

Ultracompact, Ultrathin Photoelectric Sensor with Built-in Amplifier

## E3T-SL23 2M

Limited Reflective, Sensing distance White paper 50 x 50 mm: 5 to 30 mm, Light-ON, PNP, Pre-wired models (2 m), M2 mounting, Red LED (650 nm)



Image

<b>Sensing method</b>	Limited Reflective
<b>Sensing distance</b>	White paper 50 x 50 mm: 5 to 30 mm
<b>Light source</b>	Red LED (650 nm)
<b>Connection method</b>	Pre-wired models

### Ratings/Performance

As of April 20, 2022

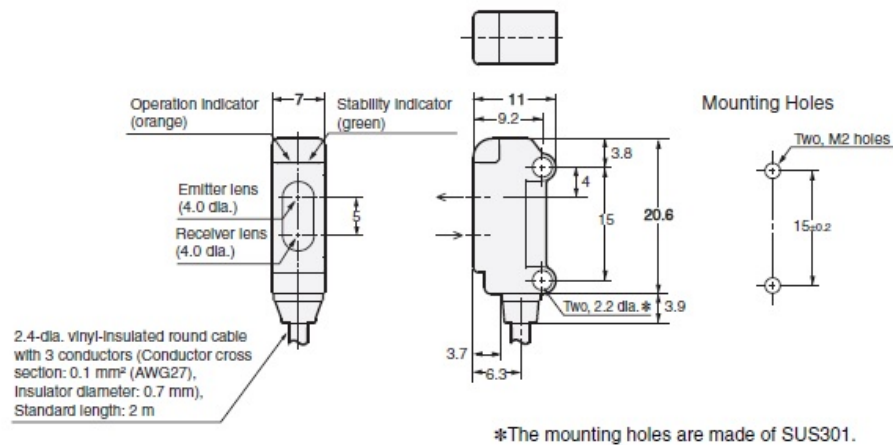
<b>Shape</b>	Square type
<b>Sensing method</b>	Limited Reflective
<b>Sensing distance</b>	White paper 50 x 50 mm: 5 to 30 mm
<b>Minimum sensing object</b>	0.15 mm min. dia. (sensing distance: 10 mm)
<b>Differential distance</b>	6 mm max.
<b>Light source</b>	Red LED (650 nm)
<b>Power supply voltage</b>	12 to 24 VDC±10% ripple (p-p) 10% max.
<b>Current consumption</b>	20 mA max.
<b>Control output</b>	PNP open collector 26.4 VDC max. 50 mA max. Residual voltage: 1 V max. (Load current Less than 10 mA) Residual voltage: 2 V max. (Load current 10 to 50 mA)
<b>Operation mode</b>	Light-ON
<b>Protective circuit</b>	Output short-cut protection, Output reverse polarity protection, Power supply reverse polarity protection
<b>Response time</b>	Operate or reset: 1 ms max.
<b>Ambient illuminance</b>	Incandescent lamp: 5,000 lx max. Sunlight: 10,000 lx max.
<b>Ambient temperature range (Operating)</b>	-25 to 55 °C (with no freezing or condensation)
<b>Ambient temperature range</b>	-40 to 70 °C (with no freezing or condensation)

<b>(Storage)</b>	
<b>Ambient humidity range (Operating)</b>	35 to 85% (with no condensation)
<b>Ambient humidity range (Storage)</b>	35 to 95% (with no condensation)
<b>Insulation resistance</b>	20 MΩ min. (500 VDC megger)
<b>Dielectric strength</b>	1000 VAC 50/60 Hz 1 min
<b>Vibration resistance</b>	Destruction: 10 to 2000 Hz, 1.5 mm or 300 m/s <sup>2</sup> double amplitude for 0.5 hours each in X, Y, and Z directions
<b>Shock resistance</b>	Destruction: 1000 m/s <sup>2</sup> 3 times each in X, Y and Z directions
<b>Degree of protection</b>	IEC: IP67
<b>Connection method</b>	Pre-wired models (Cable length 2 m)
<b>Indicator</b>	Operation indicator (orange), Stability indicator (green)
<b>Weight</b>	Package: Approx. 20 g
<b>Accessories</b>	Instruction manual, Set screws for mounting (M2*14), Nuts
<b>Material</b>	Case: Polybutylene terephthalate (PBT) Lens: Denatured Polyarylate Display: Denatured Polyarylate

