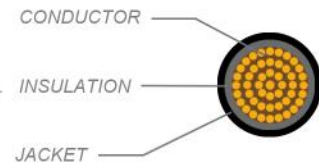


## TÜV 2 PFG 1169 PV1-F (FR-4mm<sup>2</sup>-B)

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**mm <sup>2</sup> 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:**



<b>Construction</b>	
Conductor	
Area(mm <sup>2</sup> )	1*4.0
Construction(N/mm)	56/0.30
Conductor(Dia.)	2.69
Insulation	
Standard thickness	0.75
Standard diameter	4.09±0.1
Jacket	
Standard thickness(mm)	1.05
Outer diameter	6.20±0.2
Conductor resistance(20°C)	5.09
Weight rated	70.71

<b>Electrical properties</b>	
Insulation resistance(70°C)(MΩ-km)	≥ 1000
Withstand voltage(V/5min)	AC 6500
Spaek Voltage(V/5min)	AC 6500
Min bending radius(mm)	4*D

<b>Packaging</b>	
BOX(art.code FR-100-6mm <sup>2</sup> / FR-500-6mm <sup>2</sup> )	
Size:	280x280x100mm
Weight:	±7Kg
Cable length box:	100m
PALLET (art.code FR-100-6-150pcs-15000m)	
Size:	1100x1100mm
Amount of boxes on one pallet:	150pcs
Weight of total pallet:	±1050Kg
Cable length pallet:	15000m



## TÜV 2 PFG 1169 PV1-F (FR-4mm<sup>2</sup>-B)

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

## TÜV 2 PFG 1169 PV1-F (FR-4mm<sup>2</sup>-B)

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/mm<sup>2</sup>

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