

MAXIMUM TEMPERATURE RANGE

Thermocouple Grade

32 to 3092°F  
0 to 1700°C

Extension Grade

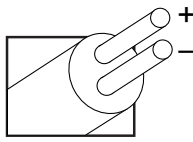
32 to 212°F  
0 to 100°C

LIMITS OF ERROR

(whichever is greater)  
Standard: 0.5°C over 800°C  
Special: NOT ESTABLISHED

COMMENTS, BARE WIRE ENVIRONMENT:  
Oxidizing or Inert; Do Not Insert in Metal Tubes;  
Beware of Contamination; High Temperature;  
Common Use in Glass Industry

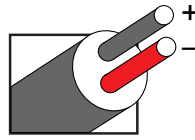
TEMPERATURE IN DEGREES °F  
REFERENCE JUNCTION AT 32°F



Thermocouple Grade

NONE ESTABLISHED

Platinum-30% Rhodium  
vs.  
Platinum-6% Rhodium



Extension Grade

Revised Thermocouple Reference Tables

TYPE B  
Reference Tables  
N.I.S.T.  
Monograph 175  
Revised to ITS-90

Z

Thermoelectric Voltage in Millivolts

Table with 21 columns (°F 0 to 10 and °F) and 100 rows of thermoelectric voltage data for Platinum-30% Rhodium vs. Platinum-6% Rhodium.



**MAXIMUM TEMPERATURE RANGE**

**Thermocouple Grade**

32 to 3092°F  
0 to 1700°C

**Extension Grade**

32 to 212°F  
0 to 100°C

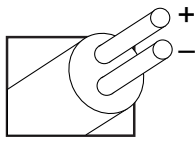
**LIMITS OF ERROR**

(whichever is greater)  
**Standard:** 0.5°C over 800°C  
**Special:** NOT ESTABLISHED

**COMMENTS, BARE WIRE ENVIRONMENT:**

Oxidizing or Inert; Do Not Insert in Metal Tubes;  
Beware of Contamination; High Temperature;  
Common Use in Glass Industry

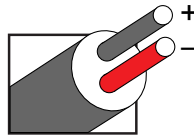
**TEMPERATURE IN DEGREES °F  
REFERENCE JUNCTION AT 32°F**



**Thermocouple Grade**

NONE  
ESTABLISHED

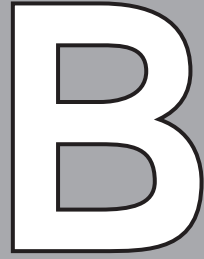
**Platinum-30% Rhodium  
vs.  
Platinum-6% Rhodium**



**Extension Grade**

**Revised Thermocouple Reference Tables**

**TYPE B**  
Reference Tables  
N.I.S.T.  
Monograph 175  
Revised to ITS-90



Z

**Thermoelectric Voltage in Millivolts**

Table with columns for temperature in °F (0-10) and °C (0-10) and rows of millivolt values for various thermocouple types.



#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

[www.omega.de](http://www.omega.de)  
Deckenpfronn, Germany  
0800-8266342

#### UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)  
Manchester, England  
0800-488-488

#### FRANCE

[www.omega.fr](http://www.omega.fr)  
Guyancourt, France  
088-466-342

#### CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)  
Karviná, Czech Republic  
596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
Amstelveen, NL  
0800-099-33-44



## More than 100,000 Products Available!

### • Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

### • Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

### • pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

### • Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters