

MP2 OMP Multipoint Thermocouple Probe

Specifications

MP2 OMP Multipoint Thermocouple Probe
 Optimized multipoint thermocouple (OMP) probes are made from a specialized MI cable. The MI cable will have multiple negative thermocouple conductors surrounding one larger positive conductor in the middle. Common ungrounded thermocouple junctions are created along the sensor sheath by accessing the conductors through the sheath wall and then re-sealing the sheath wall. Multiple points can be arranged along the length of the sheath with great accuracy.

Common Sheath Materials	
316/L stainless steel	Inconel 600
310 stainless steel	Consult factory for other

Thermocouple Types	Type K & N standard
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Thermocouple Junction	Ungrounded
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Thermocouple Tolerance	Special / standard limits of error
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Sheath OD & Maximum Points Lengths			
OD	Tolerance	Max Pts.	Max Length
0.125"	+/- 0.002"	7	1600 feet
0.188"	+/- 0.002"	10	700 feet
0.250"	+/- 0.002"	16	400 feet
0.313"	+/- 0.003"	16	250 feet

Dimensional Information			
Number of points	Wall Thickness % of Diameter	Outer Wire Size % of Diameter	Inner Wire Size % of Diameter
2-4	11.8%	11.0%	15.5%
5-7	11.8%	8.5%	11.7%
8-10	11.8%	8.0%	10.3%
11-13	11.8%	7.6%	11.4%
14-16	11.8%	7.2%	12.1%

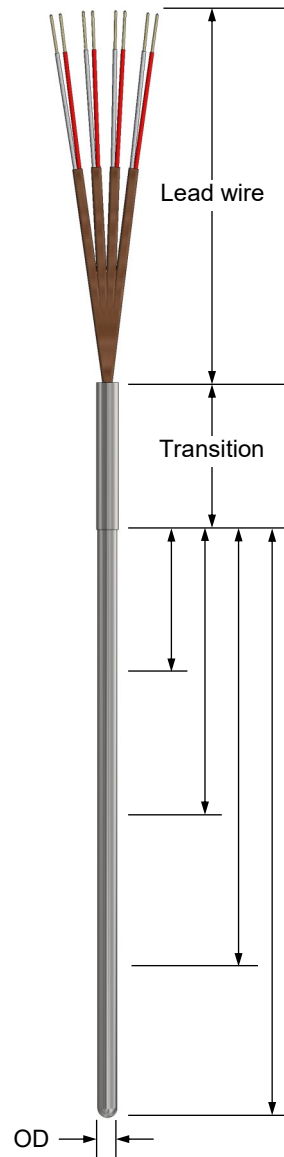
Transition Size	
# Points	OD x Length
2-4	0.5" x 1.5"
5-7	0.75" x 3.0"
8-10	0.75" x 3.0"
11-13	0.75" x 3.0"
14-16	1.0" x 3.0"

Lead Wire
Teflon (260°C)
Teflon /w SS braid
Flex armour over Teflon
Fiberglass (482°C)
Fiberglass /w SS braid
Flex armour over Fiberglass

NOTES:

1. Drawing for approval provided after receipt of order
2. Temperature rating reflective of sheath material and thermocouple type
3. Transition filled with epoxy resin 175°C maximum temperature
4. Pressure rated to 1000 psi
5. Minimum bend radius is 10x sheath OD
6. Sensors longer than 6 feet will be shipped in a coil roughly 24"- 36" OD

Outline & Dimensions



Points are measured from transition bottom
 Minimum distance between points is 1.0"

Point location tolerance is +/- 1.0" or 0.3% of length (which ever is greater)

