



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.



Typico	I Applications	
	I ADDIICAIIOUS	
, jprou		

• Toilet seat heating

FocuSens

- Water heater
- Floor heating and
- Cogeneration systems

#### **Features**

- Moisture-proof
- Fast response
- Small time constant

#### **Technical Data**

Item	Parameter
Sensing Element	NTC Thermistor various R and B value on request
Temperature range	-20°C to +120°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



# **MFP-3 Series**

## **Temperature Sensor**

### Dimensions (mm)

Part No.	Dimensions	Application		
		Feature		
1.8		Moisture-proof		
		Small time constant		
		Fast respond		
MFP-3A		Application		
		Drinking water heater		
		Toilet seat heating		
		Water heater		
		Feature		
		Moisture-proof		
	2 <del>7</del>	Small time constant		
MFP-3B		Fast respond		
		Application		
	T T	Drinking water heater		
		Water heater		
		Floor heating		
		Feature		
		Moisture-proof		
		Small time constant		
MFP-3C		Fast respond		
MFP-3C		Application		
		Cogeneration system equipment		
		water storage		
		tanks for solar systems		
		Feature		
MFP-3D		Moisture-proof		
	24	Small time constant		
		Fast respond		
		Application		
		Drinking water heater		
		Drinking machine		
		Coffee machine		



### **Temperature Sensor**

### Ordering code

<u>MFP-3</u>	<u>x</u>	XXX	<u>x</u>	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
Sub-class: Housings shape.	

3. Resistance value at 25°C.

2.

4. Resistance tolerance.

Code	Tolerance (25°C)%	Code	Tolerance (25°C)%
Е	±0.5	Н	±3.0
F	±1.0	J	±5.0
G	±2.0	К	±10.0

- 5. Beta value, unit: K.
- 6. Beta value Temperature code.

Code	T1/T2
А	25/50(Default)
В	25/85
Е	Defined by Customer

- 7. Wire type.
- 8. Wire length.

The  $1^{st}$  and  $2^{nd}$  digits are for the significant figures of the length and the  $3^{rd}$  indicate the numbering of the zeros following.

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

9. Housings Drawing number.