

TÜV 2 PFG 1169 PV1-F (FR-10mm²-B)

Rating:	
Voltage:	600/1000V
Temperature:	-40°C--90°C

Description:	
Conductor:	Tinned annealed copper
Insulation:	120°CXLPE
Jacket:	120°CXLPE,Black
Marking:	TÜV 2 PFG 1169 PV1-F 1x10mm ² UV Res DC1.8KV AC0.6/1KV FRCABLE www.fr-cable.com

Application:
Specifically designed for connecting photovoltaic system components inside and outside of building and equipment with high mechanical requirements and extreme weather conditions. For permanent installations.

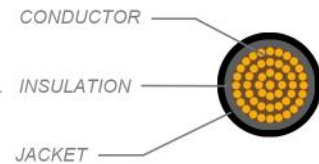
General characteristics:



Construction	
Conductor	
Area(mm ²)	1*10.0
Construction(N/mm)	80/0.40
Conductor(Dia.)	4.13
Insulation	
Standard thickness	0.90
Standard diameter	5.93±0.1
Jacket	
Standard thickness(mm)	1.20
Outer diameter	8.30±0.3
Conductor resistance(20°C)	1.95
Weight rated	145.61

Electrical properties	
Insulation resistance(70°C)(MΩ-km)	≥ 1000
Withstand voltage(V/5min)	AC6500
Spaek Voltage(V)	AC10000
Min bending radius(mm)	5*D

Packaging	
BOX(art.code FR-100-10mm ² / FR-500-10mm ²)	
Size:	310x310x100mm
Weight:	±14.6Kg
Cable length box:	100m
PALLET (art.code FR-100-6-100pcs-10000m)	
Size:	1100x1100mm
Amount of boxes on one pallet:	100pcs
Weight of total pallet:	±1460Kg
Cable length pallet:	10000m



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Main performance parameter of finished cable

Voltage test of finished cable

Min.time of dipping in water	≥1(h)
Testing voltage (AC)	6500(V)
Min.voltage applying time at one time	5(min)
Test result	no breakdown

Sheated surface resistance

Length of specimen:	250mm
Test result	≥10 ⁹ Ω

Penetrate the insulation resistance

Temperature	20℃
Test result	≥10 ¹⁴ Ω

High temperature stress

Temperature	140℃
Test result	
A: with 1.2 Voltage test	A: No breakdown
B: deep pressure	B: Wall thickness 50%

Damp-heat test

Temperature	90℃
Humidity	85%
Test result	
Aging before and after the tensile strength of Change	≤30%
Aging before and after the elongation at break of Change	≤-30%

Acid-alkali Resistance

Min.time of dipping in	168h
Test result	
Aging before and after the tensile strength of Change	≤-30%
Elongation	≥100

Low-temperature bending

Temperature	-40℃
Time	16h
Test result	No crack

Ozone resistance

Ozone concentration	200x106%
Time	72h
Test result	No crack

Heat shrinkable jacket test

Test result	≤2%
Flame retardant	
Vertical burn	
Test result	
Fixture on the lower edge from the starting point and carbonization	≥50mm
Burning fuel downward from the lower edge of bottom fixture	≤540mm

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Halogen content of non-metallic materials

Test result

Chlorine and bromine content

HCL≤0.5HBr≤0.5%

Fluoride content

F≤0.1%

The inner layer of insulation and sheath of the mechanical properties

Test result

Aging before tensile strength

8.0N/mm²

Aging before elongation

125%

Aging before and after the tensile strength of change

-30%

Aging before and after the elongation at break of change

-30%

Hot extension

Temperature

200℃

Test result

The inner layer of insulation and sheath

Elongation under load

≤100%

Elongation after unloading

≤25%

Life expectancy hot

Test result

≥25 years