

Information of Discontinued Models

Convergent Reflective Photoelectric Sensor SPH-LD50

Order cut-off date : 30 Sep 2008

Date of product discontinuance : 31 Dec 2008

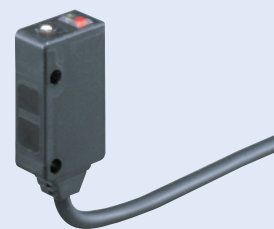
Discontinued models

Convergent reflective photoelectric sensor
SPH-LD50



Recommended replacements

Convergent reflective photoelectric sensor
Long-range diffused beam type
EX-44



* Check in the tables in

Main points of difference between recommended replacements and discontinued models
for details on model numbers for each type.

Refer to 'SUNX general catalog' or SUNX website (sunx.com)
for details.

Advantages of switching to recommended replacements

Compact, space saving

With a compact size of W10×H30×D18 mm **W0.394×H1.181**
×D0.715 in, installation can be easily carried out even in a
limited space.

Waterproof

Due to its IP67 construction, there is no problem even if water
splashes on the sensor in food production lines.

(Enclosure material: polyalylate)

Non-corrosive stainless steel mounting bracket is optional.

Notes on using recommended replacements

Recommended replacements	Sensing performance	Specifications	Output circuit	Mounting dimensions	Dimensions	Case color
EX-44						

: Highly interchangeable
: Large differences

: Almost no difference
- : No corresponding item or model

- Differences in sensing characteristics, shapes and dimensions.
- **EX-44** is side-on type.
- Optional mounting bracket is for sale separately.

Main points of difference between recommended replacements and discontinued models

Discontinued models		Recommended replacements		Main points of difference from discontinued models
Diffused beam type		Long sensing range diffused beam type		
Model No.	Sensing range (Note1)	Model No.	Sensing range (Note2)	
SPH-LD50	25 to 80 mm 0.993 to 3.176 in (convergent point 50 mm 1.969 in)	EX-44	10 to 70 mm 0.394 to 2.756 in (convergent point 40 mm 1.575 in)	<ul style="list-style-type: none"> • Recommended replacement has a sensing range of 10 to 70 mm 0.394 to 2.756 in (Convergent point: 40 mm 1.575 in)

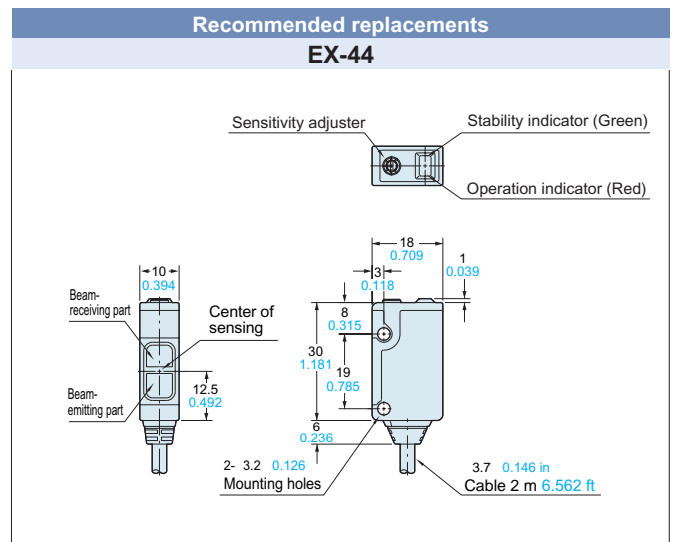
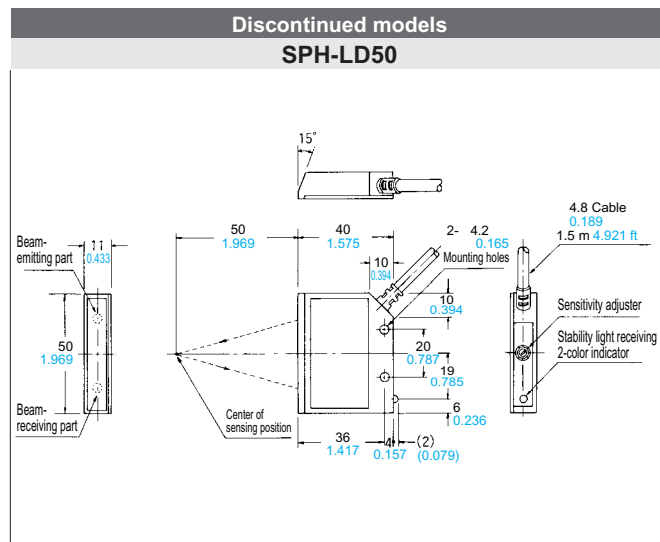
Notes: 1) With white non-glossy paper of 100 x 100 mm
3.937 x 3.937 in

