

Specialty Designs and Services

There are many different thermocouple configurations in addition to our standard designs shown in this catalog. Here are some designs that may help your selection.

Reduced Tip – The mechanical strength of the .125 inch diameter probe with the time response of the .062 inch. The thermocouple tip is swaged down for $\frac{3}{4}$ inch to achieve this design. This is available on all sheath materials and is commonly carried in Hastalloy (specify H for sheath material).
Specify RT in the option section of the part number.



Venturi Tip – In some applications, the thermocouple reading can be affected by radiant energy from heat sources close to the desired gas stream reading. This design provides a shield from these heat sources while providing for a flow path to measure the desired gas stream and protect the smaller tip.
Specify VT in the option section of the part number.



Brake Thermocouple – This versatile design is for measuring brake disc and drum temperatures. It consists of a 1/8” diameter X 1/8” long copper “slug” with the thermocouple wires silver brazed inside. It is available in any calibration and typically with 22 awg-stranded wire fiberglass insulated. On special order, it is also available in 1/16” and 1/4” diameters and can be furnished isolated from the copper tip to provide an ungrounded version for high noise applications.

This is the T52 style with OB in the position 1 and 2 of the part number.



For applications requiring continuation of the circuit ground, we offer a molded on 3-prong standard plug. The grounding wire is brazed to the third copper pin to ensure continuity of the connection. Specify S3 in the connector option of the part number.



Calibration Services – We can calibrate any thermocouple or spools of bulk wire with NIST secondary standards and tractability. Should you require matched sets of thermocouples, please specify the type, quantity and desired operation range. We will calibrate the thermocouples at that temperature and pair off the matching units. This is an excellent method of selecting pairs for measuring the inlet and outlet temperatures of heat exchangers.