



航空航天用镀银铜芯聚氯乙烯绝缘轻型电线电缆
Silver-plated copper core FEP insulated light-duty electrical wire and cable for aerospace

产品用途

本产品适用于交流额定电压250V及以下电器设备和仪器仪表连接用线以及航空航天飞行器布线等。

产品使用温度

-65℃~200℃

产品执行标准

GJB773A/10A-2000

Application

This product is applicable for electrical connection wire of equipments and instruments and aerospace vehicle wiring of rated voltage up to and including ac 250V.

Operating temperature

-65℃~200℃

Executive standard

GJB773A/10A-2000

使用特性 Service property

项目名称/Item	技术指标/Technical Index
电缆编织屏蔽密度 Cable braided shield density	≥85%
电缆绝缘电阻 Electrical wire insulation resistance	≥1.5 × 10 ¹⁰ MΩ·km
绝缘浸水电压 Insulation voltage when immersed in water	1.5kV/1min不击穿 1.5kV/1min no breakdown
电线冒烟 Electrical wire smoke emission	(200 ± 5) °C × 15min, 无冒烟现象 (200 ± 5) °C × 15min no smoke
电线绝缘及电层护套抗张强度 Tensile strength of electrical wire insulation and sheath	抗张速度为50 ± 5mm/min Tensile speed should be 50 ± 5mm/min
A) 电线绝缘 Electrical wire insulation	≥13.8N/mm ²
B) 电层护套 Cable sheath	≥20.7N/mm ² (H+型)
电线绝缘及电层护套断裂伸长率 Elongation at break of cable insulation and sheath	抗张速度为50 ± 5mm/min Tensile speed should be 50 ± 5mm/min
A) 电线绝缘 Electrical wire insulation	≥100%
B) 电层护套 Cable sheath	≥200% (H+型)

产品型号及名称 Type and description

型号/Type	名称/Description
FF4e-2Q	镀银铜芯FEP绝缘轻型电缆 Silver-plated copper core FEP insulated light-duty electrical wire
FF4e.P1+2Q	镀银铜芯FEP绝缘镀银圆丝编织屏蔽轻型电线电缆 Silver-plated copper core FEP insulated silver plated round copper wire braided shielded light-duty electrical wire and cable
FF4e.P3+2Q	镀银铜芯FEP绝缘镀银圆丝编织屏蔽屏蔽轻型电线电缆 Silver-plated copper core FEP insulated nickel plated round copper wire braided shielded light-duty electrical wire and cable

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型号/Type	名称/Description
FF4e.H3-2Q	镀银铜芯FEP绝缘FEP护套轻型电线电缆 Silver-plated copper core FEP insulated and sheathed light-duty electrical wire and cable
FF4e.P1+H3-2Q	镀银铜芯FEP绝缘镀银圆丝编织屏蔽FEP护套轻型电线电缆 Silver-plated copper core FEP insulated silver plated round copper wire braided shielded FEP sheathed light-duty electrical wire and cable
FF4e.P3+H3-2Q	镀银铜芯FEP绝缘镀银圆丝编织屏蔽FEP护套屏蔽轻型电线电缆 Silver-plated copper core FEP insulated nickel plated round copper wire braided shielded FEP sheathed light-duty electrical wire and cable

基本电缆规格和结构参数 Cable specification and structural parameter

导体标称截面 Nominal cross section area mm ²	导体结构/导体根数/导体直径 Conductor structure number of wires/diameter mm	成品电缆外径 Finished cable outer diameter mm	导体直流电阻最大值 Q/km Conductor maximum dc resistance	成品电缆最大重量 kg/km Finished cable maximum weight
0.06	7/0.10	0.61 ± 0.05	330	1.14
0.08	7/0.12	0.69 ± 0.05	227	1.59
0.14	19/0.10	0.79 ± 0.05	126	2.25
0.20	19/0.12	0.91 ± 0.05	83.5	3.36
0.35	19/0.16	1.07 ± 0.08	49.5	4.79
0.50	19/0.20	1.27 ± 0.08	30.2	7.19
0.75	19/0.23	1.49 ± 0.08	22.7	9.29
1.0	19/0.26	1.55 ± 0.10	19.0	11.1
1.2	19/0.28	1.76 ± 0.10	15.30	14.2
1.5	19/0.32	2.04 ± 0.10	11.70	17.8

