Base Metal Elements (BME)

- Industrial base metal elements and assemblies designed for the most severe environments
- Styles selected by temperature range, ambient atmosphere, and media conditions
- Select sizes and configurations based upon application requirements
- Select by the need for accuracy and speed of response

**Type K** – Due to its reliability and accuracy, Type K is used extensively at temperatures of up to 2300ºF. It is good practice to always protect this type of thermocouple with a suitable metal or ceramic protection tube, especially in reducing atmospheres. In oxidizing atmospheres and when other conditions are suitable, tube protection is not always necessary; however, protection is recommended for cleanliness and general mechanical protection. Recommended temperature range is 32ºF to 2300ºF.

**Type J** – This element may be used, protected or unprotected, where there is a deficiency of free oxygen. To maintain cleanliness and generally longer life, a protection tube is recommended. Because Type J wire will oxidize rapidly at temperatures over 1000ºF, it is recommended that larger gauge wire be used to compensate. Recommended temperature range is 32ºF to 1400ºF.

**Type T** – Useable in oxidizing, reducing or inert atmospheres, as well as vacuum applications. Not subject to corrosion in moist atmospheres. Recommended temperature range is -328ºF to 700ºF, but can be used to -454ºF.

**Type E** – This thermocouple is suitable for use in temperatures up to 1652ºF in a vacuum, inert, mildly oxidizing or reducing atmosphere. Recommended temperature range is 32ºF to 1600ºF.

**Type N** – This thermocouple is used primarily at high temperatures of up to 2300ºF.

To order an element, use Specification Codes below to assemble a complete Ordering Number.

**Base Metal Element Type K standard 8 ga. 24”L straight, single element, two-hole oval insulators.**

**BME K-08-024-00-A-0**

**Example Ordering Number**

**Base Metal Element Type K standard 8 ga. 12”L hot leg, 18”L cold leg, 90º angle single element, two-hole oval insulators.**

**BME K-08-012-18-C-0**

**Example Ordering Number**