

光伏电线规格1000VDC

PV Cable Specification 1000VDC

导体与线材结构 Construction and properties

导体结构参考表1 The construction of wire shall be complied with following and table 1.



1).导体 Conductor	镀锡退火软铜绞线 Soft annealed stranded tin-plated copper
2).绝缘 Insulation	交联聚烯烃 Electron beam cross-linked material(XLPE)
3).护套 Jacket	交联聚烯烃/Electron beam cross-linked material(XLPE)
4).参考标准 Applicable Standard	2PFG 1169/08.2007
5).印字标识 Identification Mark	 TÜV 2 PFG 1169 PV1-F 1X**mm² NSPV NewSun PV Technology Co.,Ltd
6).成品电缆耐电压 Voltage test of finished cable	AC 6.5KV 5min,or DC 1.5KV 5min 不击穿 No break
7).导体与线材结构 Construction and Properties	表1/Table1

导体 Conductor			护套 Jacket		导体电阻 Conductor Resistance
面积 Area.(mm²)	结构 Construction(mm)	绞线外径 Stranded OD(mm)	外径 Diameter(mm)	颜色 Color	Max. (Ω/KM) (at 20℃)
2.5	49/0.25	1.93	4.70±0.20	Black/red	8.21
4	56/0.285	2.46	5.50±0.20		5.09
6	84/0.285	3.01	6.10±0.20		3.39
10	77/0.40	4	7.2±0.2		1.95

额定电压/Rating voltage	V	1000VDC
工作环境/Ambient temperature	℃	-40~+90
最大导体温度/Max.conductor temperature	℃	+120
短路电流温度/Short circuit temperature	℃	+200(at the conductor max.5sec)

物理性能/Mechanical Characteristics

热寿命/Highly heat resistant:	-40℃...+90℃ (>150 hours)
	-40℃...+105℃ (>150 hours)
	-40℃...+120℃ (>150 hours)

使用寿命/Expected usable life:>25 years

8).环保要求符合RoHS/Environmental Data:RoHS-conform

9).导体允许载流量/Current Rating

导体标称截面积 Nom. Cross section of conductor mm²	三种安装方式下的载流量 Current rating at three kinds of installation methods		
	单芯电缆在流通空气中 Single-core cable in air(A)	单芯电缆在地面上 Single-core cable on the ground(A)	与其它电缆相邻在地面上 On the ground with other adjacent cable(A)
2.5	41	39	33
4	55	52	44
6	70	67	57
10	98	93	79

10).电缆载流量计算条件 Calculating condition of current rating

◆环境温度Ambient temp.:60℃						
◆导体最高温度Max. temp of conductor:120℃						
◆不同环境温度下载流量的修正系数Calibration coefficient of current rating at different ambient temp.						
环境温度 (℃) 空气中Ambient temp in air	≤60	70	80	90	100	110
修正系数Calibration coefficient	1	0.92	0.84	0.75	0.58	0.41