

INSTRUCTION MANUAL

(For Mold cavity temperature sensor)

Read this instruction manual with care before using this product.

Be sure to observe the important points mentioned in this manual. Keep this manual in custody near by in such a way that you may refer thereto anytime, if required.

Pictograms and conventions used in this manual

This manual uses the following pictograms to indicate actions to avoid at all times, aspects requiring caution, and other noteworthy matters.. Be sure to read the descriptions provided alongside these pictograms.

	NOTE : This indicates circumstances in which incorrect handling may result in accident or serious injury to users. Avoid the actions described here at all times.
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	This indicates operating or procedural precautions or restrictions. Always read the details included here to avoid malfunctioning.
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1. Introduction

Thank you very much for purchasing MinebeaMitsumi's mold cavity temperature sensor. In the beginning, confirm there isn't neither damage during transportation, and whether is difference of the type. Contact purchased agency or our office when there is a flaw. Confirm the catalog or specifications about the specification of each type.

2. Sensor assembly

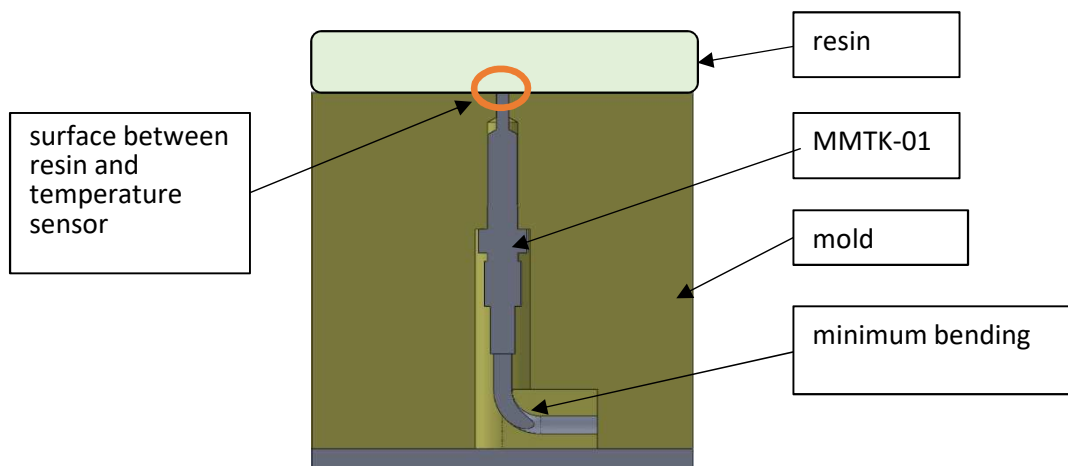
2-1. Position of sensor cable

Insert the temperature sensor in the metal mold and use it.



*Bend the cable more than the minimum bending radius and do not bend the cable repeatedly in the same location.

Since a sheath type thermocouple is used in MMTK-01, it may break like the wire.



