



AXIOMA
ENERGY

DATASHEET
TÜV 2 PfG 1169 PV1-F

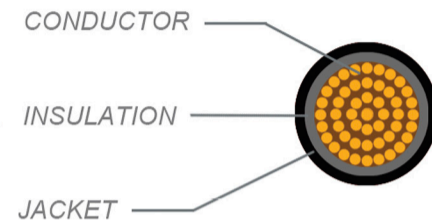
TÜV 2 PfG 1169 PV1-F

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



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(mm²) 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

Electrical properties

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

Packaging

BOX
Size: 280x280x100mm
Weight: ±7Kg
Cable length box: 100m
PALLET
Size: 1100x1100mm
Amount of boxes on one pallet: 150pcs
Weight of total pallet: ±1050Kg
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

Sheated surface resistance

Length of specimen:	250mm
Test result	≥109Ω

Penetrate the insulation resistance

Temperature	20°C
Test result	≥1014Ω

High temperature stress

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

Damp-heat test

Temperature	90°C
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°C
Time	16h
Test result	No crack

Ozone resistance

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

Heat shrinkable jacket test

Test result	≤2%
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Flame retardant

Vertical burn	
Test result	
Flxture 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°C

Test result

The inner layer of insulation and sheath

Elongation under load

≤100%

Elongation after unloading

≤25%

Life expectancy hot

Test result

≥25 years