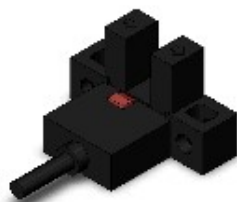


Slot-type Photomicrosensor with connector or pre-wired models (Non-modulated)*1

EE-SX671P-WR 1M



Image

Non-modulated Through-beam type, Grooved Type (L-shaped) Appearance, Pre-wired models (1m), Sensing distance 5 mm, Dark-ON/Light-ON (selectable), PNP Open collector output

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

Ratings/Performance

As of October 10, 2017

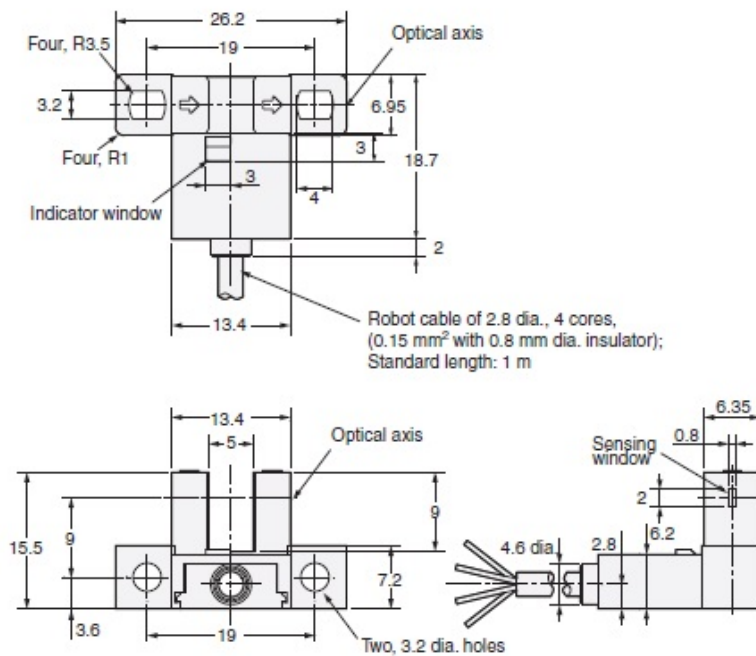
Type	Grooved Type (L-shaped)
Luminous method	Non-modulated
Sensing method	Through-beam type
Sensing distance	5 mm (slot width)
Operation mode	Dark-ON/Light-ON (selectable)
Standard sensing object	Opaque object (2 x 0.8 mm min.)
Differential distance elements	0.025 mm max.
Light source (Peak wavelength)	Infrared LED (940 nm)
Indicator	Light indicator (red)
Power supply voltage	5 to 24 VDC \pm 10% (ripple (p-p)10% max.)
Current consumption	30 mA max.
Control output (Output type)	PNP Open collector output
Control output (Load power supply voltage)	5 to 24 VDC
Control output (Load current)	50 mA max.
Control output (Residual voltage)	1.3 V max. (at 50 mA load current)
Response frequency elements	1 kHz min. (average 3 kHz) (See "Measurement condition of Response frequency elements")
Illumination on the surface receiver	Fluorescent light: 1000 lx max.
Ambient temperature	

	Operating: -25 to 55 °C Storage: -30 to 80 °C (with no icing or condensation)
Ambient humidity	Operating: 5 to 85% RH Storage: 5 to 95% RH (with no icing or condensation)
Vibration resistance	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	500 m/s**2, 3 times each in X, Y, and Z directions
Degree of protection (IEC60529)	IP50
Connection method	Pre-wired models
Cable length	1 m
Material	Case: Polybutylene phthalate (PBT) Emitter/Receiver Cover: Polycarbonate(PC)

As of October 10, 2017

Dimensions

As of October 10, 2017



Caution: All_units are in millimeters unless otherwise indicated.

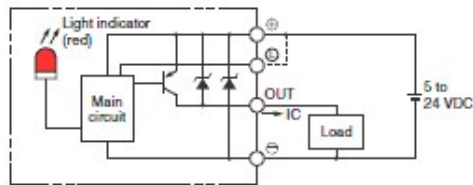
Terminal array

Terminal Arrangement

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

As of October 10, 2017

I/O Circuit diagram



As of October 10, 2017

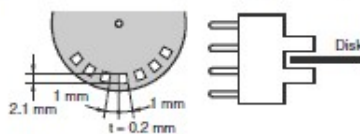
Timing chart

Output configuration	Timing charts	Terminal connections
Light-ON	Incident Interrupted Light indicator (red) ON OFF Output transistor ON OFF Load (relay) Operates Releases	Short-circuited between \ominus terminal and positive \oplus terminal
Dark-ON	Incident Interrupted Light indicator (red) ON OFF Output transistor ON OFF Load (relay) Operates Releases	Open between \ominus terminal and positive \oplus terminal

As of October 10, 2017

Measurement condition of Response frequency elements

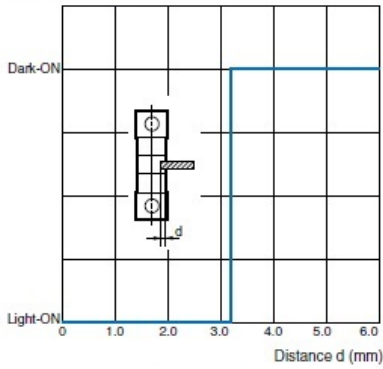
The response frequency was measured by detecting the rotating disk



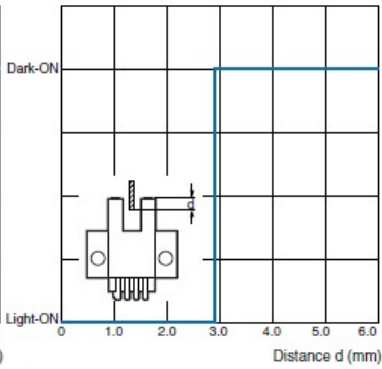
As of October 10, 2017

As of October 10, 2017

Sensing Position Characteristics
EE-SX47□/67□

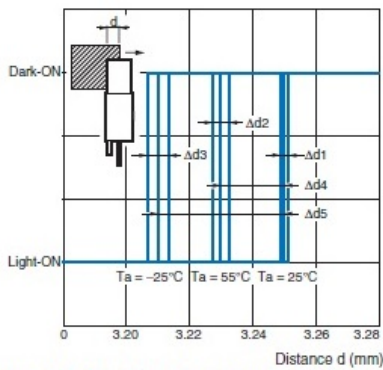


Sensing Position Characteristics
EE-SX47□/67□



Repeated Sensing Position Characteristics

EE-SX47□/67□



$V_{CC} = 12\text{ V}$, No. of repetitions: 20, $\Delta d1 = 0.002\text{ mm}$,
 $\Delta d2 = 0.004\text{ mm}$, $\Delta d3 = 0.005\text{ mm}$, $\Delta d4 = 0.02\text{ mm}$,
 $\Delta d5 = 0.04\text{ mm}$

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