

OMRON

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F39-PTG

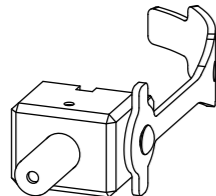
Laser Alignment Kit For F3SG Safety Light Curtain

INSTRUCTION SHEET

Thank you for selecting OMRON product. This sheet primarily describes precautions required in installing and operating the product.

Read this Manual thoroughly to understand and make good use of the descriptions before installing and operating the product.

Keep this Manual at the place where the operator can refer to whenever necessary.



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- Remove the used battery out of the product as soon as possible. Also, if the product is not used for a long period of time, remove the battery out of the product.
- Be careful to avoid pinching your hand when installing the product.
- Dispose of this product in accordance with local and national disposal regulations.

PRECAUTIONS FOR CORRECT USE

- Do not use the product in the following location:
 - Places exposed to water.
- Battery
 - Do not mix batteries with new and old, different brands or different types.
 - Do not charge, short circuit, disassemble, heat or throw into fire.
 - In case of accidental ingestion of batteries, immediately consult a doctor for the necessary treatment.
 - The battery contains strong alkaline solution or electrolyte solution composed of organic solvents. If it gets into your eyes, it may cause blindness. Wash your eyes with lots of water and immediately consult your doctor.
- Battery Handling
 - When replacing batteries, be sure to check the switch of the product is turned OFF.
 - When the product is not in use, turn OFF the switch.
- Cleaning
 - Avoid the use of thinner, benzene, acetone, and kerosene. Use of these solvents will melt the surface of the product.

LASER SAFETY

Precautions on Handling

- F39-PTG radiates visible-light laser. Do not directly look into beam. Terminate the optical path of the product.
- Termination material with less reflective and lusterless painted surface is the best choice. When a specular reflector exists on an optical path, block beam to the reflective optical path. In the case of releasing beam, avoid the optical path to be at eye level.

Laser safety regulations vary according to the country where LED devices are used.

- Use in Japan
 - JIS C 6802 regulates safety protection measures to the user according to classes of laser products.
 - F39-PTG is classified as Class 2.

Laser Warning Label

The label shown on the right is pasted on the F39-PTG.



- Use in the United States
 - This product is subject to FDA (Food and Drug Administration) laser regulations. For details on exports to foreign countries, contact OMRON representative.

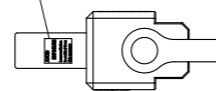
Laser Warning Label

The FDA labels supplied with the product conform to FDA technical criteria. When using the product in the U.S., refer to the illustration below to replace warning labels of F39-PTG with the FDA labels. Refer to the illustration below to paste them in correct locations.

Label for laser radiation aperture



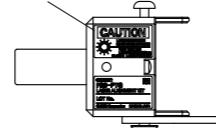
Label for laser radiation aperture



Warning label



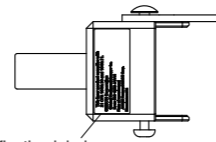
Warning label



Certification label



Certification label



- Use in countries other than Japan and United States
 - For areas other than Japan and United States, replace warning labels with the supplied English labels.
 - For used in Europe, regulations differ due to EN 60825-1.

This product is classified as Class 2 according to EN 60825-1 (IEC60825-1).



Ratings and performance

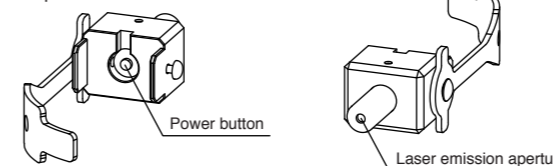
Item	Model	F39-PTG
Applicable sensor (*1)		F3SG
Power supply voltage		4.65 VDC or 4.5 VDC
Battery		Three button batteries (SR44 or LR44: 3)
Battery life (*2)		SR44: Approx. 10 hours, LR44: Approx. 6 hours (cont. use)
Light source		Red semiconductor laser (wavelength 650 nm, 1 mW max, JIS Class 2, IEC Class 2, FDA Class II)
Spot size (Typical)		6.5 mm (at 10 m)
Ambient temperature		Operating: 0 to 40°C Storage: -15 to 60°C (non-condensing, non-icing)
Ambient humidity		Operating, storage: 35 to 85% RH (non-icing)
Material		Laser module case: Aluminum, Mounting band: NBR Attaching part: Aluminum, stainless
Weight		Approx. 240 g (in packing) Approx. 210 g (in packing)
Accessories		Laser standard related labels (EN: 1, FDA: 3) Instruction Sheet, hexagonal wrench

- *1. The F39-PTG can be used with the spatter protection cover mounted.
- *2. Battery life differs depending on a battery used.

