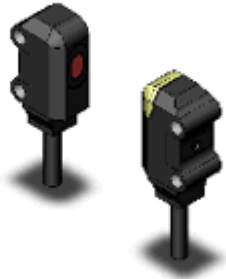


Ultracompact, Ultrathin Photoelectric Sensor with Built-in Amplifier

E3T-ST22 2M



Image

Ultracompact Photoelectric Sensor with Built-in Amplifier, Through-beam type, Sensing distance: 300 mm, NPN output, Dark-ON, Red light, M2 mounting, Pre-wired model, 2 m

Sensing method	Through-beam type
Sensing distance	300 mm
Light source	Red LED (650 nm)
Connection method	Pre-wired models

Ratings/Performance

As of July 25, 2024

Shape	Square type
Sensing method	Through-beam type
Sensing distance	300 mm
Standard sensing object	Opaque, 2 mm dia. min.
Minimum sensing object	2 mm min. dia. (Opaque)
Directional angle	Emitter: 2 to 20 ° Receiver: 2 to 70 °
Light source	Red LED (650 nm)
Power supply voltage	12 to 24 VDC±10% ripple (p-p) 10% max.
Current consumption	Emitter: 10 mA max. Receiver: 20 mA max.
Control output	NPN 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)
Operation mode	Dark-ON
Protective circuit	Output short-cut protection, Output reverse polarity protection, Power supply reverse polarity protection
Response time	Operate or reset: 1 ms max.
Ambient illuminance	Incandescent lamp: 5,000 lx max. Sunlight: 10,000 lx max.
Ambient temperature range (Operating)	-25 to 55 °C (with no freezing or condensation)
Ambient temperature range (Storage)	-40 to 70 °C (with no freezing or condensation)

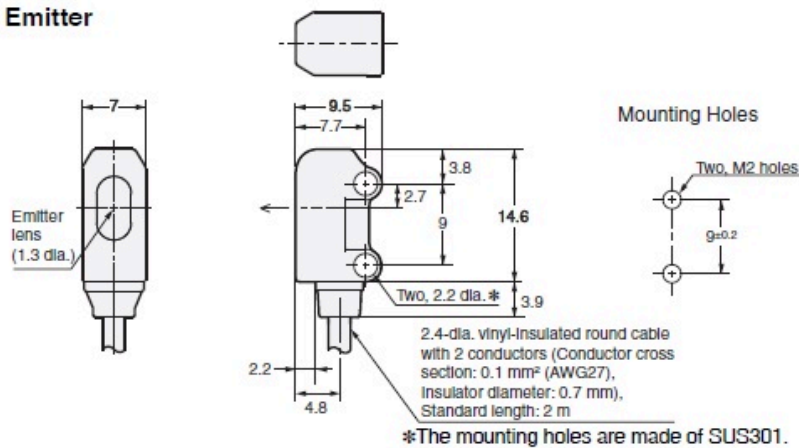
Ambient humidity range (Operating)	35 to 85 % (with no condensation)
Ambient humidity range (Storage)	35 to 95 % (with no condensation)
Insulation resistance	20 MΩ min. (500 VDC megger)
Dielectric strength	1000 VAC 50/60 Hz 1 min
Vibration resistance	Destruction: 10 to 2000 Hz, 1.5 mm or 300 m/s ² double amplitude for 0.5 hours each in X, Y, and Z directions
Shock resistance	Destruction: 1000 m/s ² 3 times each in X, Y and Z directions
Connection method	Pre-wired models (Cable length 2 m)
Indicator	Operation indicator (orange), Stability indicator (green)
Weight	Package: Approx. 40 g
Accessories	Instruction manual, Set screws for mounting (M2*14), Nuts
Material	Case: Polybutylene terephthalate (PBT) Lens: Denatured Polyarylate Display: Denatured Polyarylate

