

Instruction Manual "Mold Surface Temperature Sensor"

Before using this product, please read this manual thoroughly and be sure to observe the precautions in this manual. Futaba Corporation assumes no responsibility or warranty for injuries caused by the use of the product contrary to these precautions.

1. Preface

Thank you very much for purchasing of the mold surface temperature sensor. First, check that there is no damage during transportation or that there is no difference in the model.

If there are any defects, contact the distributor from whom you purchased the product or our sales office.

2. Overview

The temperature of the cavity surface, which is an important parameter during injection molding, can be measured easily and accurately. This sensor is used in combination with our MVS08 injection molding monitoring system and UPT01A mold surface temperature preamplifier for MVS08.

3. Precautions for Use

- Refer to 5. Product Specifications and 6. Installation Example for the processing dimensions of the sensor mounting part.
- Do not disassemble the internal parts. Doing so will impair the performance and safety of the product.
- Additional machining of the sensor tip is not possible for STF01.0 × 11.5 × 18.5, and for STF04.0 × 08.0 × 026, polishing is possible for about 0.01 to 0.02. However, do not perform shapes, curved surfaces, or diagonal machining.
- When removing from the mold, use a dedicated sensor removal wrench and do not pull the cable. It is likely to cause a broken wire.
- The sensor may be hot and may cause burns, damage, or fire if it comes into contact with people or objects.
- When assembling, disassembling or transporting the mold, be careful not to break the cable or damage the connector.
- Be careful not to apply strong impact or excessive force to the sensor as it may be damaged.
- Do not pull on the cable. Connect the cables with sufficient margin so that excessive force is not applied to the connecting parts. Pulling or applying excessive force may cause failure, interruption of measurement, or abnormal measurement value.
- The heat resistance temperature is 220°C or less for the sensor and cable, and 200°C or less for the connector. Use the product within the specified range.
- When disposing of the product, please dispose of it in an environmentally friendly manner.

4. Measurement Amplifier & Software

When using MVS08 for measurement, use the software of the following version or later.

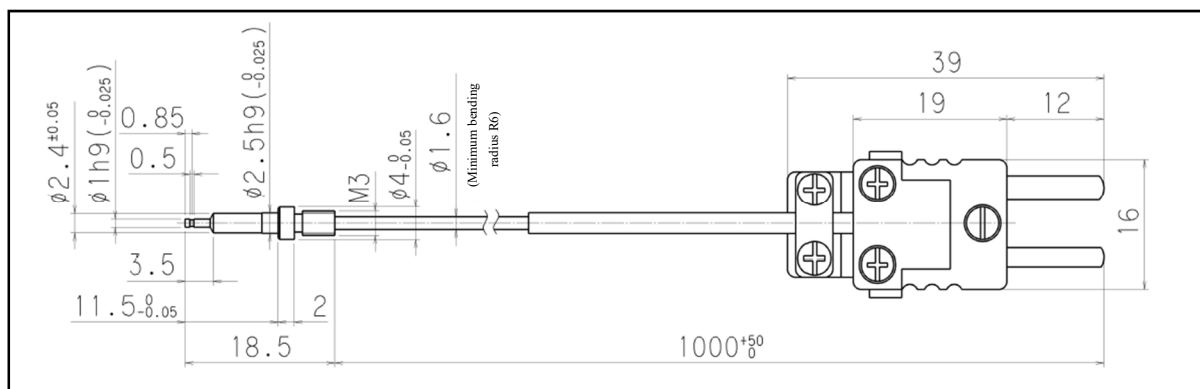
- PC measurement software version Ver.1.0.0.23
- Firmware version in MVS08 amplifier Ver.01.00.34

If you are using an older version, please download the latest software from our website and update the software before use.

