

Amplifier Built-in Ultra-slim Photoelectric Sensor EX-10 Series

MJECK-EX10 No.0054-67V

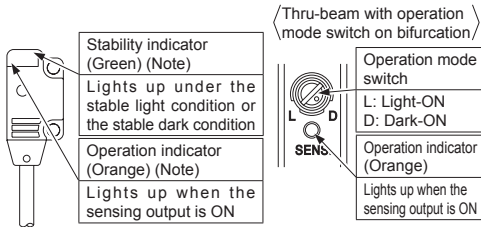
Thank you very much for purchasing Panasonic products. Read this Instruction Manual carefully and thoroughly for the correct and optimum use of this product. Kindly keep this manual in a convenient place for quick reference.

- Please refer "our web site (<http://panasonic.net/id/pidsx/global>)".
- Access method is "Download" → "Manual" → "Model No."
- If you could not visit our web site, contact our sales office near your sight.

⚠ WARNING

- Never use this product as a sensing device for personnel protection.
- In case of using sensing devices for personnel protection, use products which meet laws and standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.

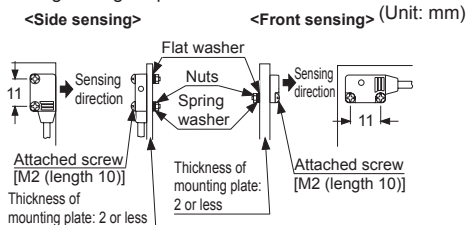
1 PART DESCRIPTION



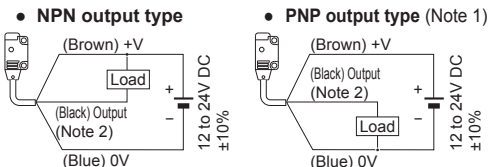
Note: Not incorporated on the thru-beam type sensor emitter.

2 MOUNTING

- The tightening torque should be 0.2N·m or less.



3 WIRING DIAGRAMS



Notes: 1) Thru-beam with operation mode switch on bifurcation is not prepared.
2) The thru-beam type sensor emitter does not incorporate the output (black).

4 CAUTIONS

- This product has been developed / produced for industrial use only.
- For the convergent reflective type **EX-14**, if there is a reflective object (e.g., a conveyor, etc.) in the background of the sensing object, since it may affect the sensing, use by keeping enough distance from the reflective object.
- The thin cable 0.1mm² is used for this product. Thus, take care that if the cable is pulled with excessive force, it may cause cable break.
- Extension up to total 50m (each emitter and receiver of thru-beam type), or less, is possible with 0.3mm², or more of conductor area cable. However, the extension of a power supply line and the output line of less than 10m is acceptable in case using this product as conforming to S-mark.
- Make sure to carry out wiring in the power supply OFF condition.
- Take care that wrong wiring will damage the sensor.
- Verify that the supply voltage variation is within the rating.
- If power is supplied from a commercial switching regulator, ensure that the frame ground (F.G.) terminal of the power supply is connected to an actual ground.
- In case noise generating equipment (switching regulator, inverter motor, etc.) is used in the vicinity of this product, connect the frame ground (F.G.) terminal of the equipment to an actual ground.
- Do not run the wires together with high-voltage lines or power lines or put them in the same raceway. This can cause malfunction due to induction.
- Take care that the sensor is not directly exposed to fluorescent lamp from a rapid-starter lamp, a high frequency lighting device or sunlight etc., as it may affect the sensing performance.
- Do not use during the initial transient time (**EX-15**, **EX-15E**, **EX-17**, **EX-17E**: 100ms, others: 50ms) after the power supply is switched ON.
- This sensor is suitable for indoor use only.
- Do not use this sensor in places having excessive vapor, dust, etc., or where it may come in contact with corrosive gas, etc.
- Take care that the sensor does not come in contact with oil, grease, organic solvents such as thinner, etc., strong acid, or alkaline.
- This sensor cannot be used in an environment containing inflammable or explosive gases.
- Never disassemble or modify the sensor.
- Since the cable end is not waterproof, do not use the sensor in the application where water may seep in from the cable end.

5 INTENDED PRODUCTS FOR CE MARKING

- The models listed under "SPECIFICATIONS" come with CE Marking. As for all other models, please contact our office.
- **Contact for CE**
Panasonic Marketing Europe GmbH Panasonic Testing Center
Winsberg 15, 22525 Hamburg, Germany



6 RoHS DIRECTIVE

- This equipment complies with RoHS (EC and Chinese directive).
- Chinese RoHS indicates inclusion despite regulation value. (Refer to Chinese part.)

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