As of July 25, 2024

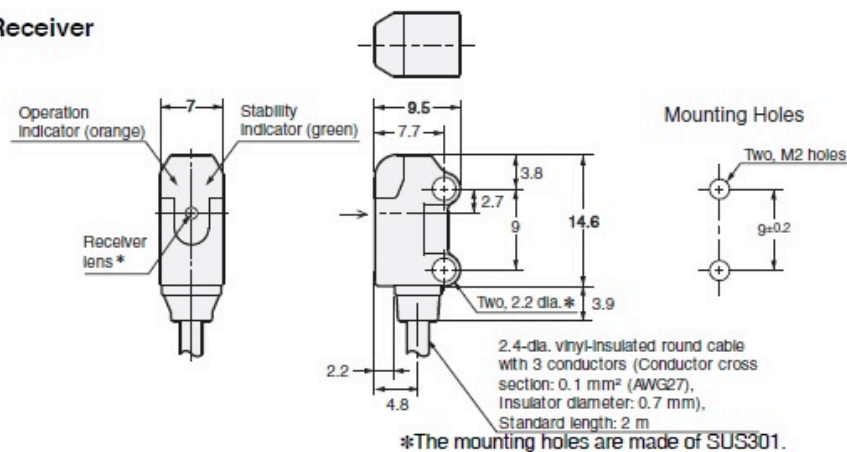
Dimensions

As of July 25, 2024

Emitter



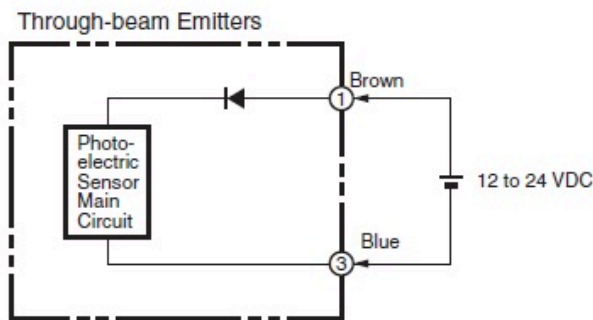
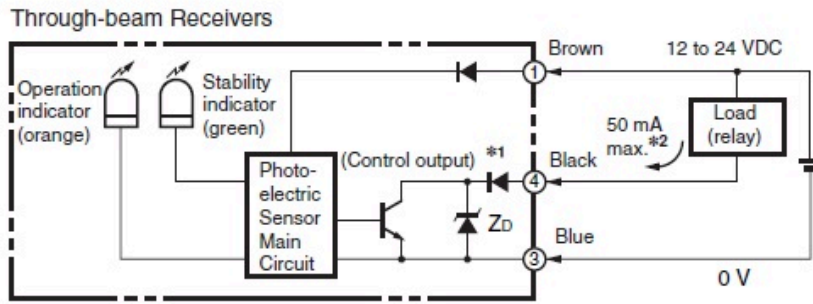
Receiver



As of July 25, 2024

Output circuit diagram

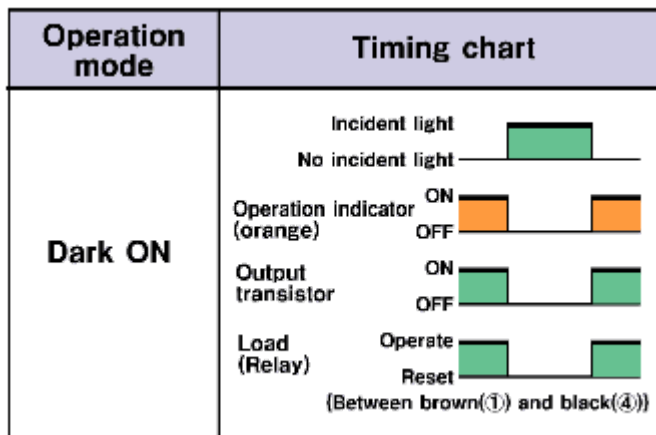
As of July 25, 2024



As of July 25, 2024

Timing chart

As of July 25, 2024

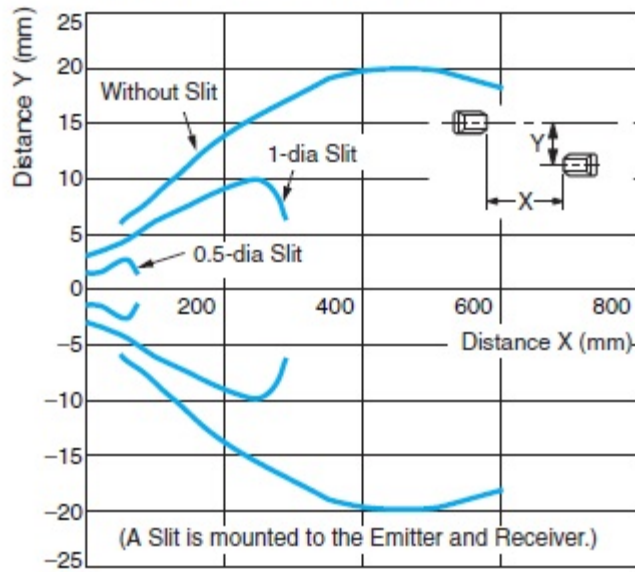


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Parallel operating range

As of July 25, 2024

E3T-ST2□ + E39-S63
E3T-ST2□M + E39-S76A/S76B

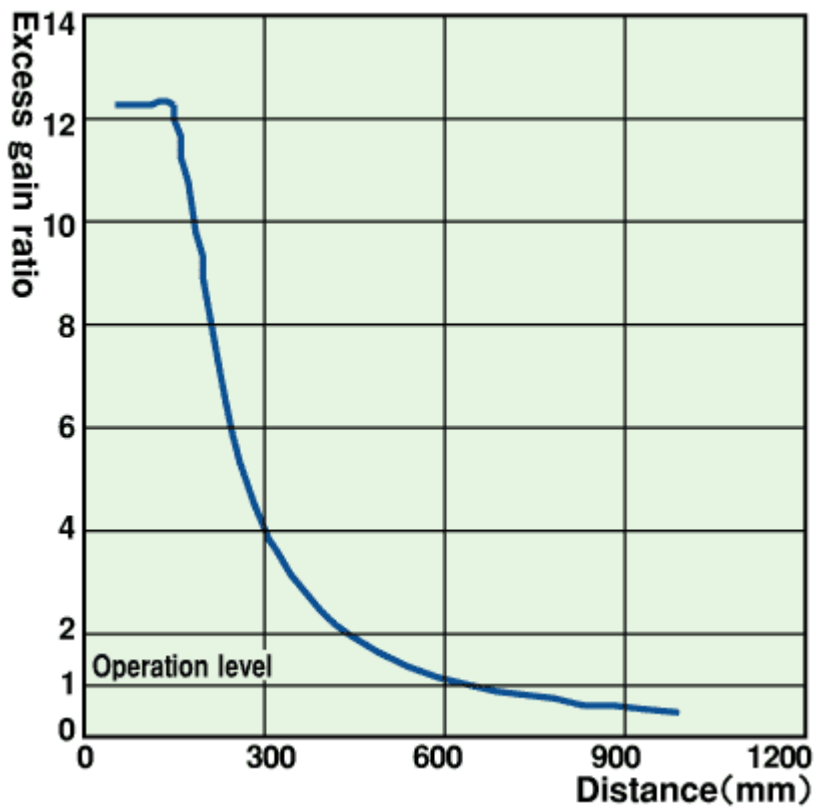


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Setting distance

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Excess gain ratio vs. setting distance



As of July 25, 2024

