OMRON Industrial Automation | ▸Global

Print

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

EE-SX672P

Image

Non-modulated Through-beam type, Grooved Type (T-shaped)(Slot center 7 mm), Connector type, Sensing distance 5 mm, Dark-ON/Light-ON (selectable), PNP open collector output, Light indicator

Type	Grooved Type (T-shaped) (Slot center 7 mm)
Luminous method	Non-modulated
Sensing method	Through-beam type
Sensing distance	Slot width: 5 mm
Control output (Output type)	PNP open collector output
Operation mode	Dark-ON/Light-ON (selectable)
Connection method	Connector type

Ratings/Performance

As of August 25, 2020

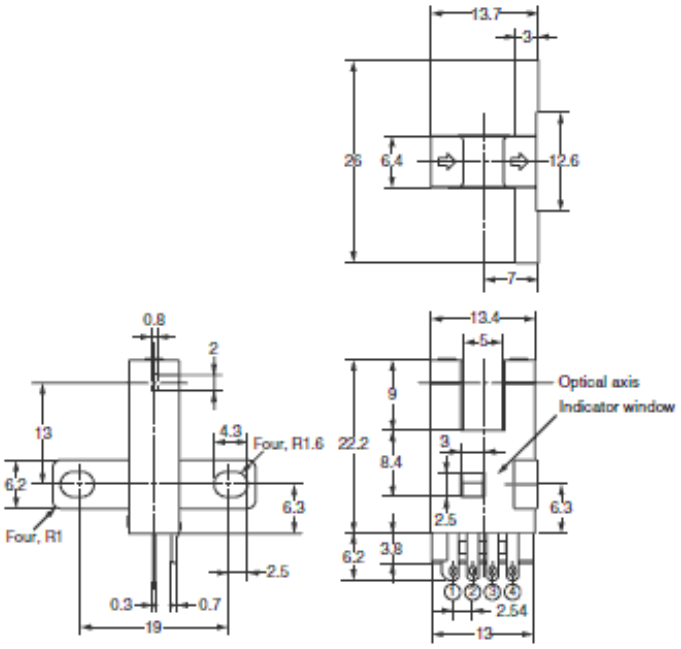
Type	Grooved Type (T-shaped) (Slot center 7 mm)
Luminous method	Non-modulated
Sensing method	Through-beam type
Sensing distance	Slot width: 5 mm
Operation mode	Dark-ON/Light-ON (selectable)
Standard sensing object	Opaque, 2 x 0.8 mm min.
Differential distance elements	0.025 mm max.
Light source (Peak wavelength)	Infrared LED (940 nm)
Indicator	Light indicator (red)

Power supply voltage		5 to 24 VDC ±10% ripple (p-p) 10% max.
Current consumption		12 mA (L terminal open)
Control output	**Output type**	PNP open collector output
	Load power supply voltage	5 to 24 VDC
	Load curren	50 mA max.
	Residual voltage	at 50 mA load current: 1.3 V max.
Protection circuits		Output short-cut protection
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		Connector type (Direct soldering possible)
Weight		Package: Approx. 2.4 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

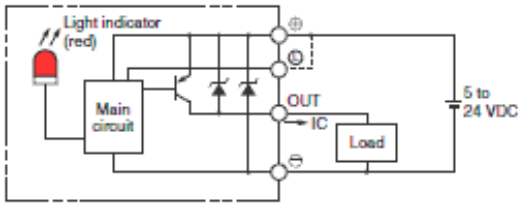
(1)	⊕	Vcc
(2)	L	L
(3)	OUT	OUTPUT
(4)	⊖	GND (0 V)

As of August 25, 2020

I/O Circuit diagram

As of August 25, 2020

Output circuit



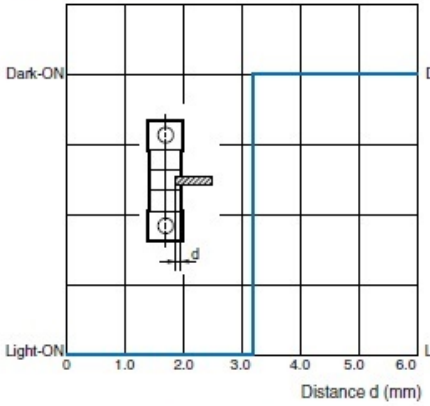
Timing chart

As of August 25, 2020

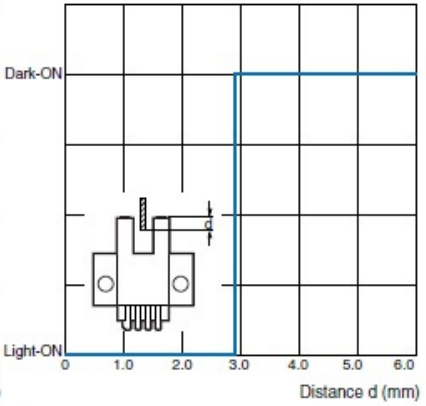
Engineering data (Reference value)

As of August 25, 2020

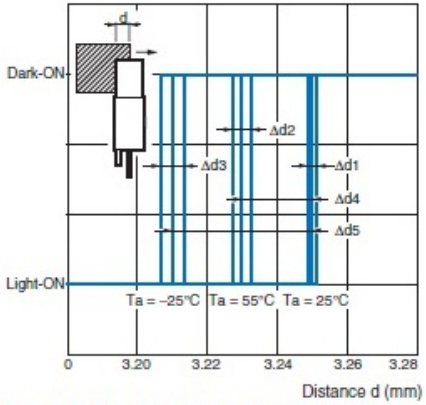
Sensing Position Characteristics
EE-SX47□/67□



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.

As of August 25, 2020