As of April 20, 2022

### Dimensions

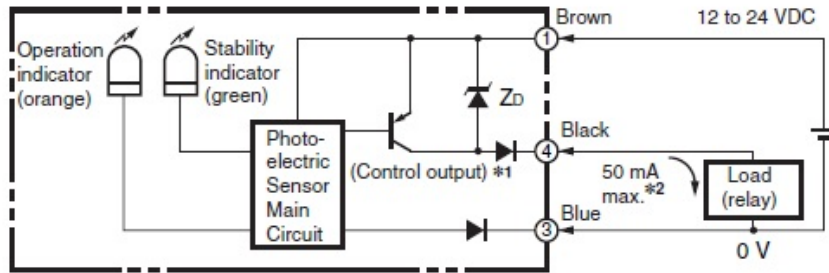
As of April 20, 2022



As of April 20, 2022

### Output circuit diagram

As of April 20, 2022



As of April 20, 2022

Timing chart

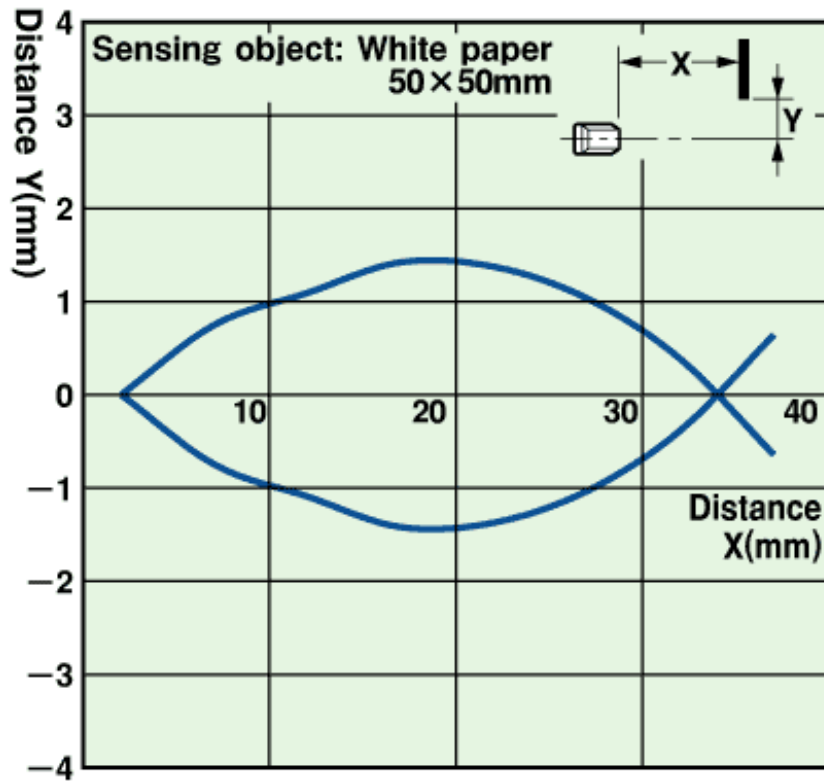
As of April 20, 2022

Operation mode	Timing chart	
<b>Light ON</b>	Incident light	
	No incident light	
	Operation indicator (orange)	ON OFF
	Output transistor	ON OFF
	Load (Relay)	Operate Reset
	(Between blue(③) and black(④))	

As of April 20, 2022

Operating range

As of April 20, 2022

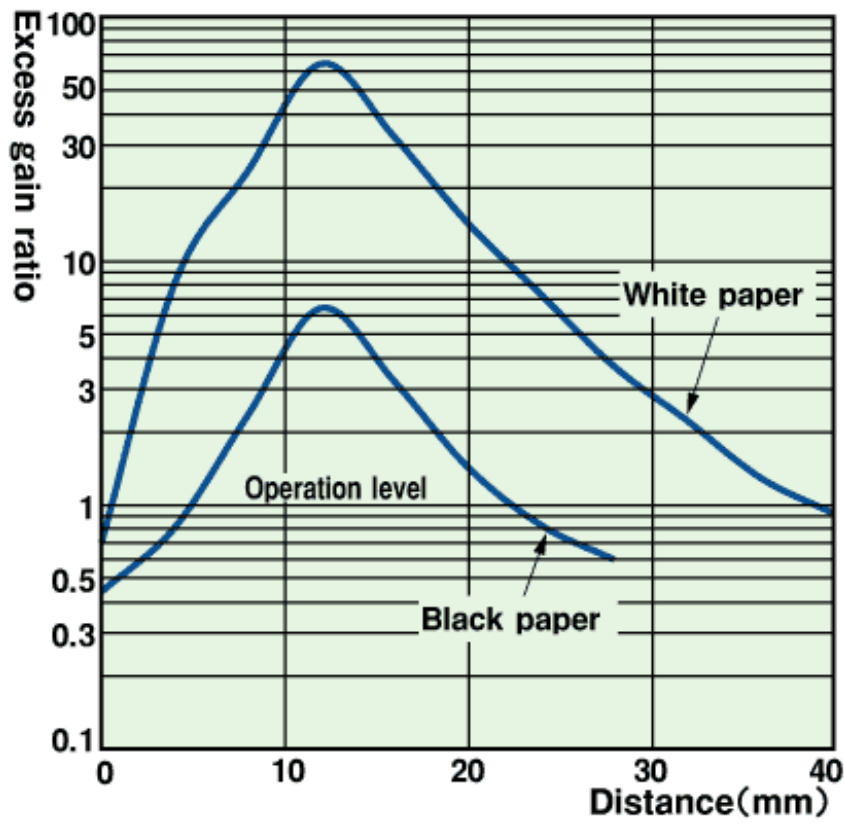


As of April 20, 2022

Setting distance

As of April 20, 2022

Excess gain ratio vs. setting distance



As of April 20, 2022