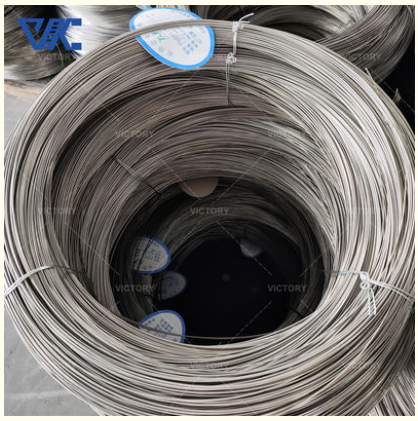
16SWG 14AWG 1.60mm Acid White FeCrAl Alloy 0Cr19Al3 0Cr21Al4 Electric Heating Resistance Round Wires

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO/ROHS
- Model Number: 0Cr19Al3
- Minimum Order Quantity: 3kgs
- Price: 3-500kgs $2.58-$3.50
- Packaging Details: Put wire into cartons, then put cartons onto pallet
- Delivery Time: 10-25 days
- Payment Terms: L/C, T/T, Paypal, Western Union
- Supply Ability: 80 Tons Per Month



Product Specification

- Material: FeCrAl
- Surface: Bright, Acid White, Black/Oxidized
- Density: 7.35 G/cm3
- Resistivity: 1.23 Ω/m
- Max Working Temperature: 1100℃
- Elongation At Rupture: 16%
- Hardness (H.B.)): 200-260
- Magnetic Properties: Magnetic
- MOQ: 3-20kgs
- Delivery Lead Time: 15-25 Days
- Melting Point Approx (℃): 1500℃
- Tensile Strength (N/mm2)): 600-700 N/mm2
- Highlight: **1.60mm Acid White FeCrAl Alloy**, **0Cr21Al4 FeCrAl Alloy**, **14AWG FeCrAl Alloy**

More Images

Our Product Introduction

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Product Description

14 20 24 AWG 16SWG FeCrAl Alloy 0Cr13Al4 Electric Resistance Wire For Oven Heating

What is 0Cr19Al3 wire?

0Cr19Al3 is an iron-chromium-aluminum alloy wire. It is a type of resistance heating alloy that is commonly used for heating elements in various electrical appliances and industrial furnaces. The "0Cr19Al3" designation indicates the composition of the alloy, with 0 representing the iron content, Cr representing chromium, and Al representing aluminum. The numbers in the designation provide the approximate percentage composition of each element in the alloy.

The 0Cr19Al3 wire exhibits high resistivity and good oxidation resistance at elevated temperatures, making it suitable for applications where consistent and reliable heat generation is required. This type of alloy is known for its durability and performance in high-temperature environments, which is essential for heating elements in ovens, electric stoves, industrial furnaces, and other heating applications.

What is main applications of 0Cr19Al3 wire?

The main application of 0Cr19Al3 is in the manufacturing of heating elements for various electrical appliances and industrial furnaces. This iron-chromium-aluminum alloy wire is commonly used in the following applications:

1. Electrical Appliances: 0Cr19Al3 wire is used in the production of heating elements for electric ovens, toasters, electric stoves, and other household appliances where reliable and efficient heat generation is required.

2. Industrial Furnaces: The alloy is utilized in the construction of industrial furnaces, kilns, and heating systems where resistance to high temperatures and consistent heat output are essential for industrial processes.

3. Resistance Heating: It is employed in applications that require resistance heating, such as in heat treatment processes, industrial drying equipment, and other thermal processing systems.

Overall, the 0Cr19Al3 alloy is valued for its high resistivity and good oxidation resistance at elevated temperatures, making it well-suited for a wide range of heating applications in both household and industrial settings.

What is the difference between 0cr19al3 and 0cr21al4?

The main difference between 0Cr19Al3 and 0Cr21Al4 lies in their composition, specifically in the percentage of Chromium (Cr) and Aluminum (Al) present in the alloy. Here are the key distinctions:

Composition:
0Cr19Al3: Contains 19% Chromium and 3% Aluminum.
0Cr21Al4: Contains 21% Chromium and 4% Aluminum.

Properties:
The higher Chromium content in 0Cr21Al4 provides better oxidation resistance compared to 0Cr19Al3.
0Cr21Al4 may offer slightly higher temperature resistance due to its composition.

Shape	Size (mm)
Wire	0.025-8.00mm
Rod	8.00-50.00mm
Robbin	(0.05-0.35)*(0.5-6.0)mm
Strip	(0.50-2.50)*(5.00-180.00)mm

Alloy Nomenclature Performance		1Cr13Al4	0Cr25Al5	0Cr21Al6	0Cr23Al5	0Cr21Al4/ 0Cr19Al3	0Cr21Al6Nb	0Cr27Al7Mo2
Main chemical composition	Cr	12.0-15.0	23.0-26.0	19.0-22.0	20.5-23.5	18.0-21.0	21.0-23.0	26.5-27.8
	Al	4.0-6.0	4.5-6.5	5.0-7.0	4.2-5.3	3.0-4.2	5.0-7.0	6.0-7.0
	Rest	opportune	opportune	opportune	opportune	opportune	opportune	opportune
	Fe	Rest	Rest	Rest	Rest	Rest	Rest	Rest
	Others	--	--	--	--	--	Nb 0.5	Mo 1.8-2.2
Max. continuous service temp. of element(°C)		950	1250	1250	1250	1100	1350	1400
Resistivity at 20ºC(μΩ@m)		1.25	1.42	1.42	1.35	1.23	1.45	1.53
Density(g/cm3)		7.4	7.1	7.16	7.25	7.35	7.1	7.1
Thermal conductivity(KJ/m@h@ºC)		52.7	46.1	63.2	60.2	46.9	46.1	
Line expansion coefficient(α×10-6/ºC)		15.4	16	14.7	15	13.5	16	16

Melting point approx.(ºC)	1450	1500	1500	1500	1500	1510	1520
Tensile Strength(N/mm2)	580-680	630-780	630-780	630-780	600-700	650-800	680-830
Elongation at break(%)	>16	>12	>12	>12	>12	>12	>10
Variation of area(%)	65-75	60-75	65-75	65-75	65-75	65-75	65-75
Repeat bending frequency(F/R)	>5	>5	>5	>5	>5	>5	>5
Hardness (H.B.)	200-260	200-260	200-260	200-260	200-260	200-260	200-260
continuous service time(Hours/ºC)	--	≥80/1300	≥80/1300	≥80/1300	≥80/1250	≥50/1350	≥50/1350
Micrographic structure	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Magnetic properties	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic	Magnetic

Are you a Manufacturer or Trader?
We are a Manufacturer.

Do you provide free samples?
Yes, we can provide a free sample for testing,buyer should bear all the shipping costs.

What is your payment terms?
T/T,L/C,D/A,D/P,Western Union,MoneyGram,Paypal.

What is the lead time?
Usually sample lead time is 7 days after payment has been confirmed.

Changzhou Victory Technology Co., Ltd

+8619906119641 victory@dlx-alloy.com victory-alloy.com

NO.32 West Taihu Road, Xinbei District, Changzhou, Jiangsu