



Product: [38112](#)

UL Type PV Wire, #12 Str TC, XLPO Ins, 2000V PV 90C Dry/Wet

[Request Sample](#)

Product Description

UL Type PV Wire, 12AWG (65x30) Tinned Copper, XLPO Insulation, 2000V PV 90C Dry/Wet USE-2 RHW-2 CSA RW90 1000V 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. |
|------------------------|---|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Conductors |
|-----|-----------|--------------------|-------------------|
| 12 | 65x30 | TC - Tinned Copper | 1 |

| | |
|------------------|---|
| Conductor Count: | 1 |
|------------------|---|

Insulation

| Material | Nominal Diameter | Nominal Wall Thickness |
|-----------------------------|------------------|------------------------|
| XLP, XLPO, XLPE (Thermoset) | 0.249 in | 0.078 in |
| XLP, XLPO, XLPE (Thermoset) | | |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR |
|-----------------------|
| 1.5 Ohm/1000ft |

Current

| Element | Max. Recommended Current [A] |
|--|--------------------------------------|
| Single Conductor in Free Air @ 30C Ambient | 40 Amps Single Conductor in Free Air |

Voltage

| Description | Non-UL Voltage Rating | UL Description | UL Voltage Rating | Voltage Rating [V] |
|-------------|-----------------------|----------------|-------------------|--------------------|
| CSA | 600 V | PV, RHW-2 | 2000 V | 1000 V |
| | | USE-2 | 600 V RMS | |

Temperature Range

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

Mechanical Characteristics

| | |
|------------------------------|---------------|
| Bulk Cable Weight: | 43 lbs/1000ft |
| Max. Pull Tension: | 84.5 lbs |
| Min. Bend Radius/Minor Axis: | 2.5 in |

Standards

| | |
|--------------------------|------------------|
| UL AWM Style Compliance: | PV, USE-2, RHW-2 |
|--------------------------|------------------|

| | |
|----------------------|------------|
| CSA Rating: | 1000V, 90C |
| CSA Type: | RW90 |
| 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 |
|------------------------------------|-----|

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|------------|
| UL Flammability: | VW-1 |
| CSA Flammability: | FT1 |
| UL voltage rating: | 2000 V RMS |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|---------------|-------|-------------|----------|--------------|
| 38112 0105000 | Black | Reel | 5,000 ft | 612825147572 |

| | |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

History

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| Update and Revision: | Revision Number: 0.352 Revision Date: 05-05-2023 |
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