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Bulletin No. TMP-G
Drawing No. LP0353
Released 05/14

MODEL TMP - FIELD CUTTABLE TEMPERATURE SENSOR PROBES AND ACCESSORIES

- *THERMOCOUPLE OR RTD*
- *24" PROBE CUTTABLE TO 3" (76 mm)*
- *MEASURE TEMPERATURES UP TO 1000 °F (538 °C)*
- *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" (76 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.

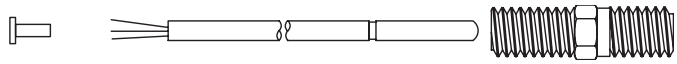
SPECIFICATIONS

1. **THERMOCOUPLE**: Ungrounded J, K, T and E calibration available.
2. **RTD**: 3 Wire, 100Ω, Class “B” DIN Platinum (Type 385)
3. **PROBE SHEATH**: 0.25" (6.35 mm)
4. **PROBE LENGTH**: 24" (0.6 M) as supplied, can be field cut down to 3" (76.2 mm).
5. **WIRE LENGTH**: 40" (1 M) thermocouple, 24" (0.6 M) RTD
6. **WIRE INSULATION**: 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 less than 3" from 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. Use a tubing cutter to cut the sheath at the marked location. Be careful not to cut or damage the sensor wires.
3. Remove the excess tubing and trim the wires to the desired length.
4. Install the tube sleeve in the open end of the tube to protect the wires from any sharp edges on the inside of the tube.



TMPACC03 * 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.

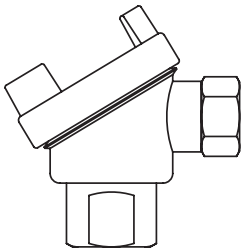
If it becomes necessary to separate the probe and the fitting, first disconnect the wires and then unscrew the fitting completely from the thermowell. Pull the probe through the fitting from the end that was screwed into the thermowell. The fitting will present resistance to the probe removal if you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

ORDERING INFORMATION

DESCRIPTION	TYPE	MEASUREMENT RANGE	WIRE COLOR	WIRE INSULATION	MAX PROBE TEMP.	PART NUMBER
TC Probe	J	32 to +1382°F 0 to +750°C	White (+) Red (-)	PFA	260 °C / 500 °F	TMPJ2SU1
				Fiberglass	482 °C / 900 °F	TMPJ2SU2
				High Temp Glass	538 °C / 1000 °F	TMPJ2SU3
	K	-328 to +2282°F -200 to +1250°C	Yellow (+) Red (-)	PFA	260 °C / 500 °F	TMPK2SU1
				Fiberglass	482 °C / 900 °F	TMPK2SU2
				High Temp Glass	538 °C / 1000 °F	TMPK2SU3
	T	-328 to +662°F -200 to +350°C	Blue (+) Red (-)	PFA	260 °C / 500 °F	TMPT2SU1
	E	-328 to +1652°F -200 to +900°C	Violet (+) Red (-)	PFA	260 °C / 500 °F	TMPE2SU1
				Fiberglass	482 °C / 900 °F	TMPE2SU2
				High Temp Glass	538 °C / 1000 °F	TMPE2SU3
RTD Probe	385	-328 to +1562°F -200 to +850°C	White (-) Red (+) Red (Exc)	PFA	260 °C / 500 °F	TMPA2S01
				Fiberglass	482 °C / 900 °F	TMPA2S02

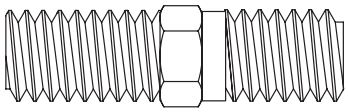
ACCESSORIES (sold separately)

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



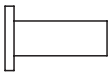
TMPACC02

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



TMPACC01

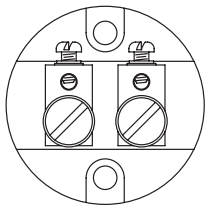
Tube Sleeve
Tube sleeve to protect probe leads from burrs after cutting probe.



TMPACC03

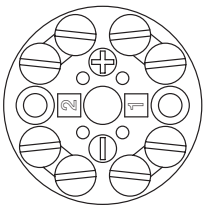
Terminal Blocks

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

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