

Mineral Insulated Thermocouple Cable

Insulation

NOTE: Letters in parentheses following the sheath material are used with the Ordering Worksheet on page 14-119.

Magnesium Oxide — MgO 96% Typical (M)

This insulation is widely used in thermocouple and heater applications below 2000°F. SiO₂ is the major impurity that provides excellent insulation resistance. Do not use with platinum or in nuclear application.

High Purity Magnesium Oxide — MgO 99.4% Minimum Purity (H)

Low impurity levels make this insulation very useful for all thermocouple calibrations up to 2500°F. Above 2500°F we recommend using Hafnia Oxide (HfO₂) insulation because of MgO's low resistivity. This material meets the requirements established in ASTM E-235-82.

Alumina Oxide — Al₂O₃ 99.6% Minimum Purity (A)

Although this material is comparable to MgO in its electrical properties and cost, it does not compact as well and tends to "powder out." This undesirable characteristic has made this insulation unpopular in industry so cable with this type of insulation is available only as a "special."

Complete Your Thermal Loop System

Instrumentation

Videographic Data Loggers and Paper Chart Recorders



Complete details can be found
in Section 12 of this catalog.



TEC Temperature Controllers



Complete details can be found
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