

## 200°C Heat-Resistant Joint Head

FT-H20-J□, FT-H20-VJ□

MJE-FTH20J No.0049-69V

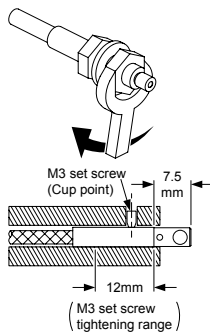
Thank you very much for purchasing Panasonic products. Read this Instruction Manual carefully and thoroughly for the correct and optimum use of this product. Kindly keep this manual in a convenient place for quick reference.

### 1 CAUTIONS

- This product has been developed / produced for industrial use only.
- Do not scratch the sensing surface. If it is scratched, the sensing performance will deteriorate.
- If the sensing surface gets dirty, wipe dirt or stains from the sensing faces with a soft cloth.
- 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.
- Do not expose the fiber cable to any organic solvent.
- The bending radius of the fiber cable must be R18mm or more. Take care if the bending radius is less than R25mm, the fiber may break.
- Take care that the sensor is not directly exposed to fluorescent light from a rapid-starter lamp or a high frequency lighting device, or sunlight, as it may affect the sensing performance.
- Do not move or bend the fiber cable after sensitivity adjustment. Detection may become unstable.

### 2 MOUNTING

- Use attached lock nut (made of metal) and toothed lock washer when mounting the fiber head of the FT-H20-J□. The tightening torque should be 0.58N·m or less.
- Use M3 set screw (please arrange separately) when mounting the fiber head of the FT-H20-VJ□. The tightening torque should be 0.29N·m or less.

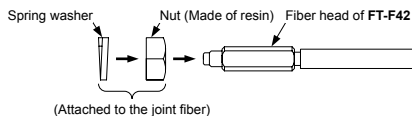


#### How to connect the joint fiber to the FT-42

- When connecting the joint fiber to the FT-42, follow the procedures below.

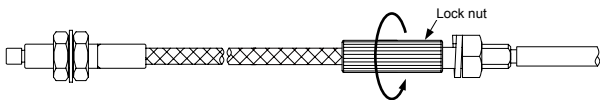
#### <Procedures>

1. Mount a nut (made of resin) and a spring washer that are attached to the joint fiber into the back of the fiber head of the FT-42.



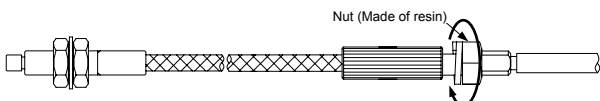
2. Mount the joint fiber in the FT-42 by a lock nut.

The tightening torque should be 0.1N·m or less when tightening the lock nut. If it is not tightened enough, a gap between the joint fiber and the FT-42 will appear and that causes the decrease in the sensing range.



Note: Make sure that the lock nut is not fixed by the nut (made of resin) and the spring washer mounted in the procedure 1.

3. Fix the lock nut with the nut (made of resin) which is mounted in the procedure 1, so that the lock nut will not loosen. The tightening torque should be 0.1N·m or less.

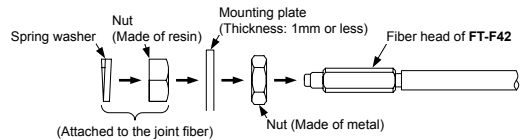


#### When fixing an intermediate portion in a mounting plate

- When fixing an intermediate portion (the connection of the joint fiber and the FT-42) in a mounting plate by the attached nut (made of metal), follow the procedures below.
- The thickness of the mounting plate should be 1mm or less.

#### <Procedures>

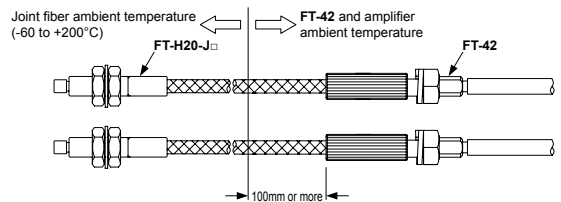
1. Mount the attached nut (made of metal) from the fiber head, then move it to the fiber cable.
2. Insert the fiber head to the mounting plate.
3. Connect the joint fiber to the FT-42 by following the procedures "How to connect the joint fiber to the FT-42."
4. Tighten the nut (made of metal) which is mounted in the procedure 1 on the mounting plate. The tightening torque should be 0.15N·m or less.



- The tightening torque should be 0.29N·m or less when fixing by the set screw.

### 3 OPERATION TEMPERATURE

- Keep the joint fiber of length 100mm or more under the rated FT-42 and amplifier ambient temperature range.



### 4 SPECIFICATIONS

Type	Top sensing type	Side sensing type
Model No.	FT-H20-J□	FT-H20-VJ□
Fiber length	FT-H20-J20: 200mm FT-H20-J30: 300mm FT-H20-J50: 500mm	FT-H20-VJ50: 500mm FT-H20-VJ80: 800mm
Allowable bending radius	R18mm or more	
Ambient temperature	-60 to +200°C (in dry condition)	
Ambient humidity	35 to 85% RH	
Materials	Fiber core, multi-component glass, sheath: SUS304 Fiber head: Brass (Nickel-plated), Lock nut: Polycarbonate	
Accessories	Nuts (made of metal): 6 pcs. Nuts (made of resin): 2 pcs. Toothed lock washers: 2 pcs. Spring washers: 2 pcs.	Nuts (made of metal): 2 pcs. Nuts (made of resin): 2 pcs. Spring washers: 2 pcs.

Note: A model that "S" is attached to the end of the Model No. includes FT-42.

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