

航空航天用镀银镀锡铜芯聚全氟乙丙烯绝缘电线电缆 Silver-plated(tinned)copper core FEP insulated electrical wire and cable for aerospace

产品用途

本产品适用于交流额定电压600V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/8A、GJB773A/11A

Application

This product is applicable for electrical connection wire of equipments and instruments and aerospace vehicle wiring of rated voltage up to and including a.c. 600V.

Operating temperature

-65℃~200℃

Executive standard

GJB773A/8A、GJB773A/11A

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%
电线绝缘电阻 Electrical wire insulation resistance	≥1.5 × 10 ³ MΩ·km
绝缘浸水电压 Insulation voltage when immersed in water	2.2KV/1min不击穿 2.2KV/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
电线绝缘及电缆护套抗张强度; Tensile strength of electrical wire insulation and sheath	拉伸速度为50 ± 5mm/min Tensile speed should be 50 ± 5mm/min
A) 电线绝缘 Electrical wire insulation	≥13.8N/mm ²
B) 电缆护套 Cable sheath	≥20.7N/mm ² (H3型)
电线绝缘及电缆护套断裂伸长率; Elongation at break of cable insulation and sheath	拉伸速度为50 ± 5mm/min Tensile speed should be 50 ± 5mm/min
A) 电线绝缘 Electrical wire insulation	≥100%
B) 电缆护套 Cable sheath	≥200%

产品型号及名称 Type and description

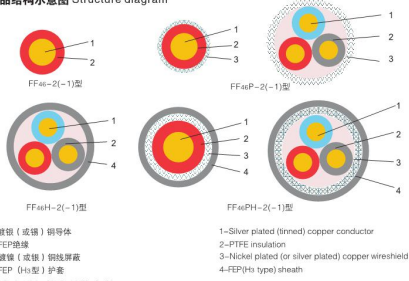
型号 Type	名称 Description
FF46-2(-1)	镀银镀锡铜芯FEP绝缘电线 Silver-plated (tinned) copper core FEP insulated electrical wire
FF46H3-2(-1)	镀银镀锡铜芯FEP绝缘FEP护套电线电缆 Silver-plated (tinned) copper core FEP insulated and sheathed electrical wire and cable
FF46P21(11)-2(-1)	镀银镀锡铜芯FEP绝缘镀银镀锡圆铜线编织屏蔽电线电缆 Silver-plated (tinned) copper core FEP insulated silver plated(tinned) round copper wire braided shielded electrical wire and cable



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型号 Type	名称 Description
FF46 P3-2	镀银铜芯PEP绝缘铜镍丝编织屏蔽铜导线 Silver-plated (tinne) copper core PEP insulated nickel plated round copper wire braided shielded electrical wire and cable
FF46 P2(11) H3-2(-1)	镀银铜芯PEP绝缘铜镍丝编织屏蔽铜导线 Silver-plated (tinne) copper core PEP insulated silver plated (tinne) round copper wire braided shielded electrical wire and cable
FF46 P3 H3-2	镀银铜芯PEP绝缘铜镍丝编织屏蔽铜导线 Silver-plated (tinne) copper core PEP insulated nickel plated round copper wire braided shielded PEP sheathed electrical wire and cable

产品结构示意图 Structure diagram



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	导体结构根数/单线直径 Conductor structure number of wires/diameter mm	成品电缆外径 Finished cable outer diameter mm	直流电阻最大值 DC resistance		成品电缆最大重量 Finished cable maximum weight kg/km
			镀银 Tinne	镀铜 Silver plated	
0.14	19/0.10	1.02 ± 0.05	136	126	3.02
0.20	19/0.12	1.14 ± 0.05	90.4	83.5	4.22
0.35	19/0.16	1.32 ± 0.05	53.1	49.5	5.87
0.50	19/0.20	1.52 ± 0.05	32.4	30.2	8.43

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导体标称截面 Nominal cross section area mm ²	导体结构根数/单线直径 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 Conductor maximum DC resistance		成品电缆最大重量 Finished cable maximum weight kg/km
			镀银 Tinne	镀铜 Silver plated	
0.75	19/0.23	1.70 ± 0.05	24.6	22.7	10.5
1.0	19/0.26	1.80 ± 0.05	20.4	19.0	12.5
1.2	19/0.28	2.00 ± 0.08	16.6	15.3	16.1
1.5	19/0.32	2.25 ± 0.08	12.7	11.7	19.5
2.0	19/0.36	2.41 ± 0.08	10.0	9.45	24.5
2.5	37/0.30	2.78 ± 0.08	7.43	6.86	32.3
3.0	37/0.32	2.90 ± 0.08	6.63	6.23	37.3
4.0	37/0.37	3.38 ± 0.10	4.86	4.51	46.9
5.0	37/0.40	3.53 ± 0.10	4.13	3.90	56.5
6.0	37/0.45	4.08 ± 0.10	3.30	3.05	68.2
8.0	133/0.29	5.08 ± 0.10	2.30	2.16	97.0