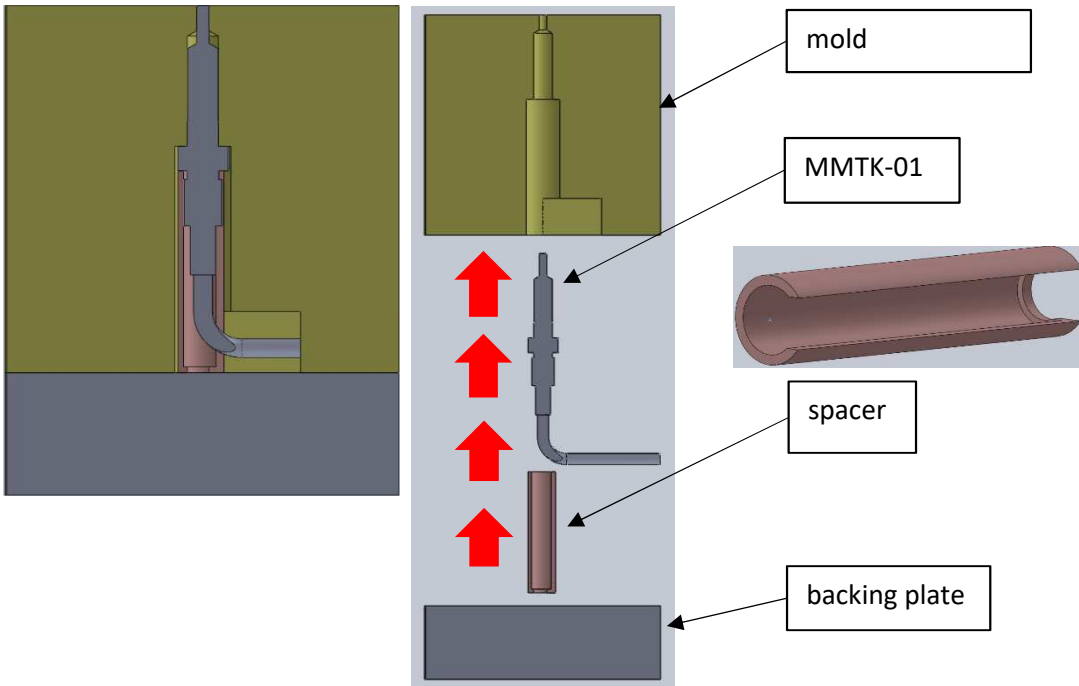
2-2. Assembly position of sensor component

First insert MMTK-01 into the mold, then insert the spacer.

Please make sure the cable passes through the gap of the spacer while inserting.



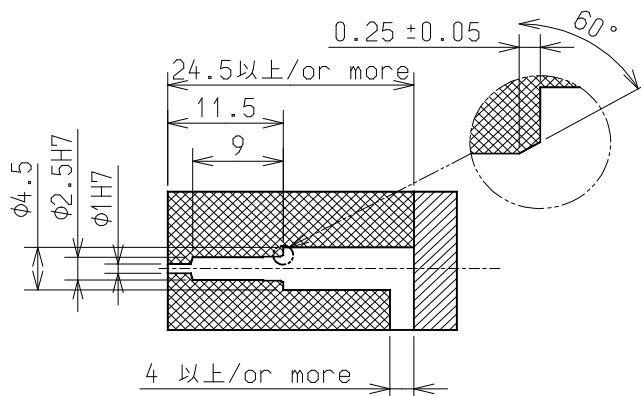
After the material is inserted, MMTK-01 is fixed by suppressing the spacer in the backing plate.



3. Component processing

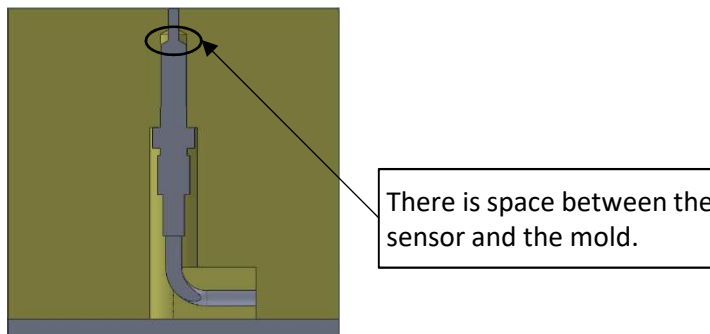
3-1. Mold processing dimensions

Process the mold by the following dimensions.



3-2. Image of temperature sensor insertion

The temperature sensor is inserted in the mold as follows.

