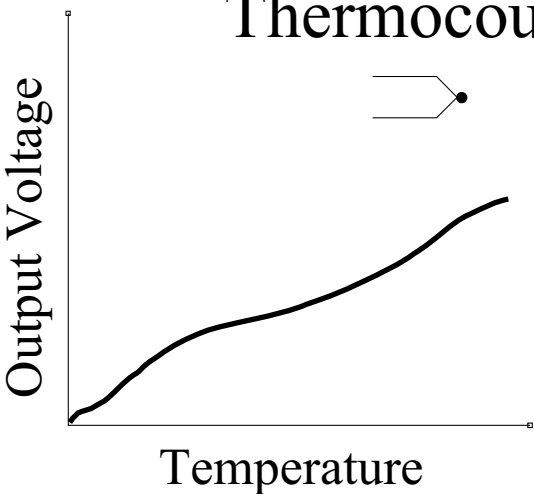


<p style="text-align: center;">Thermocouple</p>  <p style="text-align: center;">Output Voltage</p> <p style="text-align: center;">Temperature</p>	Output Characteristics
<ul style="list-style-type: none"> • Largest variety of styles • Self-powered • Rugged • Largest temperature range • Small size / fast response 	Advantages
<ul style="list-style-type: none"> • Lowest stability • Low voltage output • Nonlinear • Cold junction reference needed • Lowest sensitivity 	Disadvantages
<p style="text-align: center;">-200 to 1800°C</p>	Temperature Range

Thermocouples are constructed of two dissimilar metals welded together to form a junction. When this junction is heated there is a thermoelectric potential (emf) created on the millivolt level. The heated junction when compared to a reference junction (same junction type at a known temperature, usually 0°C) has an output proportional to the difference in the two junctions temperatures.