镀银铜芯PEP绝缘电缆
Silver plated copper core PEP insulated cable

导体标称截面 Nominal cross section area mm ²	护套厚度Hs型 Extruded Hs type sheath minimum thickness mm	屏蔽层厚度 Nominal thickness of shield mm	电缆外径/mm Cable outer diameter				
			有屏无护 With shield and no sheath	有屏有护 With shield and sheath	有屏无护 With shield and no sheath	有屏有护 With shield and sheath	
1.0	0.14	0.18	0.10	1.52	2.24	6.99	11.7
	0.20	0.18	0.10	1.64	2.36	8.57	13.6
	0.35	0.18	0.10	1.82	2.54	10.8	16.2
	0.5	0.18	0.10	2.02	2.74	13.9	19.9
	0.75	0.18	0.10	2.20	2.92	16.6	22.9
	1.0	0.18	0.10	2.30	3.03	18.9	25.5
	1.2	0.18	0.10	2.59	3.31	23.4	30.7
	1.5	0.18	0.10	2.78	3.50	27.3	35.2
	2.0	0.18	0.10	2.94	3.66	32.8	41.1
	2.5	0.18	0.10	3.33	4.05	41.8	51.0
	3.0	0.18	0.10	3.45	4.17	47.2	56.7
4.0	0.25	0.10	3.83	4.95	53.3	73.9	
	5.0	0.25	0.10	4.08	5.10	68.3	84.5
	6.0	0.25	0.10	4.63	5.65	81.7	99.8



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导体标称截面 Nominal cross section area (mm ²)	护套厚度H3 型最小值 Extruded H3 type sheath minimum thickness	屏蔽单芯 标称直径 Nominal thickness of shield mm	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	
2芯	0.14	0.18	0.10	2.86	2.59	3.31	11.8	12.7	19.6
	0.20	0.18	0.10	3.10	2.83	3.55	14.8	15.9	23.2
	0.35	0.18	0.10	3.46	3.19	3.91	19.0	20.2	28.4
	0.50	0.18	0.10	3.86	3.59	4.31	25.1	26.6	35.6
	0.75	0.25	0.10	4.52	3.95	4.97	34.3	31.8	46.3
	1.0	0.25	0.10	4.72	4.15	5.17	39.0	36.4	51.5
	1.2	0.25	0.10	5.30	4.73	5.75	48.2	45.3	62.3
	1.5	0.25	0.10	5.68	5.11	6.13	56.4	53.3	71.5
3芯	0.14	0.18	0.10	3.03	2.76	3.48	15.7	16.8	24.4
	0.20	0.18	0.10	3.29	3.02	3.74	20.0	21.3	29.5
	0.35	0.18	0.10	3.68	3.41	4.13	26.0	27.5	36.7
	0.50	0.18	0.10	4.11	3.84	4.56	34.9	36.6	46.8
	0.75	0.25	0.10	4.80	4.23	5.25	46.7	44.1	60.4
	1.0	0.25	0.10	5.02	4.45	5.47	53.7	50.9	67.9
	1.2	0.25	0.10	5.64	5.07	6.09	66.9	63.7	83.0
	1.5	0.25	0.10	6.05	5.48	6.50	78.7	75.4	96.0
4芯	0.14	0.18	0.10	3.31	3.04	3.76	19.7	20.9	29.3
	0.20	0.18	0.10	3.60	3.33	4.05	25.2	26.7	35.8
	0.35	0.18	0.10	4.04	3.77	4.49	33.0	34.7	44.9
	0.50	0.25	0.10	4.82	4.25	5.27	49.5	46.6	63.3
	0.75	0.25	0.10	5.26	4.69	5.71	59.4	56.4	74.6
	1.0	0.25	0.10	5.50	4.93	5.95	68.4	65.3	84.4
	1.2	0.25	0.10	6.20	5.63	6.65	85.6	82.1	104
	1.5	0.25	0.10	6.66	6.09	7.11	101	97.4	121
2.0	0.25	0.10	7.05	6.48	7.50	123	119	143	