2) With white non-glossy paper of 50 x 50 mm
1.969 x 1.969 in

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Convergent Reflective Photoelectric Sensor SPH-LD50

Dimensions (Unit: mm in)



Main rated specifications

Item	Type	Discontinued models	Recommended replacements
	Model No.	Diffused beam type	Diffused beam type
Sensing range	Model No.	SPH-LD50	EX-44
		25 to 80 mm 0.985 to 3.150 in (Conv. Point: 50 mm 1.969 in) with white non-glossy paper (100 x 100 mm 3.937 x 3.937 in)	10 to 70 mm 0.394 to 2.756 in (Conv. point: 40 mm 1.575 in) with white non-glossy paper (50 x 50 mm 1.969 x 1.969 in)
Min. sensing object		-----	0.2 mm 0.008 in copper wire (Setting distance: 40 mm 1.575 in)
Hysteresis		10% or less of operation distance	15 % or less of operation distance with white non-glossy paper (50 x 50 mm 1.969 x 1.969 in)
Repeatability (perpendicular to sensing axis)		0.5 mm 0.019 in	0.2 mm 0.008 in or less (Setting distance: 40 mm 1.575 in)
Supply voltage		24 V DC \pm 10 % Ripple P-P 10 % or less	12 to 24 V DC \pm 10 % Ripple P-P 10 % or less
Current consumption		30 mA or less	35 mA or less
Output	Output operation	NPN open-collector transistor •Maximum sink current: 100 mA •Applied voltage: 30 V DC or less (between output and 0 V) •Residual voltage: 1.0 V or less (at 100 mA sink current) 0.4 V or less (at 16 mA sink current)	NPN open-collector transistor •Maximum sink current: 100 mA •Applied voltage: 30 V DC or less (between output and 0 V) •Residual voltage: 1.5 V or less (at 100 mA sink current) 0.4 V or less (at 16 mA sink current)
		Light-ON	Light-ON
Response time		8 ms or less	0.5 ms or less
Sensitivity adjuster		Continuously variable adjuster	Continuously variable adjuster
Protection		IP64 (IEC)	IP67(IEC)
Ambient temperature		-5 to +45 +23 to +113 F, Storage: -10 to +60 +14 to +140 F	-25 to +55 -13 to +131 F (No dew condensation or icing allowed), Storage: -30 to +70 -22 to +158 F
Emitting element		Infrared LED (modulated)	Infrared LED (modulated) (Peak emission wavelength: 880 nm 0.035 mil, modulated)
Material		Heat-resistant ABS	Polyallylate
Cable		0.2 mm ² 3-core oil-resistant, heat-resistant, cold-resistant cable, 1.5 m 4.921 ft long	0.2 mm ² 3-core cabtyre cable, 2 m 6.562 ft long
Weight		Net weight: 65 g approx.	Net weight: 45 g approx., Gross weight: 70 g approx.
Accessory		Adjusting screwdriver: 1 pc.	Adjusting screwdriver: 1 pc.

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