

AFT250

产品结构

- 单根或多股镀银、镀镍、纯镍铜线绞合软导体，镀银性能参考 JB/T3135-2024 标准；镀镍、纯镍性能参考 GB/T11019-2021 标准。导体的结构参考 GB/T3956-2008 或客户的要求；
- 聚四氟乙烯 PTFE 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~+250°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：up to $1 \times 10^6 \text{cJ/kg}$ (up to 1 Mrad)

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 0.18mgr/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/EN50265-2-1/IEC60332-1（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: Flexible stranded conductor(s) of single/multiple silver-plated/nickel-plated/pure nickel-coated copper wires, Silver Plating: JB/T3135-2024, Nickel Plating/Coating: GB/T11019-2021, Construction: GB/T 3956-2008 or customer requirements.
- Insulation: PTFE. Insulation material performance reference: GJB773B-2015. Finished wire/cable dimensional inspection method: GB/T 2951-2008. Finished wire/cable electrical performance test method reference: GB/T 3048-2007.

Technical Scope

- Temperature Range: -65~+250°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 Chemical Resistance: Resistant to oils, strong acids, strong alkalis, strong oxidizing agents, microorganisms; prevents fungal growth.
- Superior Electrical Insulation Properties: Low and virtually frequency-independent dielectric properties. High voltage resistance, Low high-frequency loss, Non-hygroscopic / Low water absorption (< 0.01%). Minimal water vapor permeability (approx. 0.18 mgr/cm^2 within 24 hours), High insulation resistance.
- Flame Retardant: Self-extinguishing. Passes flame retardancy tests per DIN VDE 0482 Part 265-2-1 / EN 50265-2-1 / IEC 60332-1 (equivalent to DIN VDE 0472 Part 804 Test Method B).
- Environmentally Compliant: Free of hazardous substances; complies with RoHS standards.

Applications

- Electronics Industry: Temperature compensation wires, cryogenic-resistant wires, high-temperature heating wires, aging-resistant wires, flame-retardant wires.
- Household Appliance Industry: Internal wiring for air conditioners, microwave ovens, electronic sterilizers, rice cookers, electric kettles, electric heaters, electric ovens, electric casseroles, lighting fixtures.
- Industrial Environments: Installation in control cabinets subject to high heat, brick factories, heaters, kitchen equipment, measurement devices, and chemical industry.
- Specialized Applications: Transmission lines for electronic equipment operating at high temperatures and high frequencies, Internal connecting wires for computers, Aerospace cables. Other special-purpose installation wires. Oil well logging cables, Submersible motor winding wires, Micro-motor lead wires.

技术参数 Technical parameters

标称截面 Nominal cross section (mm ²)	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)
0.05	1×0.25	0.20	0.65	376	500
0.07	1×0.30	0.20	0.70	245	500
0.12	1×0.40	0.25	0.85	144	500
0.16	1×0.45	0.25	0.95	126	500
0.20	1×0.50	0.30	1.10	92	500
0.08	7×0.12	0.25	0.86	239	500
0.15	7×0.16	0.25	1.00	136	500
0.20	7×0.20	0.25	1.10	94.2	500
0.35	19×0.16	0.30	1.40	54.5	200
0.50	19×0.18	0.35	1.60	40.1	200
0.75	19×0.23	0.35	1.85	26.7	200
1.00	19×0.26	0.35	2.00	20	200
1.20	19×0.28	0.40	2.20	16	200
1.50	19×0.32	0.40	2.40	13.7	200
2.00	19×0.37	0.45	2.75	9.10	100
2.50	19×0.41	0.50	3.10	8.21	100
4.00	37×0.37	0.50	3.60	5.09	100
6.00	37×0.45	0.50	4.15	3.39	100