

# 电线电缆类

## 光伏系统用无卤PV电缆 Halogen-free PV cable for PV system

### 1 执行标准 Standard

本产品按 2 Pfg 1169/08.2007 标准生产。本产品已经获得TUV认证证书。  
It is manufactured according to 2 Pfg 1169/08.2007.This product has been awarded TUV certificate.

### 2 适用范围 Application

光伏电缆的主要应用于太阳能连接设备、太阳能电站、光伏系统等多个领域。  
Mainly used in equipment connecting of solar power system, solar power plant, PV system and so on.

### 3 产品特点 Properties

光伏电缆产品具有抗臭氧，抗紫外线，耐酸碱、耐高温、耐严寒、耐凹痕、无卤、阻燃等特性，具备与标准的接头、连接系统的兼容性等特点。太阳能作为一种可永续利用的清洁能源，有着巨大的开发应用潜力。虽然太阳能光伏发电成本较高，但是从长远看，随着技术的进步，以及其能源利用形式的逐渐饱和，太阳能可以在2030之后成为主流能源利用形式，有着不可估量的发展潜力。

PV cable has many advantages, such as ozone-resistant, anti-uv, anti-high temperature, acid and alkali durable, resistant to low temperature, Halogen-free Flame Retardant and so on. It is compatible with standard assembly and connection system. Solar power has great potential in development and application as a sustained clean energy. As the gradual saturation of other energy utilization and progress of science, solar energy may become the main trend in 2030, though solar energy power generating has high cost.

### 4 使用特性 Operation character

工频额定电压U0/U为0.6/1kV;直流1.8kV  
Rated power frequency voltage U0/U is 0.6/1kV; 1.8kV AC  
电缆导体的长期允许最高工作温度为120°C;  
The Max.long-term operating temperature of conductor: 120°C;  
短路时(最长持续时间不超过5S)电缆导体的最高温度不超过200°C;  
Maximum conductor temperature should not exceed 200°C in short circuit(5s maximum duration)  
正常工作环境温度为-40°C~90°C;  
Operation temperature in nominal condition is -40°C~90°C  
热寿命实验满足德国2 Pfg1169/08.2007标准,通过5000小时老化试验。  
Thermal life test comply with 2 Pfg1169/08.2007 and pass the 5000-hour age test.

### 5 电缆的型号、名称 Type and designation

型号 Type	额定电压 Rated voltage	名称 Designationcode name
PV1-F	0.6/1kV	光伏系统用无卤PV电缆Halogen-free PV cable for PV systemindoor/outdoor

### 6 产品范围及结构图 Product range and construction diagram

型号Type	芯数Core Number	Nominal section标称截面mm <sup>2</sup>
PV1-F	单芯single core	2.5~6

### 7 电缆敷设运行条件 laying and operation condition of the cable

光伏系统用无卤PV电缆连续负载流量  
Current rating under continuous load of Halogen-free PV cable for PV system

# ELECTRIC WIRES & CABLE

光伏系统用无卤PV电缆允许持续载流量

Current rating under continuous load of Halogen-free PV cable for PV system

型号Type	PV1-F			
芯数Core Number	单芯single core			
电缆安装类型 Cable installation type	单根电缆 one cable 置于空气中in air	单根电缆 one cable 置于表面 on the ground	电缆表面 相互贴邻 neighbouring	
线芯材质 Material of conductor	铜Cu (镀锡)tinned	铜Cu (镀锡)tinned	铜Cu (镀锡)tinned	
Nominal section 标称截面mm <sup>2</sup>	2.5	41	39	33
	4	55	52	44
	6	70	67	57

温度偏差转换因数

Temperature difference transition factor

环境温度 Ambient temperature °C	转换因数 Transition factor
60	1,00
70	0,91
80	0,82
90	0,71
100	0,58
110	0,41

## 8 交货长度、标志、包装 Delivery length, marking and package

### 8.1 交货长度

Delivery length

#### 8.1.1 交货长度不小于500m。

The delivery length of cable shall no less than 500m.

#### 8.1.2 长度的计量误差应不超过 0.5%。

The calculated tolerance of length should be no more than 0.5%.

#### 8.1.3 根据双方协议，允许以任何长度的产品交货。

According to mutual agreement, the product can be delivered in any length.

### 8.2 标志：TUV 2PFG1169 PV1-F 规格 厂名或商标

Marking: TUV 2PFG1169 PV1-F type, manufacture and trademark

### 8.3 包装package

#### 8.3.1 成盘包装，成盘包装的交货盘按JB/T 8137的规定。(出口产品包装，应符合有关规定。)

Package of every drum comply with JB/T 8137(package of export products shall comply with relevant regulations).

#### 8.3.2 每盘上应附有标签标明。Every drum shall have label indicated the followings:

生产厂名； manufacture

产品型号、规格、单位为mm<sup>2</sup>； Type and size of the product and the unit is mm<sup>2</sup>

额定电压，单位为kV； rated voltage and the unit is kV

长度，单位为m； length and the unit is m

制造日期，年 月 日 date of manufacture y m d

标准编号 standard