



Product: [38118](#)

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

[Request Sample](#)

Product Description

UL Type PV Wire, 18AWG (16x30) Tinned Copper, XLPO Insulation, 2000V PV 90C Dry/Wet 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
18	16x30	TC - Tinned Copper	1

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

Insulation

Material	Nominal Diameter	Nominal Wall Thickness
XLPE, XLPO, XLPE (Thermoset)	0.209 in	0.078 in
XLPE, XLPO, XLPE (Thermoset)		

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:	22 lbs/1000ft
Max. Pull Tension:	21 lbs
Min. Bend Radius/Minor Axis:	2.125 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
------------------------------------	-----

Flammability, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

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

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
38118 0105000	Black	Reel	5,000 ft	612825147602

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

History

Update and Revision:	Revision Number: 0.171 Revision Date: 05-05-2023
----------------------	--

© 2023 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.