



Product: [7111WS](#)

MachFlex™, 3+1G C #18 Str BC, PVC-NYL Ins, TPE Jkt, TPE Jkt, 1000V WTTC, 600V TC-ER

[Request Sample](#)

Product Description

MachFlex™ for High Flex, 3+1G Conductor 18AWG (105x38) Bare Copper, PVC-NYL Insulation, TPE Inner Jacket, TPE Outer Jacket, 1000V WTTC, 600V TC-ER

Technical Specifications

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	18	105x38	BC - Bare Copper	3
Ground Wire	18	105x38	BC - Bare Copper	1

Conductor Count: 4

Insulation

Material	Nominal Diameter
PVC/Nylon - Polyvinyl Chloride/Nylon Skin	0.089 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3
4	Green/Yellow

Inner Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.269 in	0.025 in

Outer Shield Material

Type	Material	Coverage [%]	Nominal Diameter
Braid	Tinned Copper (TC)	85%	0.297 in

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.391 in	0.047 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
5.7 Ohm/1000ft

Voltage

UL Voltage Rating
1000 V RMS
600 V RMS

Temperature Range

UL Temp Rating:	75°C Dry, 90°C Wet
Other Temp Range:	Flexing: -5°C To +90 °C

Mechanical Characteristics

Oil Resistance:	Yes
Flex Cycle Rating:	10 Million Flexes
Bulk Cable Weight:	96 lbs/1000ft
Max. Pull Tension:	92 lbs
Min Bend Radius (Continuous Flexing):	3.9 in

Standards

NEC/(UL) Compliance:	TC-ER, WTTTC
CEC/C(UL) Compliance:	CIC, TC
UL AWM Style Compliance:	20328
CSA AWM Compliance:	AWM I/II A/B

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 II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	Yes - Oil Res II
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202
UL voltage rating:	1000 V RMS

Plenum/Non-Plenum

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

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
7111WS 0031000	Orange	Reel	1,000 ft	612825182184
7111WS 0035000	Orange	Reel	5,000 ft	612825182207

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

History

Update and Revision:	Revision Number: 0.294 Revision Date: 04-28-2020
----------------------	--

© 2020 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.