

Main Characteristics Of Copper-based Low Resistance Heating Alloys

Properties Alloy Nomenclature	Resistivity ($\mu\Omega\cdot m$) (20°C)	Max working Temperature (°C)	Tensile Strength (Mpa)	Melting point (°C)	Density (g/cm ³)	TCR $\times 10^{-6} / ^\circ C$ (20~600 °C)	EMF vs Cu ($\mu V / ^\circ C$) (0~100 °C)
NC003 (CuNi1)	0.03	200	210	1085	8.9	<100	-8
NC005 (CuNi2)	0.05	200	220	1090	8.9	<120	-12
NC010 (CuNi6)	0.10	220	250	1095	8.9	<60	-18
NC012 (CuNi8)	0.12	250	270	1097	8.9	<57	-22
NC015 (CuNi10)	0.15	250	290	1100	8.9	<50	-25
NC020 (CuNi14)	0.20	300	310	1115	8.9	<30	-28
NC025 (CuNi19)	0.25	300	340	1135	8.9	<25	-32
NC030 (CuNi23)	0.30	300	350	1150	8.9	<16	-34
NC035 (CuNi30)	0.35	350	400	1170	8.9	<10	-37
NC040 (CuNi34)	0.40	350	400	1180	8.9	0	-39
NC050 (CuNi44)	0.50	400	420	1200	8.9	<-6	-43

