

# 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

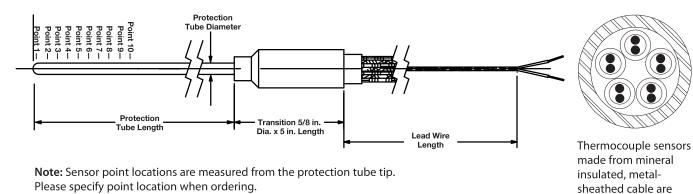
- Ideal for cost and space constrained applications
- Enables close temperature control

## **Typical Applications**

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



# **Dimensional Drawing**



# **Ordering Information**

Part	Num	ber
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Part Num	ber								
1 2	3	<b>4 5</b>	<b>6</b>	7	8	9 (10 (11)	(12)	(13) (14)	(15)
	Protection	<u> </u>	Protection	<u> </u>	Ŭ	Protection		0 0	$\overline{}$
	Tube	Number of	Tube			Tube	Lead Wire	<b>Lead Wire</b>	Lead Wire
	Diameter	Points	Materials	Calibration	Junction	Length	Const.	Length	Term.
				Cannon Cannon	7.1100		domb di		
AW									

A	N	
3	Protection Tube Diameter (in.)	(
G=	0.125	C
H =	0.188	(1
J =	0.250	P
4 (5	Number of Points	(
	04 00 00 04 05 04 07 00 00 40	

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

spec	iai iiiiiitS	3	4
8		Junction	
G =	Grounded		
U=	Ungrounded		

	riotection rube Length (iii.)			
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			
$\sim$	acaa mic reminations			
_	Standard male plug			

Protection Tube Length (in

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, 11/2 in. split leads

XACTPAK® is a registered trademark of Watlow Electric Manufacturing Company.

# Powered by Possibility



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positioned inside the overall protection

sheath.