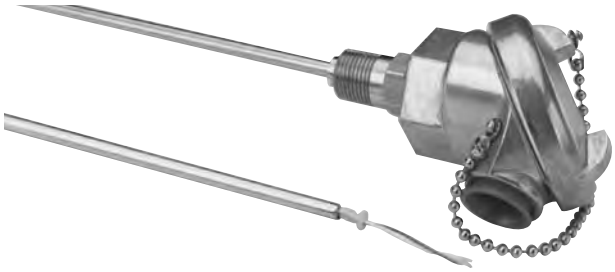
Bulletin No. TMP-F
Drawing No. LP0353
Released 2/09

MODEL TMP - FIELD CUTTABLE TEMPERATURE SENSOR PROBES AND ACCESSORIES

- *THERMOCOUPLE OR RTD*
- *24" PROBE CUTTABLE TO 3.5"*
- *MEASURE TEMPERATURES UP TO 704 °C/1300 °F*
- *MOUNTING AND WIRING ACCESSORIES*



GENERAL DESCRIPTION

Model TMP Thermocouple and RTD Temperature Probes are field cuttable to the desired length. The probes can be trimmed to within 3.5" (88.9 mm) of the probe tip allowing for greater application flexibility. Accessory hardware is available to wire and mount the probes in the user's existing thermowell.

Optional spring loaded fittings (sold separately) slide along the probe sheath to proper immersion depth as determined by the user. These fittings allow for strong contact between the probe and the thermowell to improve response.

SPECIFICATIONS

1. **THERMOCOUPLE**: Ungrounded J, K, T and E calibration available.
2. **RTD**: 3 Wire, 100Ω, Class "A" DIN Platinum per IEC751 (385 ALPHA)
3. **PROBE SHEATH**: 0.25" (6.35 mm)
4. **PROBE LENGTH**: 24" (0.6 M) as supplied, can be field cut down to 3.5" (88.9 mm).
5. **LEAD WIRE**: 6" (152.4 mm) 24 gauge
6. **WIRE INSULATION**: Neoflon PFA, Fiberglass or High Temperature Glass. As specified by part number.

CUTTING THE TUBING

The thermocouple and RTD probes have a crimp mark located 3" (76.2 mm) from the tip. This indicates the end of the internal seal. Damage to the probe will occur if trimmed within 3.5" (88.9 mm) of the tip.

1. Determine the desired probe length and mark it with a pen or marker. Secure the probe within a tube vice being careful not to deform or flatten the probe.
2. "Score" the tubing with a tubing cutter. Make one or two revolutions with the cutter. Do not cut completely through the tubing to prevent burrs or a sharp lip on the inside of the tubing.
3. Use a pair of pliers to grasp the excess tubing to be removed.
4. Use a narrow range of motion to slowly work the excess tubing from side to side until it separates from the probe. Using a wide range of motion will deform the tube and prevent installation of the tube sleeve.
5. Remove the excess tubing and trim the leads to the desired length.
6. Install the tube sleeve in the open end of the tube to protect the leads from any sharp edges on the inside of the tube.

TMPXXXXX TMPACC01

(One tube sleeve is included with each probe.)

INSTALLATION

1. Orient the probe and the spring loaded fitting as shown above.
2. Screw the spring loaded fitting one complete turn into the thermowell (not included).
3. Push the probe into the fitting until it touches the bottom of the thermowell.
4. Hold the probe to the bottom of the thermowell and tighten the fitting. This ensures good contact between the probe and the bottom of the thermowell.
5. Completely tighten the fitting into the thermowell.

   Note: The probe must be inserted only as shown above to prevent damage to the fitting.

If it becomes necessary to separate the probe and the fitting, first disconnect the wires and then unscrew the fitting completely from the thermowell. Pull the probe through the fitting from the end that was screwed into the thermowell. The fitting will present resistance to the probe removal if you attempt to go in the wrong direction.

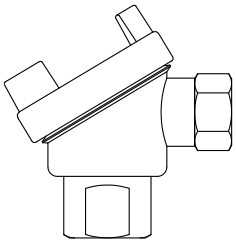
ORDERING INFORMATION

MODEL NO.	DESCRIPTION	TYPE	WIRE COLOR	WIRE INSULATION	TEMPERATURE RANGE	PART NUMBER
TMP	TC Probe	J	White (+) Red (-)	Neoflon PFA	0 to 260 °C / 32 to 500 °F	TMPJ2SU1
				Fiberglass	0 to 370 °C / 32 to 700 °F	TMPJ2SU2
				High Temp Glass	0 to 370 °C / 32 to 700 °F	TMPJ2SU3
		K	Yellow (+) Red (-)	Neoflon PFA	-200 to 260 °C / -328 to 500 °F	TMPK2SU1
				Fiberglass	-200 to 482 °C / -328 to 900 °F	TMPK2SU2
				High Temp Glass	-200 to 704 °C / -328 to 1300 °F	TMPK2SU3
		T	Blue (+) Red (-)	Neoflon PFA	-200 to 200 °C / -328 to 400 °F	TMPT2SU1
		E	Violet (+) Red (-)	Neoflon PFA	-200 to 260 °C / -328 to 500 °F	TMPE2SU1
				Fiberglass	-200 to 430 °C / -328 to 800 °F	TMPE2SU2
				High Temp Glass	-200 to 430 °C / -328 to 800 °F	TMPE2SU3
	RTD Probe	385	**	Neoflon PFA	-200 to 260 °C / -328 to 500 °F	TMPA2S01
				Fiberglass	-200 to 600 °C / -328 to 1112 °F	TMPA2S02

*** RTDs do not have color standard. Excitation and Signal+ are the same color. Signal common is the odd color.*

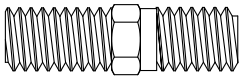
ACCESSORIES (sold separately)

Weatherproof Heads:
Cast Aluminum
Protects against dust, rain, splashing, and hose directed water
Weatherproof gasket
Stainless steel chain



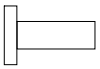
TMPACC02

Spring Loaded Fittings: Connects probe to thermowell and attaches to weatherhead 1/2" NPT X 1/2" NPT Stainless Steel.



TMPACC01

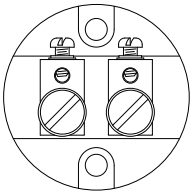
Tube Sleeve
Tube sleeve to protect probe leads from burrs after cutting probe.



TMPACC03

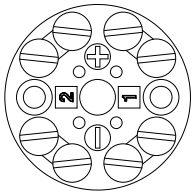
Terminal Blocks

2-Terminal for use with TCs



TMPACC04

4-Terminal for use with RTDs



TMPACC05

ACCESSORIES (All accessories are sold separately)

MODEL NO.	DESCRIPTION	PART NUMBER
TMPACC	Spring Loaded Fitting	TMPACC01
	Cast Aluminum Weatherproof Head	TMPACC02
	Spare Tube Sleeve	TMPACC03
	2-Terminal Block (for TCs)	TMPACC04
	4-Terminal Block (for RTDs)	TMPACC05