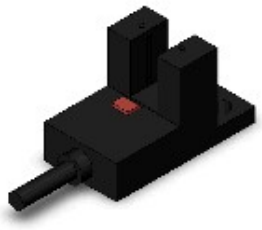
Slot-type Photomicrosensor with connector or pre-wired models (Non-modulated)*1

EE-SX674P-WR 1M



Image

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

Type	Grooved Type (Close-mounting)
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

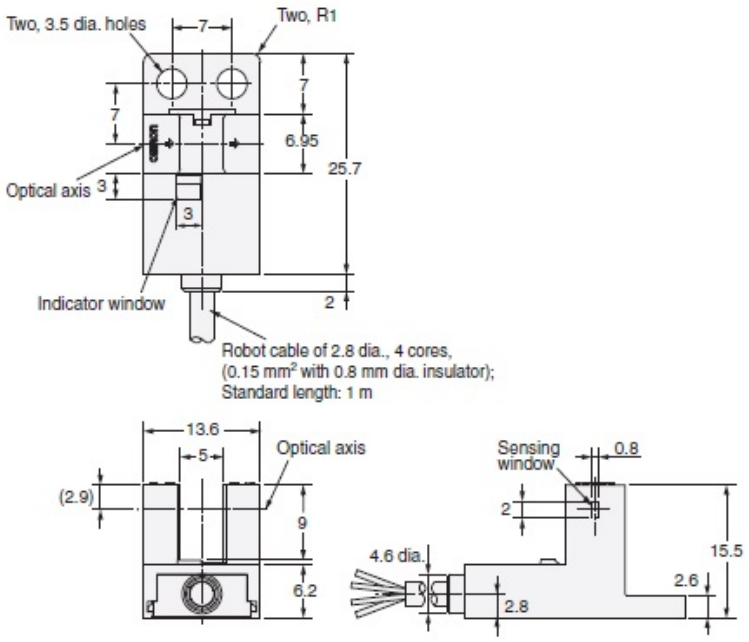
Type	Grooved Type (Close-mounting)
Luminous method	Non-modulated
Sensing method	Through-beam type
Sensing distance	5 mm (slot width)
Operation mode	Dark-ON/Light-ON (selectable)
Standard sensing object	Opaque object (2 x 0.8 mm min.)
Differential distance elements	0.025 mm max.
Light source (Peak wavelength)	Infrared LED (940 nm)
Indicator	Light indicator (red)
Power supply voltage	5 to 24 VDC ±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 ℃ Storage: -30 to 80 ℃ （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

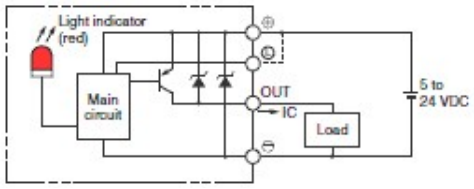
Terminal Arrangement

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

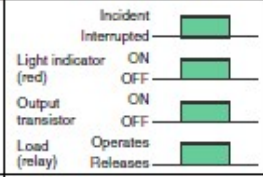
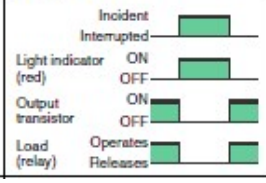
As of October 10, 2017

I/O Circuit diagram

As of October 10, 2017



Timing chart

Output configuration	Timing charts	Terminal connections
Light-ON		Short-circuited between ⊖ terminal and positive ⊕ terminal
Dark-ON		Open between ⊖ terminal and positive ⊕ terminal

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Measurement condition of Response frequency elements

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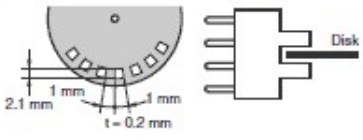
The response frequency was measured by detecting the rotating disk

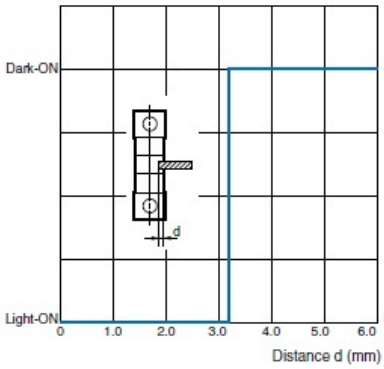


As of October 10, 2017

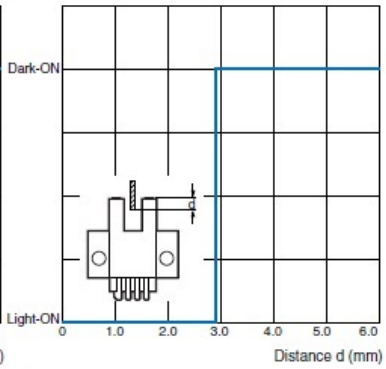
Engineering Data (Typical)

As of October 10, 2017

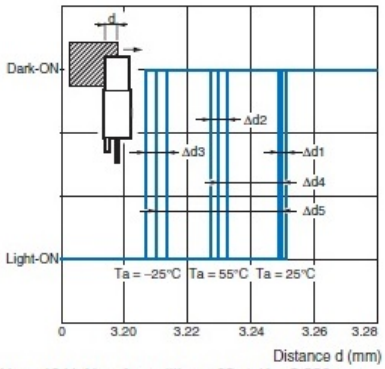
Sensing Position Characteristics
EE-SX47□/67□



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 October 10, 2017