

# MOLDED PLATINUM TEMPERATURE SENSOR MODEL - MPT

## FEATURES

- ◆ Low cost
- ◆ Water-tight construction
- ◆ Easy to use flexible design
- ◆ Temperature range: -50~105°C
- ◆ Employs standard Pt 100 or Pt 1000 DIN platinum resistance temperature elements
- ◆ Direct temperature measurement without need of any further assembly

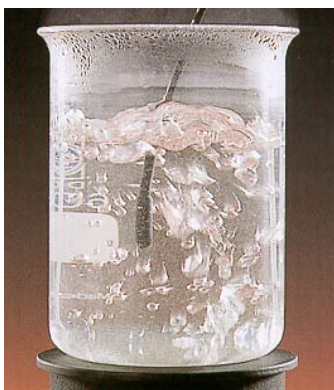


## DESCRIPTION

MPT temperature sensor is made up of Pt 100Ω or Pt-1000Ω platinum resistance temperature detector and connection cable molded together in thermoplastic rubber insulation. The sensor can be used for direct temperature measurement in air or liquids. The connection cable can be connected to a temperature indicator for display of temperature. MPT sensor features small size, flexible vibration-proof design and completely waterproof construction. The sensor is available in either 2-wire or 4-wire designs with standard one meter long connecting cable. Extra cable is available upon request from customers. Optional stainless steel enclosures are available to protect the probe tip.

## APPLICATIONS

MPT has numerous applications in various types of industries for contact type or immersion temperature measurement in air or liquids within the range of -50 to 105°C. It can be used in chemical industries for continuous immersion in corrosive liquids e.g., electrolytic processes and for temperature measurement of hot or frosted pipe-lines. It is hygienic for temperature measurement in food industry as it does not contaminate food products. It also finds applications for temperature measurement in automobile or other vibrating machinery. It can also be used as a sub-assembly for low temperature resistance temperature detector assemblies.



Direct temperature measurement of hot liquids



Temperature measurement of frosted pipelines



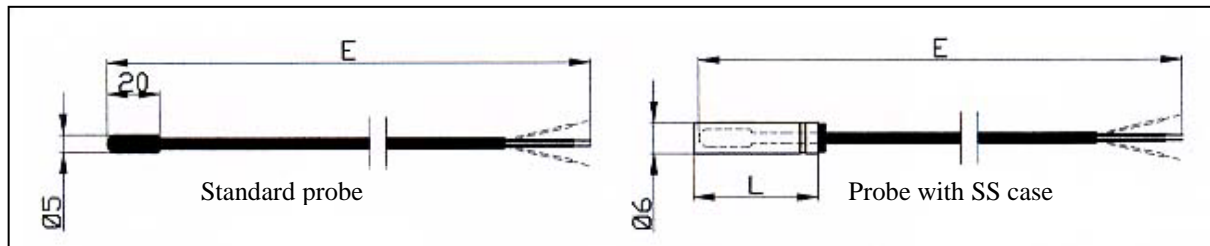
Long time dipping in corrosive liquids

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## TECHNICAL SPECIFICATIONS

Sensing element	Single RTD, 1 Pt 100Ω at 0°C or 1 Pt 1000Ω at 0°C as per IEC 751 class B or class A* (* class A available only for Pt 100 probes with 4-wire circuit)
Type of construction	Sensor and extension cable molded together as one hot vulcanized unit
Temperature range	-50 ~ 105°C
Cable data	2 or 4 stranded copper wires 0.35 mm <sup>2</sup> (22 AWG), each conductor polypropylene insulated, overall thermoplastic elastomer insulation, outer diameter ~ 3.5mm
Insulation resistance	100 MΩ with 100 VDC .
Optional stainless steel case	SS 316 case (50 mm length X 6mm OD or 100mm length X 6mm OD) is available for protection of the sensor tip

## DIMENSIONS



## ORDERING CODE

MPT										X
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**SENSING ELEMENT**

1 Pt 100	P1
1 Pt 1000	P3

**ACCURACY CLASS to IEC 751**

B	B
A*	A

\* Only Pt 100 probes with 4 wires

**NO. OF WIRES**

2 wires	E
4 wires*	S

\* Only for Pt 100 probes

**PROBE LENGTH E (mm)**

1000	1000
2000	2000
5000*	5000

\* Only Pt 100 probes with 4 wires

**TYPES**

without case (standard)	XXXX
with case 6X50 mm (option)	6X05
with case 6X100 mm (option)	6X10

Standard  
MPT probe

MPT probe  
with SS case



### MARKING

Marking of accuracy report, date of manufacturing and tractability is optionally available for MPT probes with SS case

DUE TO CONTINUOUS PRODUCT IMPROVEMENT, THE DESIGN AND TECHNICAL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

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