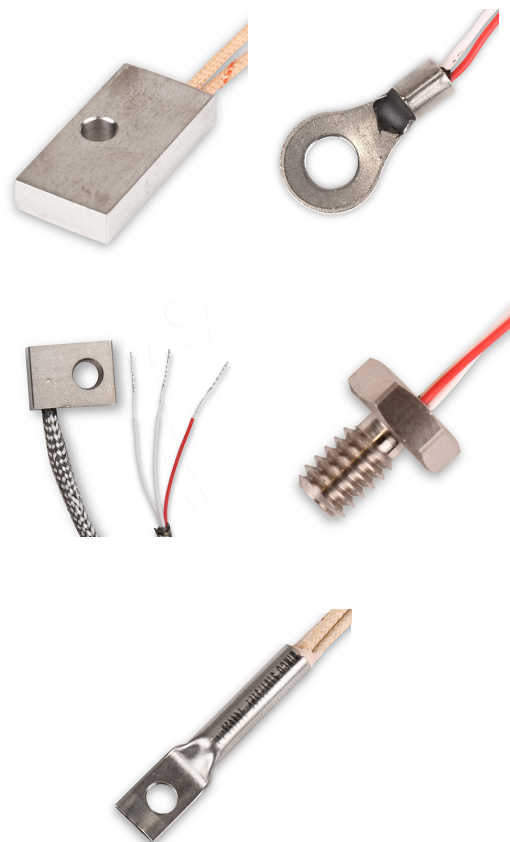


Bolt-on Temperature Sensors

Bolt-on temperature sensors are designed for easy installation in industrial and commercial environments. The sensors can be mounted on machines, against process pipes, or embedded directly into a machined part. Threaded fasteners install in seconds and can be easily removed for installation at another location.

These sensors are ideal for process control measurements, test and verification of existing systems, and retrofitting existing machines. Standard designs allow prototyping without high setup costs, while significant discounts are available for large quantities.

Standard platinum RTD elements provide stable and reliable output compatible with most control and monitoring systems. Physically interchangeable designs allow you to easily customize your installation to different instrumentation.



Features

- Removable and reusable
- Wide temperature range
- Configurations to fit most applications
- Standard 100 Ω platinum element; 2- or 3-wire configuration

Applications:

- General purpose
- Process control measurements
- Hotplates
- Measurement of media in pipes
- Conveyers in manufacturing
- Machined parts and die measurements
- Machinery






Specifications

Element Type	Platinum, Bolt-On
Resistance	100 Ω
TCR	0.00385 $\Omega/\Omega/^{\circ}\text{C}$
Time Constant	Less than 10 seconds typical, in moving water at 1 m/s
Case Material	Dependent on model
Lead insulation	Stainless steel braid over PFA insulated leads
Vibration	Withstands 10 to 2000 Hz at 20 G's min. per MIL-STD-202, Method 204, Condition D
Insulation Resistance	10 megohms min. at 100 VDC leads to case

Table of Sensor Types:

Part Number Breakdown – [Model]-[Element]-[Cable Insulation]-[Number of Wires]-[Lead Length]

Example: MB-C-PD-T-2-24, Circle shape, Platinum (0.00385 TCR) 100 Ω \pm 0.12% at 0°C (EN60751, Class B), PFA insulated cable, 2 wire, 24 in lead length

[Model]	Model Image	Dimensions W x L x T (max.)	Temp. range	Case material	Lead wire
MB-F-*		0.50 x 1.00 x 0.188" (12.7 x 25.4 x 4.8 mm) w/ 0.161" (4.1 mm) diameter hole	-70 to 500°C (-94 to 932°F)	Stainless steel	AWG 22, Mica-glass insulated
MB-T-*		0.29 x 1.25 x0.188" (7.4 x 31.8 x 4.8 mm) with 0.161" (4.1 mm) hole	-70 to 500°C (-94 to 932°F)	Stainless steel	AWG 22, Mica-glass insulated
MB-C-*		0.265" (6.7 mm) ID ring lug	-50 to 260°C (-58 to 500°F)	Nickel plated copper	2 lead: AWG 24, 3 lead: AWG 26, PFAinsulated
MB-MF-*		0.50 x 0.375 x 0.188" (12.7 x 9.5 x 4.8 mm) with 0.166" (4.2 mm) hole	-50 to 260°C (-58 to 500°F)	Stainless steel	2 lead: AWG 24, 3 lead: AWG 26, PFAinsulated
MB-S1-*		1/4 20 x 3/8"long thread with 7/16"hex head	-50 to 260°C (-58 to 500°F)	Stainless steel	
MB-S2-*		M6 x 1 thread, 10 mm long, with 10 mm hex			

[Element]	Element Specifications	Available Models
PD	Platinum (0.00385 TCR) 100 Ω \pm 0.12% at 0°C (EN60751, Class B)	All
PF	Platinum (0.00385 TCR) 1000 Ω \pm 0.12% at 0°C	All
PE	Platinum (0.00385 TCR) 100 Ω \pm 0.36% at 0°C	MB-C, MB-MF, MB-S1, MB-S2
PM	Platinum (0.00385 TCR) 100 Ω \pm 0.06% at 0°C (Meets EN60751, Class A)	MB-S2

[Cable Insulation]	Material
MG	Mica-glass
T	PFA
S	Stainless steel braid over PFA insulated leads

[Number of Wires]	[Lead Length]
2 or 3	2 to 240 inches