Usage

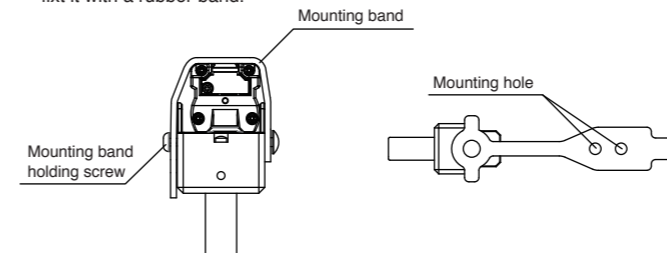
- F39-PTG is used for coarse adjustment. Coarse adjustment means to adjust an approximate location to install a Safety Light Curtain. Beam adjustment cannot be performed with coarse adjustment alone. After coarse adjustment, be sure to perform beam adjustment using Safety Light Curtain's light intensity level indicators according to the User's Manual.

- Turn ON the power of the laser module.



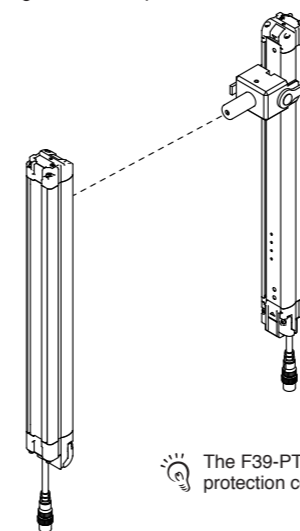
The laser is irradiated when the power button is pressed.

- Mount a F39-PTG at the top of the emitter (or receiver) of the F3SG and fix it with a rubber band.



Be sure that the F39-PTG does not fall off. A horizontal misalignment between the product and the optical axis of the laser pointer does not affect the coarse adjustment. If the mounting band is damaged, use a replacement mounting band: F39-PTG-RUB (sold separately).

- Perform coarse adjustment so that laser beam is radiated at the center of the top of the opposed receiver (or emitter). After adjustment, temporarily tighten the mounting bracket on top.

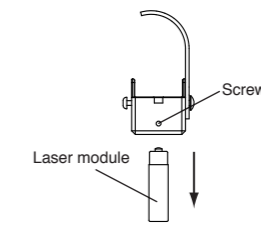


The F39-PTG can be used with the spatter protection cover mounted.

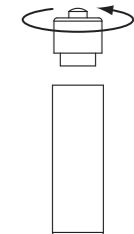
- Turn OFF the F39-PTG and remove it.
- Perform coarse adjustment steps 1 to 4 as needed and temporarily tighten the mounting bracket.
- Also perform coarse adjustment steps 2 to 4 for the receiver (or emitter).

Battery replacement

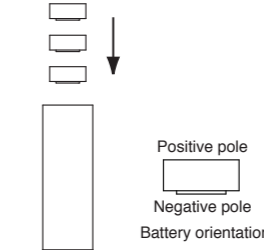
- Use a provided hexagonal wrench to loosen the screw and remove the laser



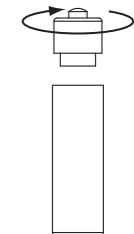
- Remove the lid.



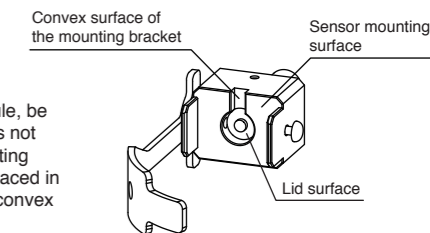
- Insert three batteries in the correct orientation.



- Tighten the lid.



- Mount the laser module and tighten the screw with the provided hexagonal wrench. (recommended torque: 0.15 to 0.20 Nm)



When mounting the laser module, be sure that the power button does not protrude from the sensor mounting surface and the lid surface is placed in line with the mounting bracket convex surface.

PRECAUTIONS ON SAFETY

Meanings of Signal Words



Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death. Additionally there may be significant property damage.

Meanings of Alert Symbols



Laser Caution
Indicates information related to laser safety



Disassembly Prohibition
Indicates that disassembly is prohibited to prevent electric shock.

Alert Statements



Never look into the laser beam. Looking into the laser beam continuously will cause injury to the eyes.



Do not disassemble the product. Disassembly of the product may cause leakage of the laser beam.



PRECAUTIONS FOR SAFE USE

- Observe the following precautions to ensure safe operation.
- Do not use the product in atmospheres containing flammable or explosive gases.
- Do not try to disassemble, repair, or modify this product.
- Do not drop the product.
- Before mounting the product, be sure to check that there is no damage or crack on the mounting band.
- Before mounting the product, be sure to check that the mounting band holding screw is not loose.
- Insert batteries into the product properly, with the + (positive) and - (negative) terminals aligned correctly.
- After battery change, be sure to check the battery cover is closed.

Suitability for Use

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

See also Product catalog for Warranty and Limitation of Liability.

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