



## CuNi6 Resistance Wire

### EQUIVALENT SPECIFICATIONS

SPECIFICATIONS	DESIGNATION
ISO	CuCr1Zr
Eropean	CuCr1Zr
BS	CC 102

CuNi6 is a copper-nickel alloy (CuNi alloy) with low resistivity suitable for use at temperatures up to 300 °C (570 °F).

Wire in CuNi6 is typically used for low-temperature applications such as heating cables.

**Sizes available: As per Customer specification**

### CHEMICAL COMPOSITION

	Ni %	Cu %
Nominal composition	6.0	Bal.

### MECHANICAL PROPERTIES

Wire size	Yield strength	Tensile strength	Elongation
∅	Rp0.2	Rm	A
mm	MPa	Mpa	%
1.00	110	280	30

### PHYSICAL PROPERTIES

Density g/cm <sup>3</sup>	8.9
Electrical resistivity at 20 °C Ω mm <sup>2</sup> /m	0.10

### TEMPERATURE FACTOR OF RESISTIVITY

Temperature °C	20	100	200	300
Ct	1.00	1.06	1.11	1.19

### THERMAL CONDUCTIVITY

Temperature °C	20
W m <sup>-1</sup> K <sup>-1</sup>	90

### SPECIFIC HEAT CAPACITY

Temperature °C	20
kJ kg <sup>-1</sup> K <sup>-1</sup>	0.380
Melting point °C	1095
Max continuous operating temperature in air °C	300
Magnetic properties	The material is non-magnetic

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