

**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	52/0.30
Diameter	2.4mm
Inner Layer	XLPO
Minimum Average Thickness	1.14mm
Color	White
Outer Layer	XLPO
Minimum Average Thickness	0.8mm
Color	Black
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  
—— 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 ——

Notes: With or without line on whole length above will be required.  
Both marking will be required according to the purchase order.

**HISTORY**

Jan 17, 2018	First issue	Draft
May 8, 2018	Add IEC marking according to IEC 62930 standard requirement	V0
Dec 30, 2021	Add 2PFG 2750 standard requirement and marking	V1
May 30, 2022	Adjust marking according requirement	V2