

LEADER TECHNOLOGY SHENZHEN CO.,LIMITED

Halogen free cable for photovoltaic equipment

①、构造 Structure



型号Type: EN50618:2014 H1Z2Z2-K 1×**mm² DC 1500V

产品标准: EN50618:2014,除客户有关于外观、加工性的书面要求外,均需依LEADER 标准。

Product Standard : EN50618:2014 , all in accordance with the LEADER standard ,unless there is a written request about visual and processability.

标称截面 Cross Section (mm ²)	导体构造 Construction (No./mm±0.008) Tinned copper wire	绞合 外径 DIA. (mm)	绝缘材料 Insulation Material	绝缘厚度 Insulation Thickness (mm)		绝缘外径 Insulation Od. (mm±0.15)	护套材料 Cover material	护套厚度 Jacket Thickness (mm)		线缆外径 Cable Od. (mm±0.2)
				Avg.	Min.			Avg.	Min.	
1×2.5	49/0.25	2.02	XLPE	0.7	0.53	3.60	XLPE	0.8	0.58	5.4
1×4	56/0.283	2.46		0.7	0.53	3.90		0.8	0.58	5.6
1×6	84/0.283	3.02		0.7	0.53	4.60		0.8	0.58	6.3
1×10	146/0.283	4.00		0.7	0.53	5.80		0.8	0.58	7.8
1×16	228/0.283	5.00		0.7	0.53	7.00		0.9	0.67	9.3
1X25	361/0.283	6.50		0.9	0.71	8.60		1.0	0.75	11.0
1X35	266/0.4	8.00		0.9	0.71	10.10		1.1	0.84	12.5

印字Marking: LEADER CABLE TÜV CE 62930 IEC131/EN50618 H1Z2Z2-K **mm² 1.0KVAC 1.5KVDC HALOGEN FREE LOW SMOKE PV CABLE MADE IN CHINA www.leadergroup-cn.com YYMM ****M

导体要求: 导体的等级应符合IEC 60228的5类。

The class of the conductor shall be Class 5 in accordance with IEC 60228.

②.电气性能 Electrical performance

标称截面 Cross Section(mm ²)	1×2.5	1×4	1×6	1×10	1×16	1×25	1x35
最大导体电阻20℃ (Ω/km) Conductor Max. Resistance AT 20℃ (Ω/km)	7.98	5.09	3.39	1.95	1.24	0.795	0.565
最小绝缘电阻20℃ (MΩ·km) Insulation Min. Resistance AT 20℃ (MΩ·km)	690	579	499	419	339	340	290
最小绝缘电阻90℃ (MΩ·km) Insulation Min. Resistance AT 90℃ (MΩ·km)	0.690	0.579	0.499	0.419	0.339	0.34	0.29

③.参考载流量 Current Rating Ambient Temperature

敷设方法 Installation Method Conductor (mm ²)	单根电缆至于空气中 Single cable Free in air	单根电缆至于表面 Single cable Free on a surface	电缆表面相互贴邻 Two loaded cables touching, on a surface
1×4	55	52	44
1×6	70	67	57
1×10	98	93	79
1×16	132	125	107
1×25	176	167	142
1×35	218	207	176

环境温度 ambient temperature: 60℃ 最大导体温度 Max. conductor temperature: 120℃

四.物理性能 Electrical performance

测试项目		测试标准	Test method
绝缘/护套伸长率 elongation of insulation/sheath	老化前 test are before aging	125%↑	EN 60811-1-1
绝缘/护套抗张强度 Tensile strength of insulation/sheath		8.0Mp↑	
绝缘/护套伸长率 elongation of insulation/sheath	老化后 test are after aging	>70% Tensil Strength before aging	EN 60811-1-2
绝缘/护套抗张强度 Tensile strength of insulation/sheath		>70% Tensil Strength before aging	
护套热收缩Shrinkage resistant		≤2%	EN 60811-503
耐酸碱Acid and alkali resistant		EN 60811-2-1	
耐臭氧Ozone resistant		EN50396 - 8.1.3	
耐气候性 UV resistant		EN 50289 - 4 - 17	
动态穿透Dynamic penetrate force		1	
低温冲击 (- 40℃, 5h) Impact at low temperature		EN 60811-1-4	
耐燃 Fire performance		IEC60332-1-2	
氯溴含量Cland Br Content		EN 50618	
热寿命Thermal endurance Test		EN60216 - 1,EN60216 - 2, T1120	

五.应用 Application:

应用范围Application	太阳能板及光伏应用的内部连线 Internal wiring for solar panel and photovoltaic applications
认证 Approval	EN 50618
额定电压Rating voltage	DC1500V
测试电压Test voltage	AC 6.5KV,50Hz 5min
绝缘线芯直流耐压 DC Voltage test of insulation	1800V, 240h(85℃, 3%Nacl) 不击穿No break
工作温度 Working temperature	- 40~90℃
短路温度 Short circuit temperature	250℃ 5S
弯曲半径Bending radius	6×D
寿命Life Period	≥25 years

核准Approved By	审核Checked By	制作Made By
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