# Panasonic INSTRUCTION MANUAL

350°C Heat-resistant Fiber FT-H35-□, FD-H35-□

MJEC-FXH35 No.0079-14V

### 1 CAUTIONS

- This product has been developed / produced for industrial use only.
- Keep the sensing surface intact. If it is scratched, the detectability will deteriorate.
- If the sensing surface gets dirty, wipe dirt or stains from the sensing surface with a soft cloth.
- Do not expose the fiber cable to any organic solvent.
- Since the fiber is made of glass, if it is used at places having intense vibration or impact, or pulled excessive force, the fiber may break. Take sufficient care when using the fiber.
- The bending radius of the fiber cable must be R25mm or more. Take care if the bending radius is less than R25mm, the fiber may break.
- The sleeve part bending radius of fiber with sleeve must be 10mm or more.
- Take care that the product 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 move or bend the fiber cable after sensitivity adjustment. Detection may become unstable.

### 2 MOUNTING OF FIBER

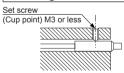
 When mounting, follow the guidelines given below for the tightening torque.

### Mounting with lock nut



Model No.	Nut size	Tightening torque
FT-H35-M2 FT-H35-M2S6	M4	0.98N⋅m or less
FD-H35-20S	M4	0.58N·m or less
FD-H35-M2S6	M6	1.96N·m or less

#### Mounting with set screw



Tightening torque 0.29N·m or less

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.

## **3** CONNECTION WITH AMPLIFIER

- Insert the fiber plug into the socket slowly.
- Then, fasten the fiber firmly.

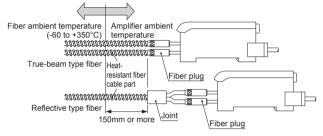
### In case of reflective type fiber

 Insert the fiber having engraved "P" mark into the emitting side hole of the amplifier, and insert the fiber having engraved "D" mark into the receiving side hole of the amplifier.

There are no such engraved marks on the thru-beam fibers. **FD-H35-M2S6** and **FD-H35-20S**.

# **4** OPERATION TEMPERATURE

 Keep the amplifier and the fiber cable of length 150mm or more under the rated amplifier ambient temperature range.



- Make sure that the amplifier unit is not exposed to radiant heat or hot wind.
- The surface of the fiber head or the stainless spiral of the 350°C heat-resistant fiber may be discolored by heat.
   However, this does not affect the detection capability.
- If the fiber is used under -30°C, the usable maximum temperature drops to +200°C.
- Always bend fiber cable optics slowly under the ambient temperature of -30°C and below, otherwise it may be broken down.
- If the side-view lens FX-SV1 is put on the fiber head of thrubeam type fiber FT-H35-M2, the allowable maximum temperature comes down to +300°C.

The ambient temperature range of the **FX-SV1** is from -60 to +300°C.

Further, if **FT-H35-M2** is used with the expansion lens, take care that the beam becomes narrow. Therefore, make sure to align the beam axis before use.

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