

TÜV 2 PfG 1169 PV1-F (FR-6mm²-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 1x**mm² 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*6.0
Construction(N/mm)	84/0.30
Conductor(Dia.)	3.17
Insulation	
Standard thickness	0.75
Standard diameter	4.67±0.1
Jacket	
Standard thickness(mm)	1.05
Outer diameter	7.0±0.2
Conductor resistance(20°C)	3.39
Weight rated	102.6

Electrical properties

Insulation resistance(70°C)(MΩ-km)	≥ 1000
Withstand voltage(V/5min)	AC6500
Spaek Voltage(V/5min)	AC6500
Min bending radius(mm)	4*D

Packaging

BOX(art.code FR-100-6mm² / FR-500-6mm²)

Size: 310x310x100mm

Weight: ±10Kg

Cable length box: 100m

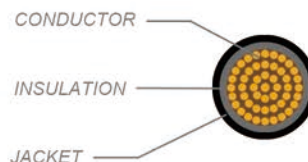
PALLET (art.code FR-100-6-150pcs-15000m)

Size: 1100x1100mm

Amount of boxes on one pallet: 100pcs

Weight of total pallet: ±1000Kg

Cable length pallet: 15000m



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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
Sheathed surface resistance	
Length of specimen:	250mm
Test result	≥109Ω
Penetrate the insulation resistance	
Temperature	20℃
Test result	≥1014Ω
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