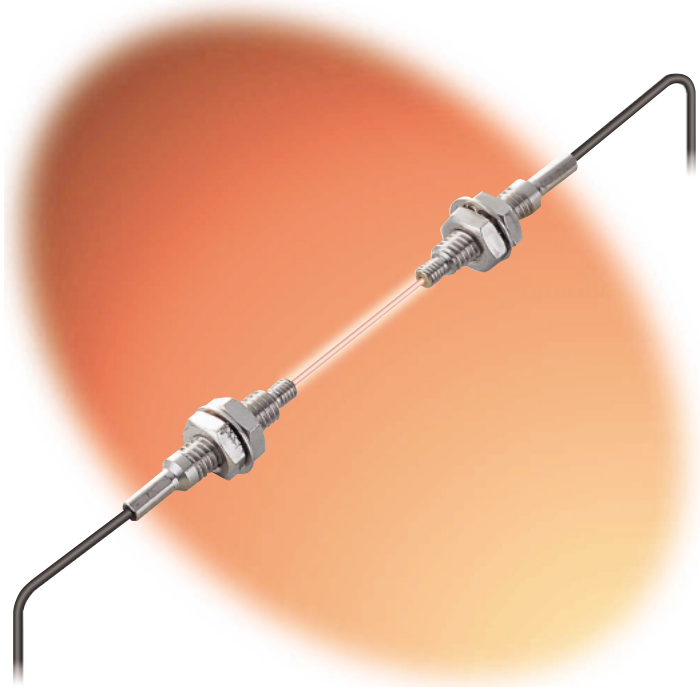
SUNX

FLEXIBLE HEAT-RESISTANT FIBER

New

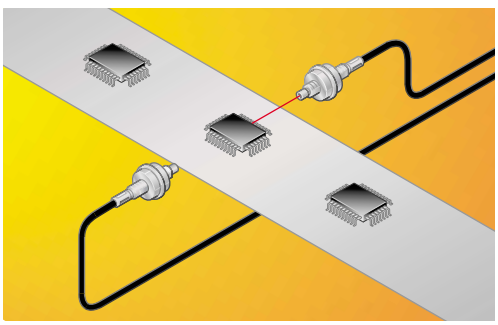
FT-H20W SERIES

A bending radius of R10mm is possible even in high temperature environments



Heat-resistant Temperature 200°C

Withstands temperature up to 200°C.
Sensing is now possible in high temperature environments, such as detecting the presence of ICs in a high temperature handler.



Bending Radius R10mm for Space Saving

By utilizing a PTFE exterior coating, bends of R10mm are possible, even in high temperature environments. Cabling can be laid out freely, thus saving space.

Conventional models

FT-H20W series

Fiber Cable Types of 1m and 2m Lengths Are Available

Fiber cables can be selected for your specific applications, from fiber cable types of 1m (**FT-H20W-M1**) and 2m (**FT-H20W-M2**) lengths.

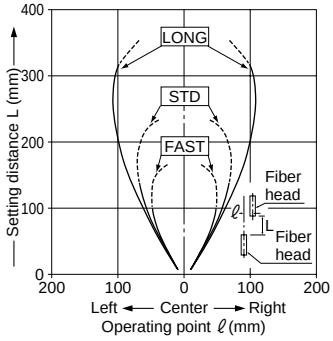
SPECIFICATIONS

Item \ Type	Fiber cable length 1m	Fiber cable length 2m
Model No.	**FT-H20W-M1**	**FT-H20W-M2**
Applicable amplifier (Note 1)	**FX-301**	
Sensing range	310mm (LONG), 140mm (STD), 100mm (FAST)	
Min. sensing object	ϕ0.02mm opaque object	
Allowable bending radius	R10mm or more	
Fiber cable length	1m	2m
Ambient temperature	−60 to +200°C (No dew condensation or icing allowed) Storage: −60 to +200°C (Note 2)	
Ambient humidity	35 to 85% RH, Storage: 35 to 85% RH	
Material	Fiber core: Multi-component glass, Sheath: PTFE Fiber head: Brass (Nickel plated), Plug: Polyamide	
Weight	15g approx.	23g approx.
Accessories	Nut: 2 Nos., Toothed lock washer: 1 No.	

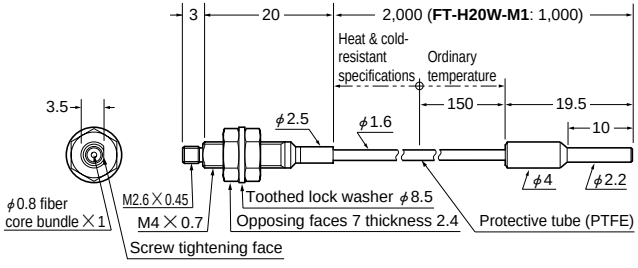
Notes: 1) For further details, refer to **FX-301** catalog. Please contact our office about another applicable amplifiers.
2) The ambient temperature is the value in dry condition.
In humid environment, the ambient temperature differs.
(For a high humidity of 85% RH, the ambient temperature is 0 to +40°C.)

SENSING CHARACTERISTICS (TYPICAL)

Parallel deviation



DIMENSIONS (Unit: mm)



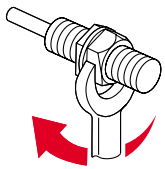
PRECAUTIONS FOR PROPER USE

This product is not a safety sensor. Its use is not intended or designed to protect life and prevent body injury or property damage from dangerous parts of machinery. It is a normal object detection sensor.

Mounting

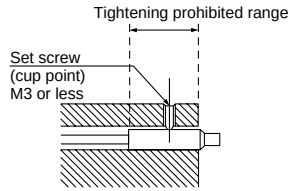
• The tightening torque must not exceed the values given below.

Mounting with a nut



Tightening torque
0.98N·m or less

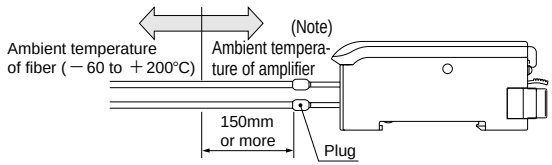
Mounting with a set screw



Tightening torque
0.49N·m or less

Cautions

• The bending radius of the fiber cable must be R10mm or more. If the fiber cable is bent at a smaller bending radius, the sensing capability will deteriorate.
• Do not bend the fiber cable at the root of the fiber head.
• Do not install the fiber cable on a movable part.
• In order to protect the amplifier, use by keeping 150mm, or more, of the heat-resistant fiber cable part at normal temperature.



Protect the amplifier from heat radiation or hot air.
• Keep the fiber head surface intact. If it is scratched or spoiled, the detectability will deteriorate.
• If the fiber head surface is dirty, wipe off the dirt with a clean soft cloth moistened with water.
(Do not use any organic solvents.)
• Do not use the fiber head surface in places where it may come in direct contact with water. A water drop on the fiber head surface deteriorates the sensing.
• Ensure that any strong extraneous light is not incident on the receiving face of the fiber head.
• Do not apply excessive tensile force of the fiber cable.
(The excessive tensile force should be 19.6N or less.)
• Take care that the sensor is not directly exposed to fluorescent lamp from a rapid-starter lamp or a high frequency lighting device, as it may affect the sensing performance.
• Avoid dust, dirt, and steam.
• Take care that the sensor does not come in direct contact with water, oil, grease or organic solvents, such as, thinner, etc.