Polyimide-Insulated T2 Thermocouple Wire (Ni95-(Al+Mn+Si)5)

Alumel (Ni95/Al-Mn-Si) negative leg — polyimide insulation for Type K thermocouple fabrication in aerospace, cryogenic & high-temperature environments. **SKU:** 1000007240-group
Product Code: NI10-SW-000125

Material Properties for Alloys

Magnetic Properties

Element	Value
Maximum permeability	1.07

Mechanical Properties

Element	Value
Elongation at break(%)	44
Modulus of elasticity(GPa)	220
Izod impact strength(J m?¹)	108
Tensile strength(MPa)	550-780

Electrical Properties

Element	Value
Electrical resistivity(µOhmcm)	29-33
Temperature coefficient(K?¹)	0.0019

Thermal Properties

Element	Value
Maximum use temperature in air(C)	1100
Melting point(C)	1315-1390
Specific heat(J K?¹ kg?¹)	446@23°C
Thermal conductivity(W m?¹ K?¹)	30-32@23°C
Coefficient of thermal expansion(x10?? K?¹)	16.8@20-1000°C

Physical Properties

Element	Value
Density(gcm?³)	8.5-8.7