



Brand Name	A-COPPER 11		
Material Code	-		
Abbreviation	SNCA/SNCB RNCA/RNCB		
Chemical Composition.(mass components.) in % average values of alloy components			
Cu Balance	Ni 3	Mn 2	

Form of Delivery

A-COPPER 11 is supplied in the form of wires with dimensions from 0.05 to 10 mm Ø in bare condition. Enamelled wires are available in dimension between 0.05 and 1.5 mmØ. A-COPPER 11 can also be supplied in form of stranded wire, ribbon, flat wire and rods. Please contact us for the range of dimension.

Features and Application Notes

A-COPPER 11 is used as the negative leg for compensating lead for the element type Pt10Rh-Pt and Pt13Rh-Pt.

A-COPPER 11 is standardized in the temperature range between 0 and 200 °C

Thermoelectrical and Electrical Values in Soft-Annealed Condition

EMF vers. Pt/NIST 175 0-200 ° F / mV	EMF vers. Pt67/NIST 175 0-100 ° C / mV	EMF vers. Pt/NIST 175 0-400 ° F / mV	EMF vers. Pt67/NIST 175 0-200 ° C / mV	Electrical resistivity at 20°C in	
				μΩ x cm	Ω / cir mil ft
0.114 / 0.114	0.128 / 0.127	0.411 / 0.382	0.396 / 0.368	12	72

Physical Characteristics (Reference Values)

Density at 20 ° C		Melting Point	Specific heat at 20 ° C	Thermal conductivity at 20 ° C	Average linear thermal expansion coefficient between 20 ° C and 100 ° C	Magnetic at room temp.
g/cm ³	lb/cub in	°C	J/g K	W/m K	10 ⁻⁶ /K	no
8.9	0.321	1080	0.38	around 200	18	no

Mechanical Properties at 20 °C in Annealed Condition (Reference Values) ¹⁾

Annealing State	Tensile Strength		Elongation %	Hardness HV10
	MPa	lb / sq in		
hard	>500	>72500	2	>170
soft	320	46400	33	90

1) The mechanical values considerably depend on dimension. The indicated values refer to a dimension of 1 mm diameter.

Notes on Treatment

A-COPPER 11 is easily to process. The alloy can be soldered and brazed without difficulty. All known welding methods are applicable.