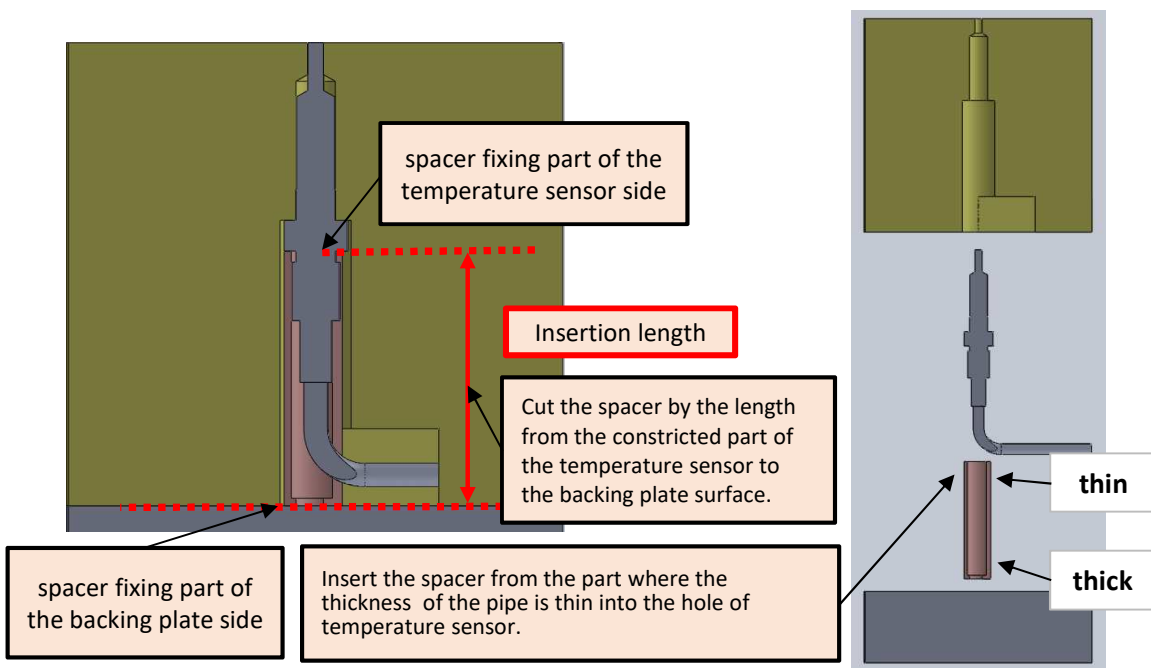
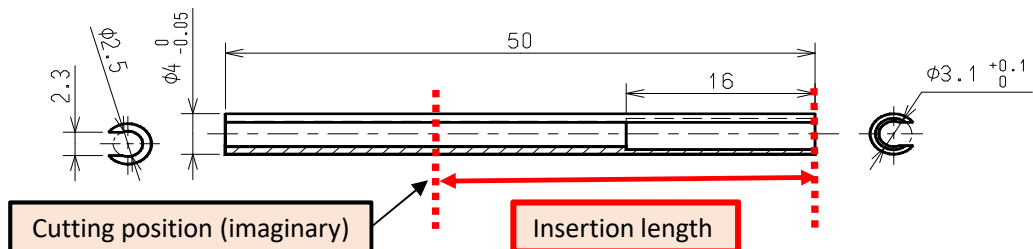


3-3. Spacer processing

Cut the length of the spacer by the same length as the temperature sensor insertion part.
 The thermal sensor is designed as inserted from the direction with thin thickness of the pipe.
 Cut the part where the thickness of the pipe is thick as a scrap.

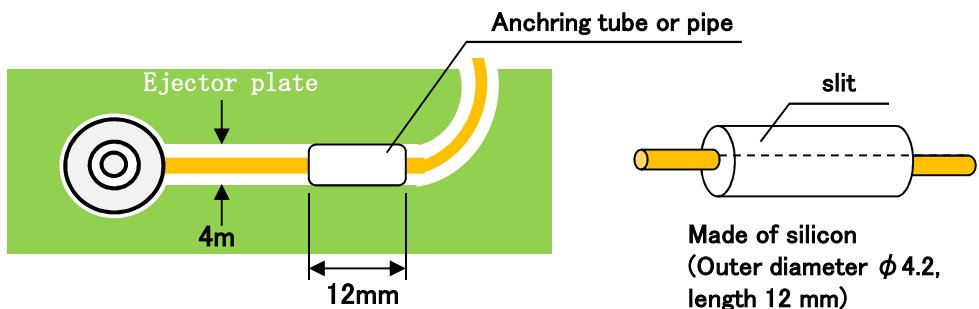
*Processing method (The following two processing methods are recommended.)

