

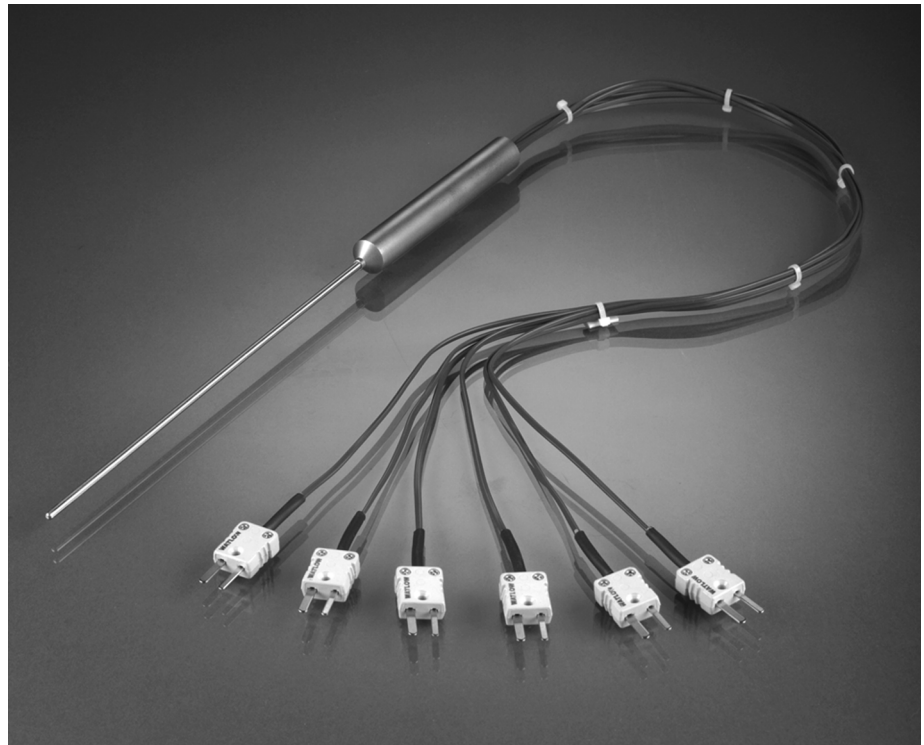
# Thermocouples

## Multipoint Sensor

Temperature variances exist in all systems, regardless of materials, working fluid or system design. There is no process that involves heating a particular medium where temperature of that medium is the same throughout—temperature gradients will always exist. Sensing the temperature at just one location in a process is acceptable for many applications because temperature gradients are often insignificant. However, there is a need in many applications to monitor the 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 are capable of accurately measuring temperatures at various locations along its length. They are used in a broad range of processes and installations—predominately applications involving a large or complex process where close temperature control is necessary.

Multipoint temperature sensors are designed to meet the requirements of the specific application; i.e., temperature, pressure, chemical environment, time response and number of points required. Sensors are constructed from a variety of protecting tube materials, with



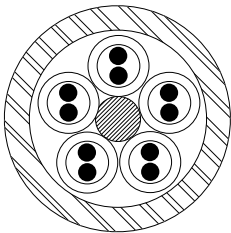
XACTPAK® mineral insulated, metal-sheathed cable. Multipoint temperature sensors are available in either standard or special ASTM thermocouple calibration tolerances. For applications requiring extreme accuracy, special constructions can be made with platinum RTDs.

### Applications

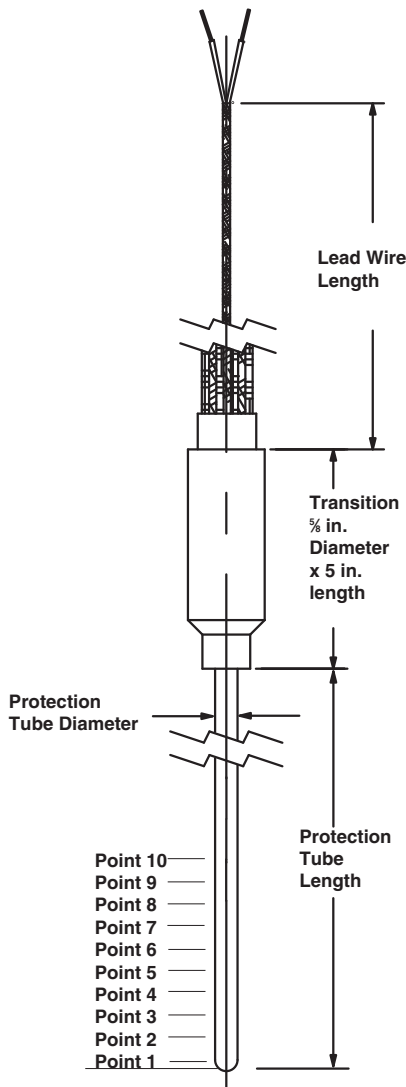
- Chemical processing
- Petroleum distillation towers
- Semiconductor manufacturing
- Profiles of furnaces and kilns
- Combustion research
- Storage tanks
- Air flow ducts

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## Multipoint Sensor



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



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

**Ordering Information**—To order, complete the part number on the right with the information below:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	A W														
<b>1-2. Style</b>	AW = Multipoint														
<b>3. Protection Tube Diameter (inch)</b>															
G = 0.125															
H = 0.188															
<b>4-5. Number of Points</b>															
02 - 10															
<b>6. Protection Tube Material</b>															
F = 316 SS															
<b>7. Calibration</b>															
J = J Standard Limits															
K = K Standard Limits															
3 = J Special Limits															
4 = K Special Limits															
<b>8. Junction</b>															
G = Grounded															
U = Ungrounded															
<b>9-11. Protection Tube Length (inch)</b>															
006-096*															
<b>12. Lead Wire Construction</b>															
A = Fiberglass solid wire															
C = FEP solid wire															
<b>13-14. Lead Wire Length (feet)</b>															
01-25															
<b>15. Lead Wire Termination</b>															
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 inch split leads															

\*Consult factory for lengths greater than 96 inches.

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