



Product: [38318](#)

UL Type PV Wire, #18 Str TC, XLPO Ins, PVC Jkt, 2000V PV 90C Dry/Wet

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Product Description

UL Type PV Wire, 18AWG (16x30) Tinned Copper, XLPO Insulation, PVC Outer Jacket, 2000V PV 90C Dry/Wet USE-2 RHW-2 SUN RES

Technical Specifications

Product Overview

Suitable Applications:	Interconnection wiring of grounded and ungrounded photovoltaic power systems as described in Section 690.31(A) of the 2008 NEC.
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Conductors
18	16x30	TC - Tinned Copper	1

Conductor Count:	1
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Insulation

Material	Nominal Wall Thickness
XLP, XLPO, XLPE (Thermoset)	0.063 in
XLP, XLPO, XLPE (Thermoset)	

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.245 in	0.033 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
6 Ohm/1000ft

Current

Element	Max. Recommended Current [A]
Single Conductor in Free Air @ 30C Ambient	18 Amps Single Conductor in Free Air

Voltage

UL Voltage Rating
2000 V

Temperature Range

UL Temp Rating:	90°C
Operating Temperature Range:	-40°C To +90°C

Mechanical Characteristics

Bulk Cable Weight:	30 lbs/1000ft
Max. Pull Tension:	21 lbs
Min. Bend Radius/Minor Axis:	2.5 in

Standards

UL AWM Style Compliance:	PV
Military Compliance:	N/A

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Sunlight Resistance:	Yes
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Flammability, LSOH, Toxicity Testing

UL Flammability:	VW-1
UL voltage rating:	2000 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
38318 0105000	Black	Reel	5,000 ft	612825147763

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.173 Revision Date: 05-05-2023
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