- ①Wire discharge manufacture
- ②After preventing the transformation by the processing by putting the stick of the metal in the spacer block cut in rough length with the lathe, and process a minute tune of length by grinding.



4. Sensor cable fixing

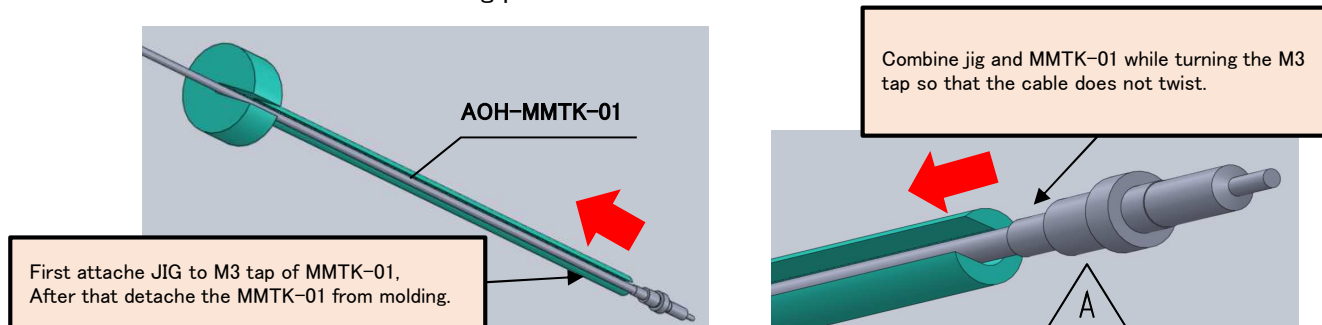
Use the cable anchoring tube provided with the sensor to anchor the sensor in the groove.
 ⚠ And take great care not to damage the cable such as by trapping it when assembling the mold.
 The tube can be inserted into a 4 mm wide groove.



5. Sensor detach

If you want to detach the sensor, please use the detaching jig AOH-MMTK-01.

And refer to the following picture.



6. Precautions for use

- Do not bend the cable excessively or pull it strongly. This may damage the cable.
- When removing sensor from the mold, use the dedicated JIG instead of pulling the cable.
- Do not modify or disassemble the sensor.
- The sensor, temperature sensitive part, cable, or the whole product can be extremely hot or cold. If touched by people or objects, there is a risk of burns, frostbite, damage or fire.
- Do not subject the sensor to excessive loads, such as pinching it between mold parts or placing heavy objects on top of it.
- Do not subject the sensor to violent shock, such as dropping heavy objects on it.
- When assembling, dismantling or transporting, pay close attention to cable and connector in order not to damage them.
- Please refer to the instruction manual and appearance specification for the processing size of the mold for installing the sensor.
- The cable going out the mold should have a margin in consideration of the movable range of the mold.
- Please use the anchoring tube provided to anchor and protect the cable in the mold.
- Please use the attached metal spacer to fix the sensor in the mold.
- Do not remove the label attached to the cables.
- Please handle in consideration of the environment when disposing.
- The insulation resistance of the temperature sensor greatly affects the measuring precision. Please store in a dry and dust-free environment.
- Please keep the ambient temperature of the sensor body and cable within the specified temperature compensation range.
- Please perform periodic inspections, check the protection tube for damage, check sensor surface for corrosion and dirt. Also, perform inspection and cleaning as necessary.

Please contact us if you have any questions about the connection method or other things.