

# MP1 Multipoint Thermocouple Probe

## Specifications

### MP1 Multipoint Thermocouple Probe

Multiple MI (mineral insulated) thermocouple sensor probes are combined and embedded inside an overall probe sheath. Excess space inside the sheath is filled using redundant MI filler material. The MP1 design is a very robust design that is capable of experiencing very high temperature and pressures. The limiting temperature and pressure factors will be the thermocouple type, and sheath material used.

### Common Sheath Materials

304/L stainless steel	321 stainless steel
316/L stainless steel	Inconel 600
310 stainless steel	Hastelloy C-276

**Thermocouple Types** Type K, J, T, N & B

**Thermocouple Junction** Grounded or ungrounded

**Thermocouple Tolerance** Special / standard limits of error

### Transition Size

# Points	OD	Length
2-3	0.5"	4.0"
4-5	0.75"	4.0"
6-7	1.0"	4.0"
8-12	1.0"	6.0"
13-16	1.5"	6.0"
17-20	2.0"	6.0"
21-25	2.375"	6.0"
26-30	2.375"	8.0"

### Sheath Outside Diameter

# Points	OD
4	0.062"
5-7	0.092"
8-12	0.125"
13-24	0.188"
25-30	0.250"
25-30	0.313"

### Sheath OD & Maximum Length

OD	Maximum Length
0.062"	240" (20ft)
0.092"	240" (20ft)
0.125"	1320" (110ft)
0.188" - 0.375"	1320" (110ft)

### Lead Wire

Teflon (260°C)	Fiberglass (482°C)
Teflon /w SS braid	Fiberglass /w SS braid
Flex armour over Teflon	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 rating will be reflective of sheath tubing specifications
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

