

I/O Circuit Diagrams

NPN Output

Model	Output configuration	Timing charts	Output circuit
EE-SPW411	Light-ON		
EE-SPW311	Dark-ON		

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.

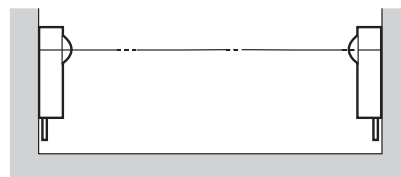
● Wiring

- Connection is made using a connector. Do not solder to the pins (leads).
- When extending the cable, use an extension cable with conductors having a total cross-section area of 0.3 mm². The total cable length must be less than 10 m.

● Axis Adjustment

- (1) Tentatively mount the emitter and receiver so that the center of each lens is in a single line.

Side view

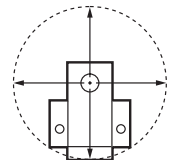


Top view



- (2) Turn ON the emitter and receiver after making sure that they have been wired correctly. When power is turned ON, the light indicator on the receiver will light. Make sure that the light indicator is OFF when an object intercepts the optical axis and that the light indicator lights again when the object is removed.

- (3) Fix the position of the receiver (or emitter) securely, move the emitter (or receiver) horizontally and vertically to check the range in which the operation indicator is lit. Then locate the emitter (or receiver) in the center of the range and fix the position securely.



Dimensions

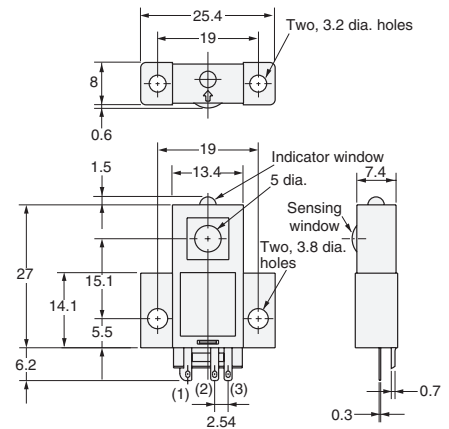
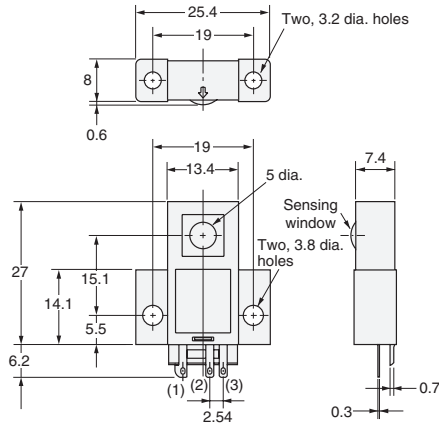
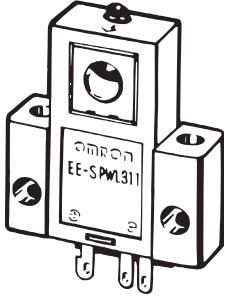
Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

Sensors

EE-SPW311
EE-SPW411

Emitter (EE-SPWL□11)

Receiver (EE-SPWD□11)



Terminal Arrangement

(1)	+	Vcc
(2)	---	Vacant
(3)	-	GND (0 V)

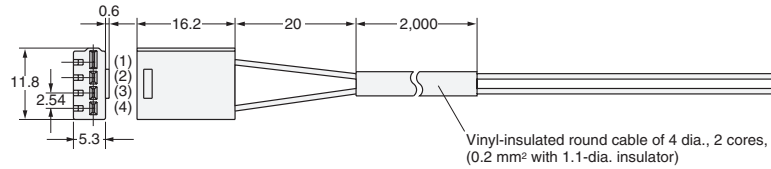
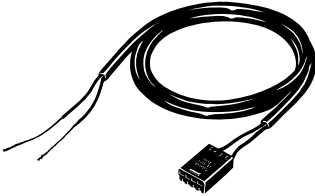
Terminal Arrangement

(1)	+	Vcc
(2)	OUT	OUTPUT
(3)	-	GND (0 V)

Accessories (Included)

Connector with Cable for Emitter

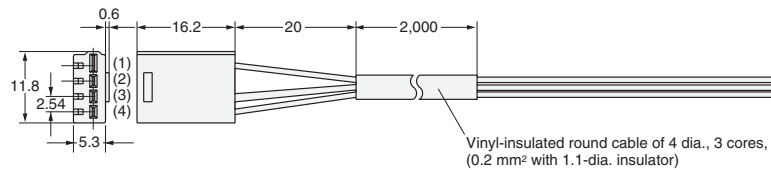
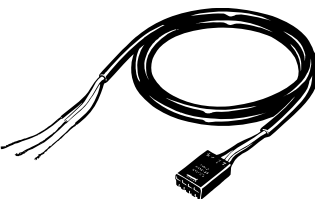
EE-1006L



(1)	Brown	+
(4)	Blue	-

Connector with Cable for Receiver

EE-1006D



(1)	Brown	+
(3)	Black	OUT
(4)	Blue	-

Note: These cables can also be ordered separately.

* Refer to *Accessories* for details.