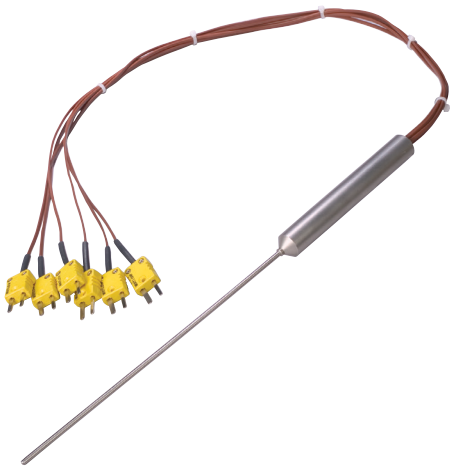
Sensor Accurately Measures Temperature Across Multiple Locations



Temperature variances exist in all systems, regardless of materials, working fluid or system design. There is not a process that involves heating a particular medium where temperature of that medium is consistent throughout—temperature gradients always exist. Sensing temperature at a single location during a process is acceptable for many applications because temperature gradients are often insignificant. However, there is a need for many applications to monitor temperature in multiple locations to ensure a safe, accurate and cost efficient process. Installing multiple, independent temperature sensors may be impractical due to cost or space limitations.

Multipoint temperature sensors accurately measure temperatures at various locations along the sensor's length. They are used across a broad range of processes and installations—predominately in applications involving a large or complex process where close temperature control is necessary.

Multipoint temperature sensors are designed to meet requirements of specific applications that include temperature, pressure, chemical environments, time response and number of points required. Sensors are constructed from a variety of protecting tube materials that use XACTPAK® mineral insulated, metal-sheathed cable. Multipoint temperature sensors are available in standard or special ASTM thermocouple calibration tolerances. For applications requiring extreme accuracy, special constructions can be made with platinum resistance temperature detectors (RTDs).

Features and Benefits

Accurately measure temperatures along the sensor length

- Accommodates sensor variances

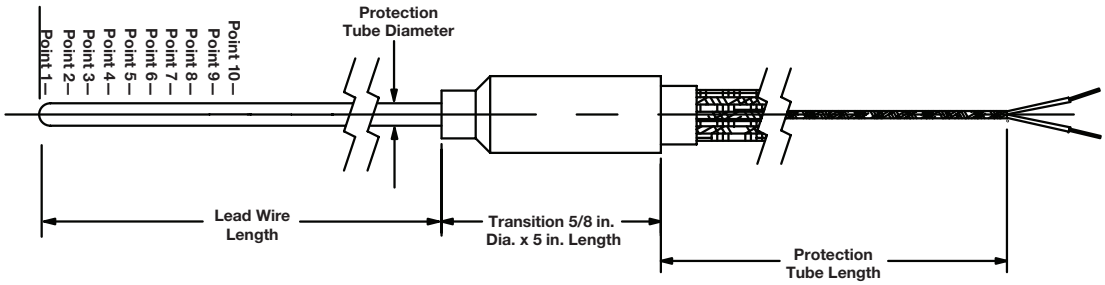
Monitors temperature in multiple locations

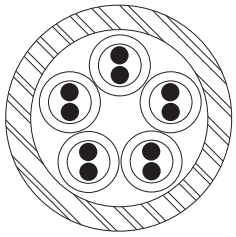
- Ideal for cost and space constrained applications
- Enables close temperature control

Typical Applications

- Chemical processing
- Petroleum distillation towers
- Semiconductor manufacturing
- Profiles of furnaces and kilns
- Combustion research
- Storage tanks
- Air flow ducts

Dimensional Drawing





Thermocouple sensors made from mineral insulated, metal-sheathed cable are positioned inside the overall protection sheath.

Note: Sensor point locations are measured from the protection tube tip. Please specify point location when ordering.

Ordering Information

Part Number

① ②	③ Protection Tube Diameter	④ ⑤ Number of Points	⑥ Protection Tube Materials	⑦ Calibration	⑧ Junction	⑨ ⑩ ⑪ Protection Tube Length	⑫ Lead Wire Const.	⑬ ⑭ Lead Wire Length	⑮ Lead Wire Term.
AW									

③	Protection Tube Diameter (in.)
G =	0.125
H =	0.188
J =	0.250

④ ⑤	Number of Points
	01, 02, 03, 04, 05, 06, 07, 08, 09, 10

⑥	Protection Tube Materials
F =	316 SS
Q =	Alloy 600

⑦	Calibration	
	J	K
Standard limits	J	K
Special limits	3	4

⑧	Junction
G =	Grounded
U =	Ungrounded

⑨ ⑩ ⑪	Protection Tube Length (in.)
006-096	

⑫	Lead Wire Construction
A =	Fiberglass solid wire
C =	FEP solid wire

⑬ ⑭	Lead Wire Length (ft)
01-25	

⑮	Lead Wire Terminations
A =	Standard male plug
B =	Standard female jack
C =	Standard plug with mating connector
F =	Miniature male plug
G =	Miniature female jack
H =	Miniature plug with mating connector
T =	Standard, 1½ in. split leads

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1-800-WATLOW2 • www.watlow.com
inquiry@watlow.com

International Technical Sales Offices:

Austria	+43 6244 20129 0	**India**	+91 40 6661 2700	**Mexico**	+52 442 256 2200
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