

Safety Precautions

Refer to *Warranty and Limitations of Liability*.

WARNING

This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.



Precautions for Correct Use

Make sure that this product is used within the rated ambient environment conditions.

Wiring

Connections

The length of the standard cable is 10 m max. (including the cable attachment, AWG24 min.). When extending the Sensor wires, use a wire greater than AWG 22 in diameter and a cable shorter than 100 m. If the cable length exceeds 10 m, the supply voltage applied at the Sensor terminal will decrease as the impedance of the extended cable increases and the low level output voltage at the cable end will increase. Therefore, take voltage fluctuation into account when extending the Sensor cable.

Mounting

Tighten the mounting screws to a torque of 0.54 N·m max.

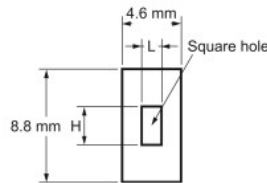
Adjustment

Aperture Stickers

One sheet with 16 total slits is provided (0.5 × 3 mm, 1 × 3 mm, 3 × 0.5 mm, 3 × 1 mm; four each).

Use these when the sensing object is 2 mm or smaller or when mutual interference must be reduced.

For each slit of the same type, attach a sticker to the sensing surface of the emitter and receiver.



	Size L (mm)	Size H (mm)
Slit A	0.5	3
Slit B	1	3
Slit C	3	0.5
Slit D	3	1

Note: These are pressure sensitive adhesive-type stickers. Peel off the seal and stick it on the lens.

Optical Axis Adjustment

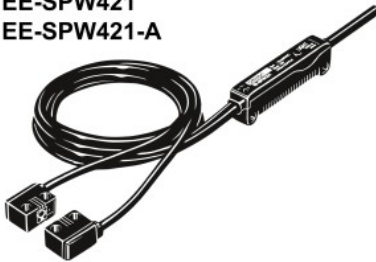
- (1) Set the Sensor so that the center of the lens in the emitter and receiver form one line.
- (2) Having checked that the Sensor is correctly wired, turn ON the power. The operation indicator on the amplifier of the emitter will light. Check to make sure the light goes ON and OFF when an opaque object is moved in and out between the emitter and receiver.
- (3) Move the emitter (or receiver) up and down, left and right and secure the emitter (or receiver) in the center of the range of the operation indicator. Secure the receiver (or emitter) in the same way after adjustment is complete.

(Unit: mm)

Dimensions

Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

- EE-SPW321
- EE-SPW321-A
- EE-SPW421
- EE-SPW421-A



* L = 500 mm (EE-SPW321, EE-SPW421)
L = 1,000 mm (EE-SPW321-A, EE-SPW421-A)

