AWM1212/1213

产品结构

- 单根或多股镀银、镀镍铜线绞合软导体，镀银性能参考 JB/T3135-2024 标准；镀镍性能参考 GB/T11019-2021 标准。导体的结构参考 UL758&UL1581 或客户的要求
- 聚四氟乙烯 PTFE 绝缘，绝缘材料性能参考 UL758&UL1581；成品电线电缆的外形尺寸检验方法按 UL758&UL1581；成品电线电缆电性能检验方法参考 UL758&UL1581

技术范围

- 温度范围：-65~+80/+105°C　•　额定电压：U0/U 无要求
- 测试电压：1500V
- 绝缘电阻：20°C时应不小于 1.0×10^{3}MΩ・km
- 耐辐射性：up to 1×10^{6}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/cm²）、绝缘电阻大
- 不易燃，自熄，阻燃测试符合 DINVDE0482 第 265-2-1 部分/EN50265-2-1/IEC60332-1（等效 DINVDE0472part804 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: Stranded flexible conductor composed of single or multiple silver-plated, or nickel-plated copper wires. Silver-plating performance reference: JB/T3135-2024. Nickel-plating performance reference: GB/T11019-2021. Conductor structure reference: UL758&UL1581 or customer requirements.
- Insulation: PTFE. Insulation material performance reference: UL758&UL1581. Finished wire/cable dimensional inspection method: UL758&UL1581. Finished wire/cable electrical performance test method reference: UL758&UL1581.

Technical Scope

- Temperature Range: -65~+80/+105°C
- Rated Voltage: U0/U No requirement
- Test Voltag: 1500V
- Insulation Resistance: Not less than 1.0×10^{3}MΩ・km at 20°C (Min. 1000MΩ・km at 20°C)
- Radiation resistanc: up to 1×10^{6}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/cm² 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 the 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

线规 Guage (AWG)	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)
10	37×0.43	0.20	3.60	3.546	305
12	19×0.49	0.20	3.00	5.64	305
14	19×0.37	0.20	2.35	8.96	305
16	19×0.30	0.20	2.00	14.6	305
17	19×0.26	0.20	1.80	18.3	305
18	19×0.235	0.20	1.70	23.2	305
20	19×0.20	0.20	1.50	36.7	305
	1×0.813	0.20	1.25	35.2	305
22	19×0.16	0.20	1.20	59.4	610
	1×0.65	0.20	1.05	56.4	610
24	7×0.20	0.20	1.00	94.2	610
	1×0.511	0.20	0.95	89.3	610
26	7×0.16	0.20	0.90	150	610
	1×0.404	0.20	0.80	143	610
28	7×0.12	0.20	0.80	239	610
	1×0.32	0.20	0.75	227	610
30	7×0.10	0.20	0.70	381	610
	1×0.254	0.20	0.65	361	610
32	7×0.08	0.20	0.65	596	610
	1×0.20	0.20	0.60	561	610
34	7×0.06	0.20	0.60	925	610
	1×0.16	0.20	0.60	908	610
36	7×0.05	0.20	0.60	1471	610
	1×0.12	0.20	0.55	1443	610