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6J12 CuNi Alloy

Our Product Introduction

sasic information	
Place of Origin:	China
Brand Name:	Victory
Model Number:	6J12
Minimum Order Quantity:	5
 Packaging Details: 	Spool package with Carton box, Coil package with polybag
Delivery Time:	5-21 days
Payment Terms:	L/C, T/T, Western Union, MoneyGram
Supply Ability:	300 tons per month



Product Specification

• Highlight:

6J12 CuNi Alloy, CuNi Alloy wire, nickel copper alloy strip

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Product Description

Manganin is a highly precise electrical resistance alloy that is composed of copper, manganese, and nickel. This alloy is known for its exceptional properties, which include high resistivity, low-temperature coefficient of resistance, and very low thermal effect against copper. Additionally, manganin exhibits excellent performance of electrical resistance over long periods of time. There are several types of manganin available, including 6J13, 6J8, and 6J12. These different types offer varying levels of resistance and can be chosen based on the specific needs of the application. Overall, manganin is an excellent choice for applications that require precise electrical resistance and long-term stability.

Manganin wire is a popular choice for low-voltage instrumentation applications where high precision is required. To ensure optimal performance, it is important to stabilize the resistors carefully and avoid exposing them to temperatures above +60°C. If the maximum working temperature is exceeded, the wire may oxidize and cause a resistance drift, which can negatively impact long-term stability. This can result in slight changes to the resistivity and temperature coefficient of the electric resistance.

Despite this potential issue, manganin wire remains a cost-effective replacement material for silver solder in hard metal mounting applications. Its versatility and reliability make it a go-to choice for many industries that require precise measurements and stable performance over time. By carefully selecting and using manganin wire, engineers and technicians can ensure that their instrumentation systems operate at peak efficiency and accuracy.

Product Description

Cu-Ni Alloy: CuNi1, CuNi2, CuNi6, CuNi8, CuNi10, CuNi14, CuNi19, CuNi23, CuNi30, CuNi34, CuNi44

NC003, NC005, NC010, NC012, NC015, NC020, NC025, NC030, NC035, NC040, NC050

We can supply type of : wire, ribbon, strip, customized furnace spring wire/strip

Cold Drawing Wire: DIA 0.03m-8.0mm

Hot Rolled Rod / Bar: DIA 8.0mm-50.0mm

Cold Rolled Ribbon/Strip: (0.05mm-0.35mm) *(0.5-6.0)mm

Hot Rolled Strip: (0.5mm-2.5mm) *(5-180.0)mm

Properties/ Material	Resistivity (200C $\mu\Omega$.m)	Max. Working Temperature(C)	Tensile Strength (Mpa)	Melting Point	C
NC003(CuNi1)	0.03	200	210	1085	8
NC005(CuNi2)	0.05	200	220	1090	8
NC010(CuNi6)	0.1	220	250	1095	8
NC012(CuNi8)	0.12	250	270	1097	8
NC015(CuNi10)	0.15	250	290	1100	8
NC020(CuNi14)	0.2	300	310	1115	8
NC025(CuNi19)	0.25	300	340	1135	8
NC030(CuNi23)	0.3	300	350	1150	8
NC035(CuNi30)	0.35	350	400	1170	8
NC040(CuNi34)	0.4	350	400	1180	8
NC050(CuNi44)	0.5	400	420	1200	8

Shape	Size(mm)
Wire	0.08-7.5
Bar	8.0-50
Ribbon	(0.05-0.35)*(0.5-6.0)
Strip	(0.5-2.5)*(5-180)

Characteristic

Pure copper plus nickel can significantly improve strength, corrosion resistance, hardness, electrical resistance and pyroelectricity, and reduce the temperature coefficient of resistivity. Therefore, the mechanical and physical properties of white copper are exceptionally better than other copper alloys.

Good ductility, high hardness, beautiful color, corrosion resistance and deep drawing performance, are widely used in shipbuilding, petrochemical, electrical appliances, instruments, medical machinery, daily necessities, handicrafts and other fields, and are also important resistance and thermocouple alloys. The disadvantage of cupronickel is the main added element - nickel is a scarce strategic material, and the price is relatively expensive.

Copper Nickel alloy performance tables

NC003 (CuNi1)	0.03	200	210	1085	8.9	<100	-8
NC005 (CuNi2)	0.05	200	220	1090	8.9	<120	-1
NC010 (CuNi6)	0.1	220	250	1095	8.9	<60	-1
NC012 (CuNi8)	0.12	250	270	1097	8.9	<57	-2
NC015 (CuNi10)	0.15	250	290	1100	8.9	<50	-2
NC020 (CuNi14)	0.2	300	310	1115	8.9	<30	-2

NC025 (CuNi19)	0.25	300	340	1135	8.9	<25	-3
NC030 (CuNi23)	0.3	300	350	1150	8.9	<16	-3,
NC035 (CuNi30)	0.35	350	400	1170	8.9	<10	-3
NC040 (CuNi34)	0.4	350	400	1180	8.9	0	-3
NC050 (CuNi44)	0.5	400	420	1200	8.9	<-6	-4:
The Form we co	ould offer						
Size Range						Image	
Wire	dia 0.03	-7.5mm					
	dia 8.0-1	2.0mm					
Ribbon	(0.05-0.3	35)*(0.5-6.0)mm					
Strip	(0.50-2.	5)*(5-180)mm					

Changzhou DLX Alloy Co., Ltd was established in 2002 and has got ISO9001 International Quality Management System Certificate and SGS Certificate. Our factory is becoming a high-tech company, We are professional in researching and producing special alloy material. The production process includes melting, drawing, heat treatment, finishing, and testing.

8-50mm

We offer super alloy, welding wire, corrosion resistance alloy, precision alloy, FeCrAI alloy, NiCr alloy, CuNi alloy, in the form of wire, strip, ribbon, bar, tube, plate and etc.

The administrative principle of our company is "intensifying inner supervision, complying with technical process and quality control, continuously adopting new technology to ensure the product quality".

> VK. Changzhou Victory Technology Co., Ltd