导体标称截面 Nominal cross section area (mm ²)	排包护套厚度H 包层小径mm type sheath minimum thickness of sheath	屏蔽层厚度 Nominal thickness of shield	电缆外径≤mm Cable outer diameter						电缆重量≤kg/km Cable weight	
			未屏蔽 With shield and no shield	有屏蔽 With shield and shield	有屏蔽 With shield and no shield	有屏蔽 With shield and shield	有屏蔽 With shield and no shield	有屏蔽 With shield and shield		
1.0	0.06	0.18	0.10	-	1.11	1.67	-	3.86	6.56	
	0.08	0.18	0.10	-	1.19	1.75	-	4.56	7.41	
	0.14	0.18	0.10	-	1.29	1.85	-	5.52	8.57	
	0.20	0.18	0.10	-	1.41	1.97	-	7.00	10.3	
	0.35	0.18	0.10	-	1.57	2.13	-	8.92	12.5	
	0.50	0.18	0.10	-	1.77	2.33	-	11.9	15.9	



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导体标称截面 (mm ²) Nominal cross section area	挤包护套厚度H ₃ 型最小值mm Extruded H ₃ type sheath minimum thickness	屏蔽单芯 标称直径 mm Nominal thickness of shield	电缆外径≤mm Cable outer diameter			电缆重量≤kg/km Cable weight			
			无屏有护 With sheath and no shield	有屏无护 With shield and no sheath	有屏有护 With shield and sheath	无屏有护 With sheath and no shield	有屏无护 With shield and no sheath	有屏有护 With shield and sheath	
1芯	0.75	0.18	0.10	-	1.99	2.55	-	14.7	19.1
	1.0	0.18	0.10	-	2.05	2.61	-	16.7	21.2
	1.2	0.18	0.10	-	2.28	2.84	-	20.5	27.5
	1.5	0.18	0.10	-	2.57	3.13	-	25.0	32.8
2芯	0.06	0.18	0.10	1.88	1.77	2.33	5.17	6.66	10.4
	0.08	0.18	0.10	2.04	1.93	2.49	6.36	8.02	12.0
	0.14	0.18	0.10	2.24	2.13	2.69	8.06	9.92	14.3
	0.20	0.18	0.10	2.48	2.37	2.93	10.8	12.9	17.7
	0.35	0.18	0.10	2.80	2.69	3.25	14.2	16.6	22.0
	0.50	0.18	0.10	3.20	3.09	3.69	19.8	22.6	28.7
3芯	0.06	0.18	0.10	1.99	1.88	2.44	6.71	8.43	12.5
	0.08	0.18	0.10	2.16	2.05	2.61	8.41	10.3	14.8
	0.14	0.18	0.10	3.37	2.26	2.84	10.9	13.0	17.9
	0.20	0.18	0.10	2.63	2.52	3.08	14.7	17.1	22.7
	0.35	0.18	0.10	2.98	2.87	3.43	19.8	22.6	28.5
	0.50	0.18	0.10	3.41	3.30	3.86	27.9	31.2	38.0
4芯	0.06	0.18	0.10	2.16	2.05	2.61	8.26	10.2	14.7
	0.08	0.18	0.10	2.35	2.24	2.80	10.5	12.7	17.5
	0.14	0.18	0.10	2.59	2.48	3.04	13.6	16.1	21.4
	0.20	0.18	0.10	2.88	2.77	3.33	18.7	21.5	27.4
	0.35	0.18	0.10	3.27	3.16	3.72	25.3	28.5	35.1
	0.50	0.18	0.10	3.75	3.64	4.20	36.0	39.7	47.3