

# COPPER PV WIRE UL4703 1000/2000V



1 – 1<sup>st</sup> insulation:  
halogen free special copolymer

2 – 2<sup>nd</sup> insulation:  
halogen free special copolymer

3 – Conductor:  
Stranded tin-plated copper

1 and 2 INSULATION COLOR



## MARKING :

(UL) E332231 Type PV Wire \*AWG 90 C Dry and Wet 1000/2000V Sun Res -40 C VW-1 Direct Burial FRCABLE

## Description

1. Rated Voltage: 1000/2000V
2. Ambient Temperature: -40 C – 90 C Max. Temperature at Conductor 90 C
3. Conductor: Stranded tin-plated copper
4. Insulation: 90 C XLPE
5. Jacket: 90 C XLPE
6. Color: Insulation: Black Jacket: Black, Red, White

## Construction

Conductor		Insulation	Jacket		Conductor Resistance
Gauge	No.	Nom.Thickness	Nom.Thickness	OD.	
AWG	N/mm	mm	mm	mm	max Ω/km
6	106/0.40	1.39	1.14	9.82±0.1	1.403
8	66/0.40	1.39	0.76	8.05±0.1	2.23
10	76/0.30	1.14	0.76	6.82±0.1	3.546
12	48/0.30	1.14	0.76	6.20±0.1	5.64

## Electrical Properties

Item	Unit	Values
Withstand voltage (2-8AWG)	V/5min	AC7500
Withstand voltage (8-18AWG)	V/5min	AC6000

## Electrical Properties

Item		Unit	Insulation	Jacket
Unaged	Tensile strength		≥10.3Mpa	≥10.3Mpa
	Elongation		≥150%	≥150%
Aging	Tensile strength	121±2 C X168h	≥70%	≥ 70%
	Elongation			
Conductor Corrosion		Unaged and aging	Pass	
Deformation Test		131±2 C X1h	≤ 30%	
Cold Shock		-40±1 C X16h	No crack	
Flaming test				VW-1