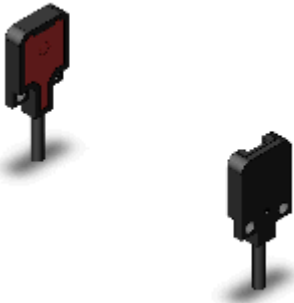


Ultracompact, Ultrathin Photoelectric Sensor with Built-in Amplifier

# E3T-FT22 2M



Image

**Ultrathin 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	Rectangular type (Flat)
Sensing method	Through-beam type
Sensing distance	300 mm
Standard sensing object	Opaque: 1.3 mm dia. min.
Minimum sensing object	1.3 mm min. dia. (Opaque)
Directional angle	Emitter: 3 to 25 ° Receiver: 3 ° min.
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)

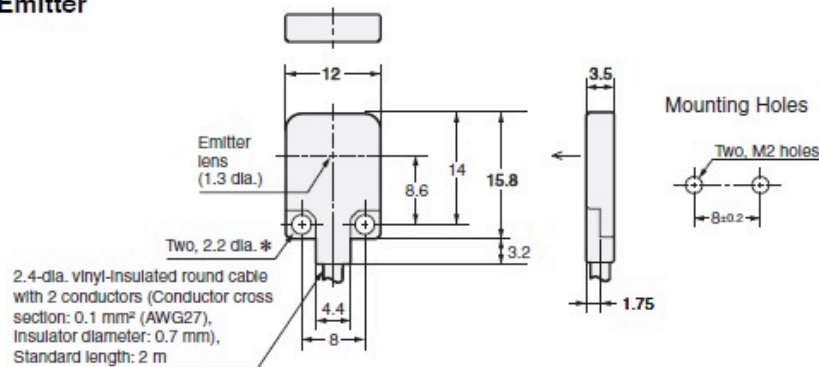
<b>Ambient humidity range (Operating)</b>	35 to 85 % (with no condensation)
<b>Ambient humidity range (Strage)</b>	35 to 95 % (with no condensation)
<b>Insulation resistance</b>	20 MΩ min. (500 VDC megger)
<b>Dielectric strength</b>	1000 VAC 50/60 Hz 1 min
<b>Vibration resistance</b>	Destruction: 10 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>Connection method</b>	Pre-wired models (Cable length 2 m)
<b>Indicator</b>	Operation indicator (orange), Stability indicator (green)
<b>Weight</b>	Package: Approx. 40 g
<b>Accessories</b>	Instruction manual, Set screws for mounting (M2*8), Nuts
<b>Material</b>	Case: Polybutylene terephthalate (PBT) Lens: Denatured Polyarylate Display: Denatured Polyarylate

As of July 25, 2024

### Dimensions

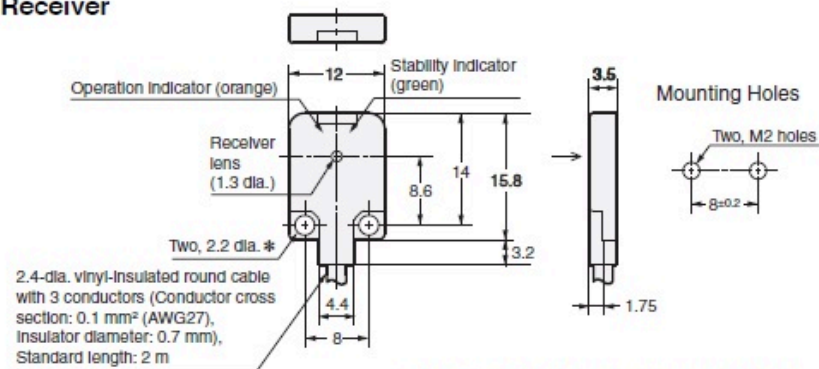
As of July 25, 2024

#### Emitter



\*The mounting holes are made of SUS301.

#### Receiver

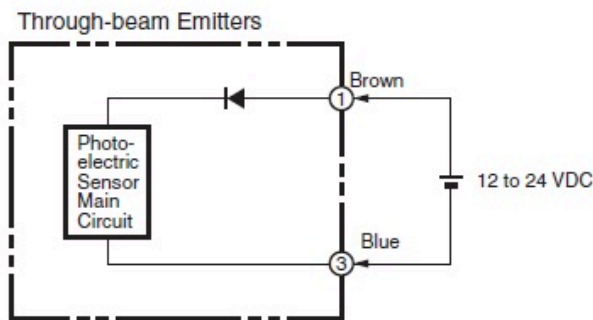
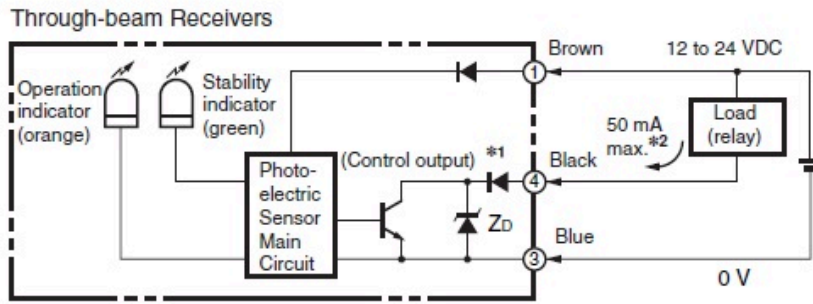


\*The mounting holes are made of SUS301.

