MFE-1 Series

Overmoulding Temperature Sensor

MFE-1 series temperature sensor is plastic overmoulding sensor. TPE, PVC material as standard material, with different mounting request it can be injected into different size and type.

NTC, RTD elements are most popular sensing element.

Special advantage of MFE-1 series is high water proof, with IP67 as standard class, it can reach IP68 on request.

Another advantage is custom flexible, size, mounting type, sensing type and material type can be customized according to application condition.

Typical Applications

- Refrigerator
- Water heater
- Washing Machine and Tumble Dryer
- Ambient temperature measurement

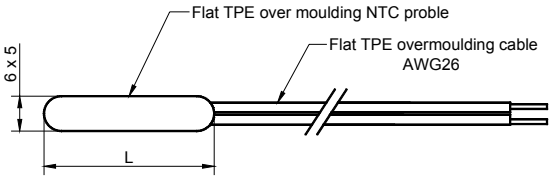
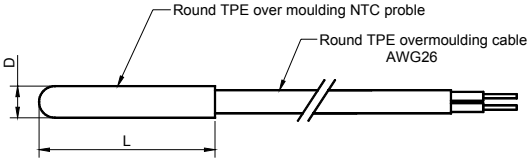
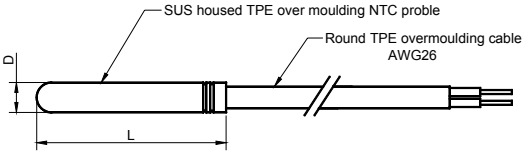
Features

- Excellent insulating property and waterproof
- High mechanical strength
- High reliability and long term stability

Technical Data

Item	Parameter
water and Dust proof	IP67
Sensing element	NTC Thermistor
Temperature range	-30 - +105°C
Response time	water (0.4 m/s) $T_{0.63}$=30s
Dissipation Factor	2.5mW/°C
Long-term stability	Drift 3% after 1000h heat or cold store (80°C / -30°C)
Dielectric strength	1500V_{AC}
Insulation resistance	100MΩ@500V_{DC}

Dimensions (mm)

Part No.	Dimensions
MFE-1A	
MFE-1B	
MFE-1C	

Different type of connector available, please contact our sales staff.

Ordering code

MFE-1	A	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 1st and 2nd digits are for the significant figures of the length and the 3rd indicate the numbering of the zeros following.

   Example: 1m = 102, 10m=103.
9. Housings Drawing number.