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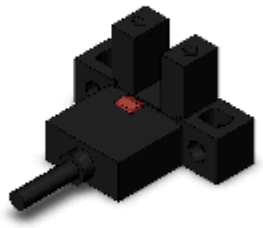
Print

Slot-type Photomicrosensor with connector or pre-wired models (Non-modulated)*1

EE-SX671-WR 1M



Image

Non-modulated Through-beam type, Grooved Type (L-shaped), Pre-wired models, Sensing distance 5 mm, Dark-ON/Light-ON (selectable), NPN open collector output, Light indicator

Type	Grooved Type (L-shaped)
Luminous method	Non-modulated
Sensing method	Through-beam type
Sensing distance	Slot width: 5 mm
Control output (Output type)	NPN open collector output
Operation mode	Dark-ON/Light-ON (selectable)
Connection method	Pre-wired models

Ratings/Performance

As of August 25, 2020

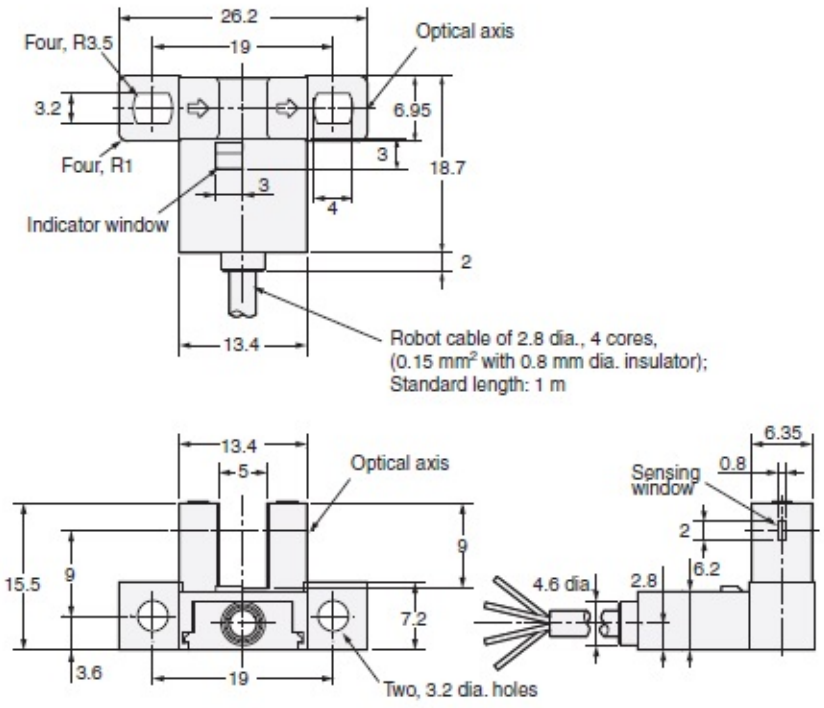
Type		Grooved Type (L-shaped)
Luminous method		Non-modulated
Sensing method		Through-beam type
Sensing distance		Slot width: 5 mm
Operation mode		Dark-ON/Light-ON (selectable)
Standard sensing object		Opaque, 2 x 0.8 mm min.
Differential distance elements		0.025 mm max.
Light source (Peak wavelength)		Infrared LED (940 nm)
Indicator		Light indicator (red)
Power supply voltage		5 to 24 VDC ±10% ripple (p-p) 10% max.
Current consumption		35 mA
Control output	**Output type**	NPN open collector output
	Load power supply voltage	5 to 24 VDC
	Load curren	100 mA max.
	Residual voltage	at 100 mA load current: 0.8 V max. at 40 mA load current: 0.4 V max.
Response frequency elements		1 kHz min. Average value: 3 kHz
Illumination on the surface receiver		Fluorescent light: 1000 lx max.
Ambient temperature		Operating: -25 to 55 ℃ (with no freezing or condensation)