As of July 25, 2024

Output circuit diagram

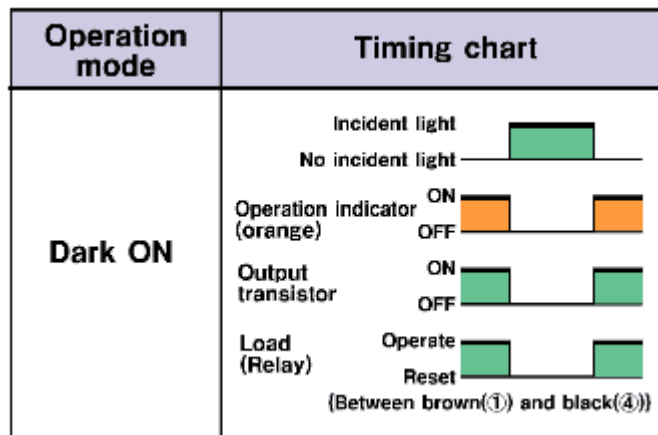
As of July 25, 2024



As of July 25, 2024

Timing chart

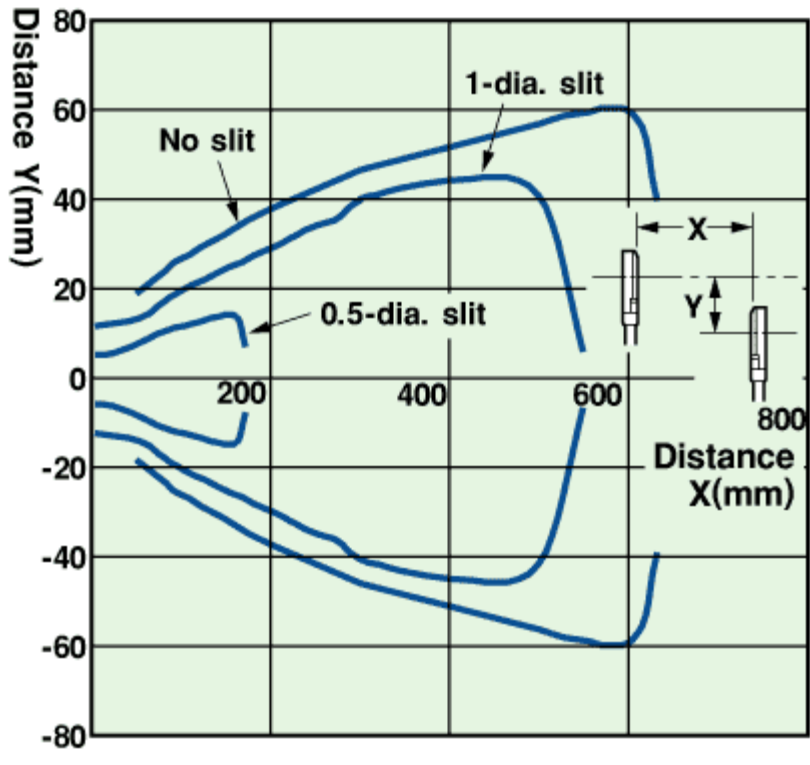
As of July 25, 2024



As of July 25, 2024

Parallel operating range

As of July 25, 2024



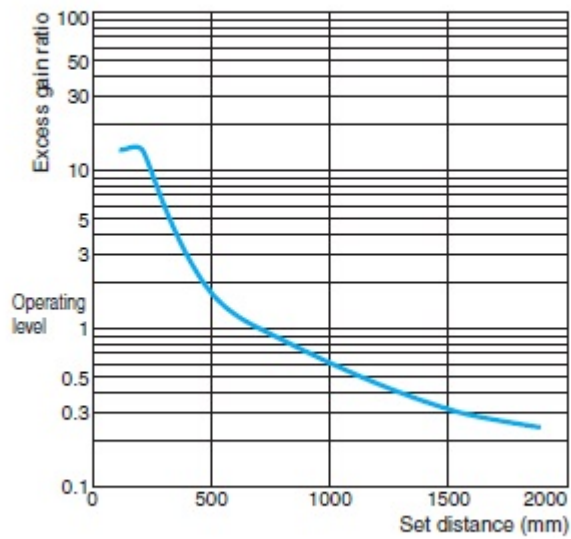
As of July 25, 2024

Setting distance

As of July 25, 2024

Excess gain ratio vs. setting distance

E3T-FT2



As of July 25, 2024