

MP3 Pocket Junction Multipoint Thermocouple

Specifications

MP3 Pocket Junction Multipoint Thermocouple

Pocket Junction Multipoint thermocouple probes are very similar to MP2 OMP MultiPoint's. They utilize a specialized MI cable that contains multiple thermocouple wire pairs. Ungrounded uncommon 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

Thermocouple Junction Ungrounded

Thermocouple Tolerance Special / standard limits of error

Sheath OD & Maximum Points Lengths

OD	Tolerance	Max Pts.	Max Length
0.125"	+/- 0.002"	7	1600 feet
0.188"	+/- 0.002"	8	700 feet
0.250"	+/- 0.002"	8	400 feet
0.313"	+/- 0.003"	8	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	11.8%	8.0%	10.3%

Transition Size

# Points	OD x Length
2-4	0.5" x 1.5"
5-7	0.75" x 3.0"
8	0.75" x 3.0"

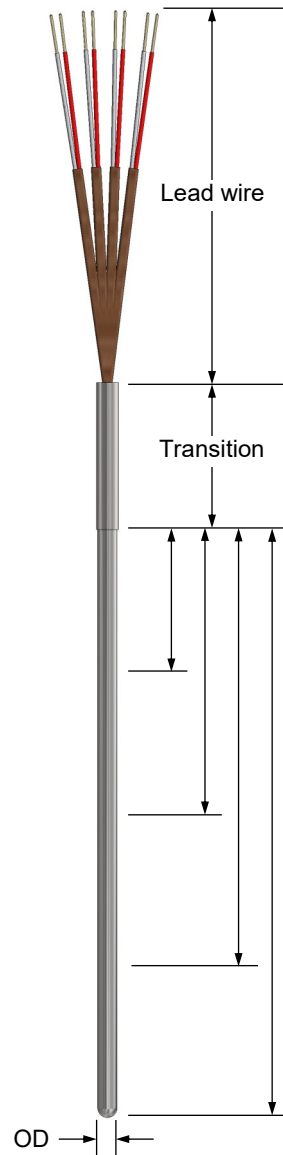
Lead Wire

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 (whichever is greater)

Cross section example of a 0.250" OD sheath with 8 Type K points