	Storage: -30 to 80 ℃ (with no freezing or condensation)
Ambient humidity	Operating: 5 to 85% RH (with no condensation) Storage: 5 to 95% RH (with no condensation)
Vibration resistance	Destruction: 20 to 2000 Hz, peak acceleration 100 m/s^2, 1.5-mm double amplitude 2 h each in X, Y, and Z directions (4 min periods)
Shock resistance	Destruction: 500 m/s^2 for 3 times each in X, Y, and Z directions
Degree of protection	IP50
Connection method	Pre-wired models
Cable length	1 m
Weight	Package: Approx. 17.3 g
Material	Case: Polybutylene terephthalate (PBT) Emitter/Receiver Cover: Polycarbonate (PC)

As of August 25, 2020

Dimensions

As of August 25, 2020



Terminal array

Terminal Arrangement

Brown	(1)	Vcc
Pink	(2)	L
Blue	(3)	GND (0 V)
Black	(4)	OUTPUT

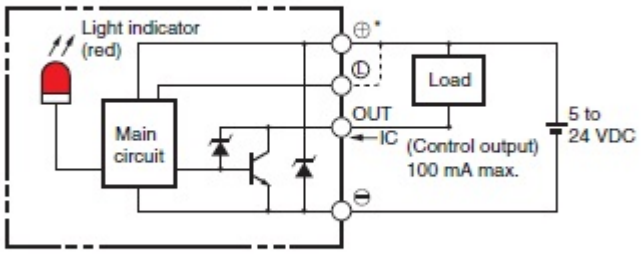
As of August 25, 2020

I/O Circuit diagram

As of August 25, 2020

Output circuit

EE-SX67□-WR



*The terminal arrangement depends on the model.
Check the dimensional diagrams.

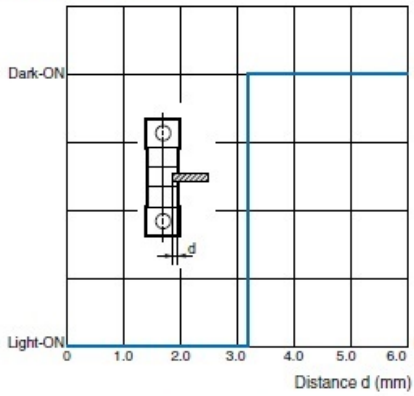
Timing chart

As of August 25, 2020

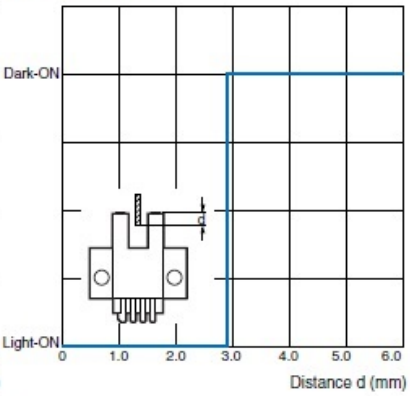
Engineering data (Reference value)

As of August 25, 2020

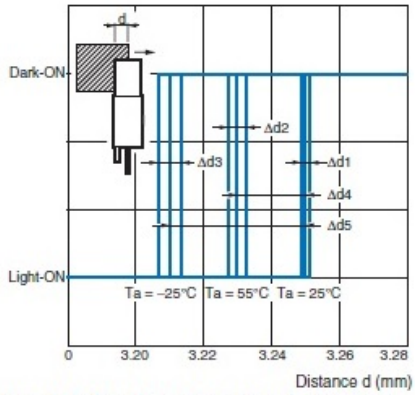
Sensing Position Characteristics
EE-SX47□/67□



Sensing Position Characteristics
EE-SX47□/67□



Repeated Sensing Position Characteristics
EE-SX47□/67□



Vcc =12 V, No. of repetitions: 20, Δd1 = 0.002 mm, Δd2 = 0.004 mm, Δd3 = 0.005 mm, Δd4 = 0.02 mm, Δd5 = 0.04 mm

Note: The data applies to dark status. Operation may be affected by external light interference or light coming through the sensing object.

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