paper, setting distance:50 mm)	50 to 200 mm (50×50mm white paper) 5 to 150 mm (50×50mm black paper)	[BGS] 2 mm to set distance (80 mm max.)	[BGS] 20mm to set distance (100× 100 mm white or black paper)	
			[FGS] —	[FGS] Set distance to 200 mm min (100×100mm white paper) Set distance to 160 mm min (100×100mm black paper)	
Setting range	30 to 50 mm (50×50mm white paper, black paper)	50 to 200 mm (50×50mm white paper) 5 to 150 mm (50×50mm black paper)	20 to 80 mm (100×100mm white paper)	40 to 200 mm (100×100mm white paper) 40 to 160 mm (100×100mm black paper)	
Differential travel	4% max. of setting distance	10% max. of setting distance	2% max. of setting distance	10% max. of setting distance	
Reflectivity characteristics (black/white error)	4% max. of setting distance	10% max. of setting distance	5% max. of setting distance	10% max. of setting distance	
Light source (wavelength)	Red LED (670 nm)	Infrared LED (860 nm)	Red LED (650 nm)	Red LED (680 nm)	
Power supply voltage	10 to 30 VDC including 10% (p-p) ripple		12 to 24 VDC 10%, ripple (p-p): 10% max.		
Current consumption	55 mA max.	65 mA max.	30 mA max.		
Control output	Load power supply voltage: 30 VDC max. Load current: 100 mA max. (Residual voltage: NPN output: 1.2 V max., PNP output: 2.0 V max.) Open collector output (NPN/PNP, depends on the model) Light ON/Dark ON selectable		Load power supply voltage: 26.4 VDC max. Load current: 100 mA max. (Residual voltage 1 V max.) Open collector output (NPN or PNP depending on model) Light-ON/Dark-ON switch selectable		
Indications	Operation indicator (orange), Distance indicator (green: 8 levels), Threshold indicator (red, NORMAL mode: 13 levels, ZONE mode: 5 levels)		Operation indicator (orange), Stability indicator (green)		
Protection circuit	Power supply reverse polarity protection, Load short-circuit protection, Mutual interference prevention		Reversed power supply polarity protection, Output short-circuit protection, Mutual interference prevention		

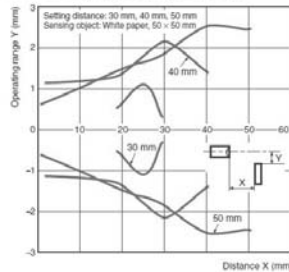
Characteristics

item		Product discontinuation		Recommended replacement	
Model	NPN output	E3G-L11/L15	E3G-L31/L35	E3Z-LS63/LS68	E3Z-LS61/LS66
	PNP Output	E3G-L12/L16	E3G-L32/L36	E3Z-LS83/LS88	E3Z-LS81/LS86
Response time		Operate or reset: 1.5 ms max.	Operate or reset: 2.5 ms max.	Operate or reset: 1 ms max.	
Distance setting		Teaching (in NORMAL or ZONE mode)		5-turn endless adjuster	
Ambient temperature		Operating: -25 to °C to 55°C, Storage: -30 to 70°C (with no icing or condensation)		Operating: -25 to 55°C, Storage: -40 to 70°C (with no icing or condensation)	
Ambient humidity		Operating: 35% to 85%, Storage: 35% to 95% (with no condensation)		Operating: 35% to 85%, Storage: 35% to 95% (with no condensation)	
Degree of protection		IEC IP67 (with protective cover)		IP67 (IEC 60529)	

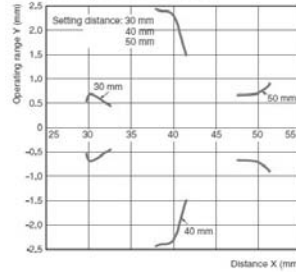
Operation ratings

Product discontinuation E3G-L series

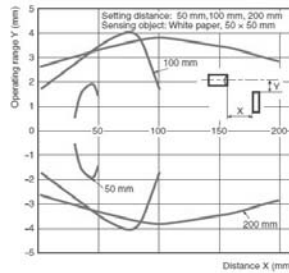
E3G-L1 (in NORMAL Mode)



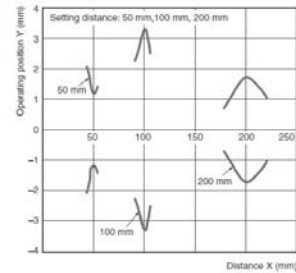
E3G-L1 (in ZONE Mode)



E3G-L3 (in NORMAL Mode)

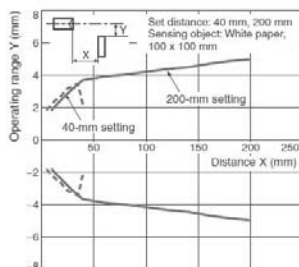


E3G-L3 (in ZONE Mode)

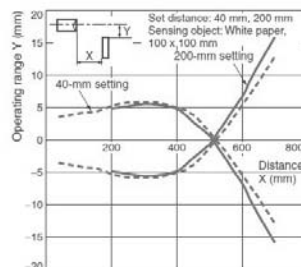


Recommended replacement E3Z-LS series

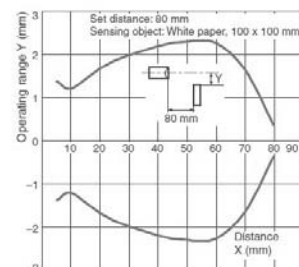
**E3Z-LS1/LS6
BGS**



FGS



E3Z-LS3/LS8



Operation methods

Product discontinuation E3G-L series	Recommended replacement E3Z-LS series
Operation with select switch and teaching button.	Operation with distance adjuster (5-turn endless adjuster) and operation select