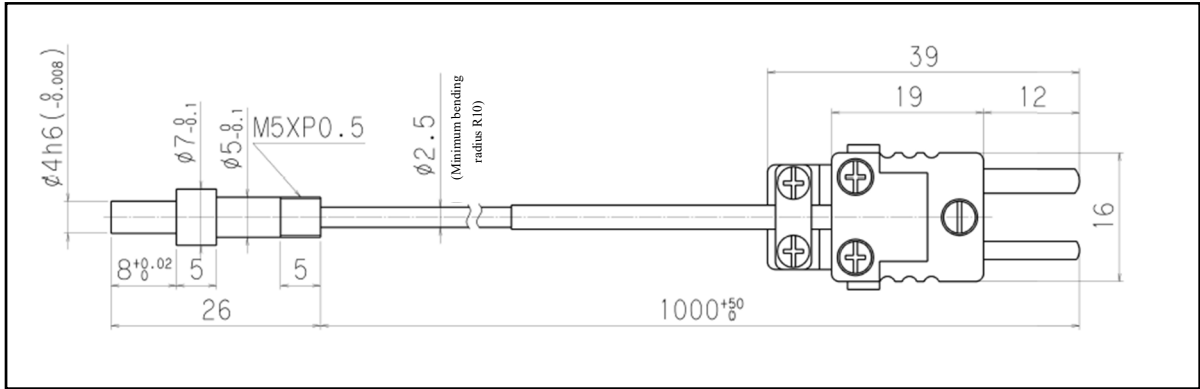
URLs for the latest software downloads: <https://mms.mtb.futaba.co.jp/download/>

5. Product Specifications (Unit: mm)

5-1.STF01.0×11.5×18.5

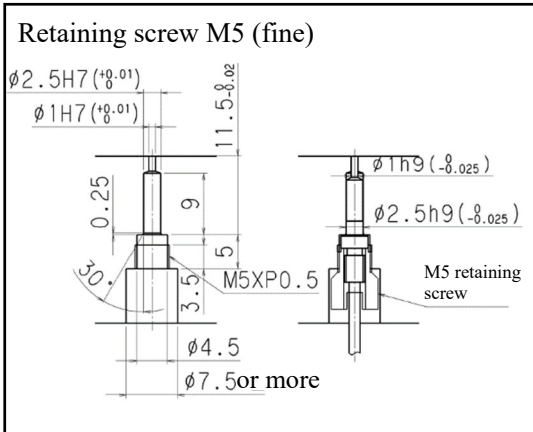


5-2.STF04.0×08.0×026

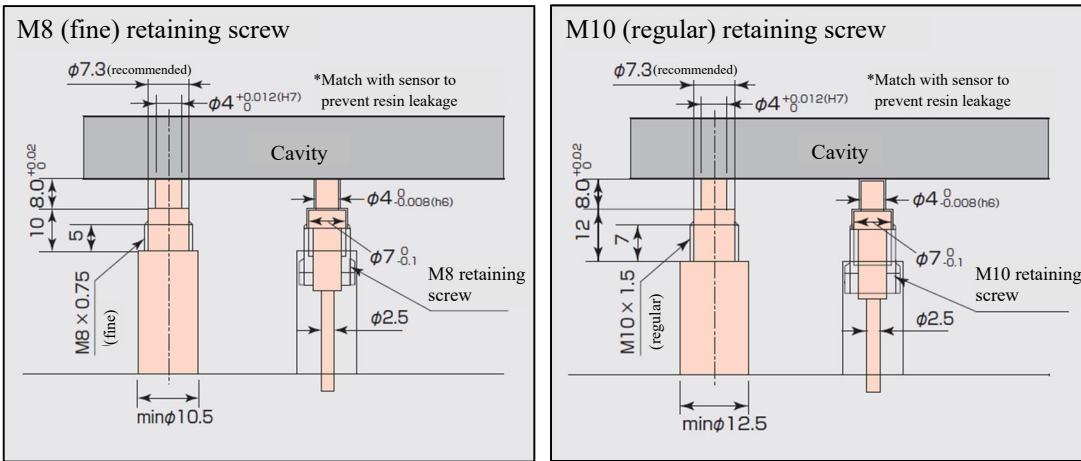


6. Mounting example (Unit: mm)

6-1.STF01.0×11.5×18.5



6-2.STF04.0×08.0×026



※Precautions for sensor installation

- Finish the mounting hole of the sensor tip with $\phi 1H7$ and $\phi 4H7$.
- Check that the mounting holes and sensor are free of dirt and other foreign matter.
- Do not hit the sensor with a tool when installing or removing the sensor. Otherwise, the sensor may be damaged.
Use a dedicated securing wrench and a removal wrench to mount and remove the sensor.
- Be careful not to pinch the sensor cable.

- The contents of this manual are subject to change without notice.
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