

BOLT Type Temperature Sensors

These temperature sensors are designed for easy installation in industrial 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.

MELT-BOLT SENSORS

They are designed to mount directly into extruder heads or into the injection molding machine nozzle with the tip protruding directly into the Teflon melt. Sensing the temperature of Teflon is especially difficult due to the elevated temperatures and corrosive conditions found in that environment. Immersion lengths, lead wire options, and wire terminations are available in a wide range of possible configurations. The melt bolt tip is manufactured of Alloy C-276 and other material as per customer requirement, with the balance of the bolt made of SS316

Sensor TIP

Tip part of sensor gets immersed into molten material and the immersion length is kept between 0 to 25mm keeping in mind the effects of vortices that generate in flowing medium.

Technical Specifications

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Sensor Type	Thermocouple, RTD
Elements	Thermocouple K, J, N, E, RTD Pt100
No. of Elements	Simplex/Duplex
Junction Style	Grounded, Ungrounded
Response Time	T/C Ungrounded <10Sec. Grounded <5 Sec.
Design	Bolt with Tip, Lug Termination (Brass, Nickel plated copper), and Ring type washer (washer size M2, M4, M6, M8, M10)
Bolt Thread Size	1/4", 1/2", 3/4" (NPT/BSP), M8, M10, M12, M20, etc
Cable Type	SS braided, flexible cable
Termination	Cable Lug, Standard or Miniature Connector



Standard Features

- ✓ Available in 3", 5" or 7" lengths
- ✓ 1/8" Diameter MGO tip
- ✓ 1/2-20 UNF thread
- ✓ Grounded, exposed or ungrounded junctions available
- ✓ High pressure & high temperature rated
- ✓ Immersion available from 1/8" to 1"

Adv. of Bolt Type Thermocouple

- ✓ Good mechanical Strength
- ✓ Itself a process connection
- ✓ Easy to install
- √ Fast response
- ✓ Replaceable
- ✓ Use at high temperature surface
- ✓ Low at cost

Application Areas

- ✓ Ideal surface thermocouple sensor for nozzles, extruder barrels, die heads, molds and many other surface sensing applications
- ✓ Motor and pipe temperature

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