

MFP series temperature sensor using the NTC resistance element, according to the different temperature environment or application, through the mature technology, fabricate into a variety of specifications of the sensor, customers can use directly without fabricating.

According to the different application, choose a different installation method, including front-end thread and the back-end.

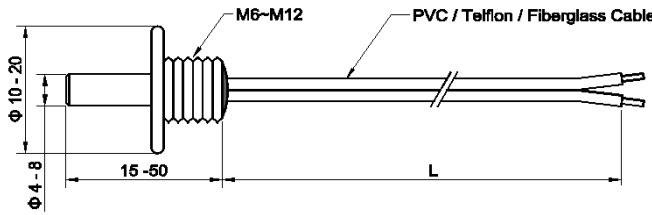
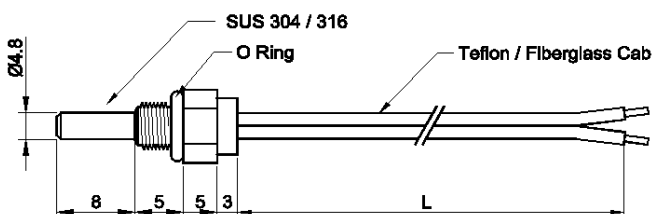


| Typical Applications | Features                     |
|----------------------|------------------------------|
| Water heater         | Screw and nut mounting       |
| Coffee machine       | Solid structure              |
| Water boiler         | Waterproof and fast response |
| Solar systems        |                              |

### Technical Data

| Item                  | Parameter  |
|-----------------------|--|
| Sensing Element       | NTC Thermistor various R and B value on request          |
| Temperature range     | -30°C to +105°C  |
| Response time         | Water (0.4m/s) T0.63 ≤ 30s                               |
| Dissipation Factor    | ≥ 2.5mW/°C   |
| Long-term stability   | Drift ≤ 3% after 1000h heat or cold store (80°C / -30°C) |
| Dielectric Strength   | 1500VAC  |
| Insulation Resistance | ≥100MΩ 500VDC  |

### Dimensions (mm)

| Part No. | Dimensions   | Application  |
|----------|--|--|
| MFP-6A   |   | <p>Feature</p> <ul style="list-style-type: none"> <li>Moisture-proof small time constant</li> <li>End-end thread</li> <li>Fast respond</li> </ul> <p>Application</p> <ul style="list-style-type: none"> <li>Water boiler</li> </ul>      |
| MFP-6B   |  | <p>Feature</p> <ul style="list-style-type: none"> <li>Front-end thread</li> <li>SUS Housings</li> </ul> <p>Application</p> <ul style="list-style-type: none"> <li>Water heater</li> <li>Coffee machine</li> <li>Solar systems</li> </ul> |

Other options:

- Different probe and wire size and color available.
- Different size SUS housings available for sensor mounting protection
- Different type of connector available

### Ordering code

MFP-6    x        xxx    x        xxx    x        x        x        x  
 (1)        (2)        (3)        (4)        (5)        (6)        (7)        (8)        (9)

#### 1. Housings Type.

| Code  | Description  |
|-------|--|
| MFE   | Epoxy encapsulation type or injection molding type |
| MFT   | Tubular type                                       |
| MFL   | Insert lead type                                   |
| MFP-1 | Line pressing type                                 |
| MFP-2 | Surface installation type                          |
| MFP-3 | Multi-step type                                    |
| MFP-4 | Flange shape type                                  |
| MFP-5 | Hat shape tube type                                |
| MFP-6 | Threaded fastening installation                    |
| MFP-7 | Pipe clamp type                                    |

#### 2. Sub-class: Housings shape.

#### 3. Resistance value at 25°C.

#### 4. Resistance tolerance.

| Code | Tolerance (25°C)% | Code | Tolerance (25°C)% |
|------|-------------------|------|-------------------|
| E    | ±0.5              | H    | ±3.0              |
| F    | ±1.0              | J    | ±5.0              |
| G    | ±2.0              | K    | ±10.0             |

#### 5. Beta value, unit: K.

#### 6. Beta value Temperature code.

| Code | T1/T2               |
|------|---------------------|
| A    | 25/50(Default)      |
| B    | 25/85               |
| E    | Defined by Customer |

#### 7. Wire type.

#### 8. Wire length.

The 1<sup>st</sup> and 2<sup>nd</sup> digits are for the significant figures of the length and the 3<sup>rd</sup> indicate the numbering of the zeros following.

Example: 1m = 102, 10m=103.

#### 9. Housings Drawing number.