



## DESCRIPTION

Non-Halogen Cable for 1000V Photovoltaic Power System Class 5 TC Stranding Low Smoke Density and Direct Burial Applied,  
Cable also designed for Floating PV System.

## STANDARDS

IEC 60228, IEC 60332-1-2, IEC 60754, IEC 60811, IEC 61034, IEC 62930  
UL 44, UL 854, UL 1581, UL 2556, UL 4703  
EN 50618, TUV 2 PFG 2750/09.20  
ROHS 2011/65/EU

## CABLE CONSTRUCTION



Conductor	Stranded tinned copper
Size	4mm <sup>2</sup> /12AWG
Stranding	56/0.30
Diameter	2.4mm
Inner Layer	XLPO
Minimum Average Thickness	1.14mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Red
Diameter	6.35±0.2mm

## ELECTRICAL CHARACTERISTICS (at +20°C)

Voltage Rating	
UL 4703	1000V
EN 50618	1000V
IEC 62930	1000V
TÜV 2PFG 2750	1000V
Insulation Resistance	≥ 1000 MΩ.km
Voltage Withstand	6500 VAC
Conductor DC Resistance	≤ 5.09 Ω/km

## OTHER CHARACTERISTICS

Bending Radius	
Dynamic	≥ 5 X OD
Static	≥ 4 X OD
Flammability	VW, IEC 60332-1-2
Working Temperature	105°C Dry, 90°C Wet
Cable Light Transmittance	≥ 60%

## PRINT LEGEND

AKATSUKI E497908 (UL) 12AWG PV WIRE 105°C DRY 90°C WET 1000V SUN RES -40°C DIR BUR AKATSUKI H1Z2Z2-K 4mm<sup>2</sup>  
R 50385976 WPV WATERPROOF AKATSUKI 62930 IEC 131 4mm<sup>2</sup> HALOGEN FREE LOW SMOKE R 50406787

## HISTORY

Jun 13, 2018	First issue	Draft
Dec 28, 2021	Add 2PFG 2750 standard requirement and marking	V0
May 30, 2022	Adjust marking according requirement	V1