

AF200

产品结构

- 单根或多股镀锡铜线绞合软导体，镀锡铜线性能参考 JB/T3135-2024 标准；导体的结构参考 GB/T3956-2008 或客户的要求
- 聚全氟乙丙烯 FEP 绝缘，绝缘材料性能参考 GJB773B-2015；成品电线电缆的外形尺寸检验方法按 GB/T2951-2008；成品电线电缆电性能检验方法参考 GB/T3048-2007

技术范围

- 温度范围：-65~+200°C
- 额定电压：U0/U 600V
- 测试电压：2000V
- 绝缘电阻：20°C时应不小于 $1.0 \times 10^3 \text{ M}\Omega \cdot \text{km}$
- 耐辐射性：高达 $1 \times 10^6 \text{ cJ/kg}$

产品特性

- 具有优良的耐腐蚀性能，抗油、强酸、抗强碱、强氧化剂、抗微生物、不允许任何真菌形成等
- 具有优良的电绝缘性能，具有低且几乎与频率无关的介电特性，耐高电压、高频损耗小，不吸潮吸水率 <0.01%、最小的水蒸气渗透率（24 小时内约 0.18 mgr/cm^2 ）、绝缘电阻大
- 不易燃，自熄，阻燃测试符合 DIN VDE 0482 第 265-2-1 部分/EN 50265-2-1/IEC 60332-1（等效 DIN VDE 0472 part 804 测试方法 B）
- 不含有害物质，符合 ROHS 标准

应用

- 电子行业中，可用于温度补偿导线，耐低温导线，高温加热导线，耐老化电线以及阻燃电线
- 家用电器行业中，可用于空调机，微波炉，电子消毒柜，电饭煲，电子热水瓶，电暖器，电烤箱，电砂锅，灯具灯饰等内部布线
- 用于安装在受高热影响的控制柜中以及砖厂、加热器、厨房设备和测量设备以及化学工业中
- 高温高频下使用的电子设备传输线，电子计算机内部的连接线，航空宇宙用电线，及其他特种用途安装线、油矿测井电缆、潜油电机绕组线、微电机引出线等

Product Structures

- Conductor: Single or multi-stranded tin-plated copper wire, stranded flexible construction. Tin-plated copper wire performance refers to standard JB/T3135-2024. Conductor structure refers to standard GB/T 3956-2008 or customer-specific requirements.
- Insulation: FEP. Insulation material performance refers to standard GJB773B-2015. Finished wire/cable dimensions shall be tested according to GB/T 2951-2008. Finished wire/cable electrical performance testing refers to GB/T 3048-2007.

Technical Scope

- Temperature Range: -65~+200°C
- Rated Voltage: U0/U 600V • Test Voltage: 2000V
- Insulation Resistance: Not less than $1.0 \times 10^3 \text{ M}\Omega \cdot \text{km}$ at 20°C (Min. $1000 \text{ M}\Omega \cdot \text{km}$ at 20°C)
- Radiation resistance: up to $1 \times 10^6 \text{ cJ/kg}$ (up to 1 Mrad)

Product Features

- Excellent corrosion resistance: Resistant to oil, strong acids, strong alkalis, strong oxidizers, and microorganisms; prevents any fungal growth.
- Excellent electrical insulation properties: Features low, frequency-independent dielectric characteristics; high voltage resistant; low high-frequency loss; non-hygroscopic (water absorption < 0.01%); minimal water vapor permeability (approx. 0.18 mgr/cm^2 per 24 hours); high insulation resistance.
- Non-flammable and self-extinguishing: Flame retardant performance complies with DIN VDE 0482 Part 265-2-1 / EN 50265-2-1 / IEC 60332-1 (equivalent to DIN VDE 0472 Part 804 test method B).
- Free from harmful substances: Compliant with ROHS standards.

Applications

- Electronics Industry: Suitable for temperature compensation wires, cryogenic-resistant wires, high-temperature heating wires, aging-resistant wires, and flame-retardant cables.
- Household Appliance Industry: Used for internal wiring in air conditioners, microwave ovens, electronic sterilizers, rice cookers, electric hot water bottles, electric heaters, electric ovens, electric casseroles, lamps, and lighting fixtures.
- Industrial Settings: Installation in control cabinets exposed to high heat, brick kilns, heaters, kitchen equipment, measurement devices, and within the chemical industry.
- Specialized Applications: Transmission lines for electronic equipment operating at high temperatures and high frequencies; internal connection wires for computers; aerospace cables; other special-purpose installation wires; oil well logging cables; winding wires for submersible oil pump motors; lead wires for micro-motors.

技术参数 Technical Parameters

标称截面 Nominal cross section(mm²)	导体结构根数 / 线径 Conductor construction: Number/size(mm)	绝缘厚度 Insulation thickness(mm)	平均外径 Average outer diameter(mm)	20°C时导体直流电阻 Max The maximum resistance value of the conductor at 20°C (Ω/km)	包装长度 The length of package (m)
0.014	7/0.05	0.15	0.45	1454	500
0.035	7/0.08	0.15	0.60	596	500
0.05	7/0.10	0.15	0.60	381	500
0.08	7/0.12	0.20	0.80	245	500
0.12	7/0.15	0.20	0.85	163	500
0.20	7/0.20	0.25	1.10	94.2	200
0.35	19/0.16	0.25	1.30	53.1	200
0.50	19/0.18	0.25	1.40	40.1	200
0.75	19/0.23	0.25	1.70	24.8	200
1.0	19/0.26	0.25	1.80	20	200
1.20	19/0.28	0.30	2.00	16.6	200
1.50	19/0.32	0.30	2.20	13.7	200
2.0	19/0.37	0.30	2.50	9.1	100
2.5	19/0.41	0.40	2.90	8.21	100
4.0	37/0.37	0.40	3.40	5.09	100
6.0	37/0.45	0.50	4.20	3.39	100
8.0	133/0.28	0.50	5.20	2.3	100
10	133/0.32	0.50	5.80	1.95	100
16	133/0.39	0.60	7.00	1.24	100
20	133/0.45	0.60	8.00	0.89	100
25	196/0.40	0.60	8.80	0.795	100
35	494/0.30	0.70	10.40	0.565	100
50	396/0.40	0.80	12.20	0.393	100
70	551/0.40	1.00	14.60	0.277	100
95	760/0.40	1.20	17.20	0.21	500
0.03	1/0.20	0.15	0.50	563	500
0.05	1/0.26	0.17	0.60	381	500
0.07	1/0.30	0.20	0.70	245	500
0.12	1/0.40	0.20	0.80	143	500
0.2	1/0.50	0.25	1.00	94.2	500
0.3	1/0.60	0.30	1.20	65.3	500
0.5	1/0.80	0.30	1.40	36.7	500
0.75	1/0.97	0.26	1.50	24.7	500
1.13	1/1.20	0.30	1.80	16.5	500

备注：根据供需双方协议，可以生产其他规格的产品。
Note: Products with other specifications can be manufactured according to the agreement between both parties.