




Product: [7416W](#) 

MachFlex™, 17+1G C #18 Str BC, PVC-NYL Ins, TPE Jkt, 1000V WTTC, 600V TC-ER

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Product Description

MachFlex™ for High Flex, 17+1G Conductor 18AWG (16x30) Bare Copper, PVC-NYL Insulation, TPE Outer Jacket, 1000V WTTC, 600V TC-ER

Technical Specifications

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	18	16x30	BC - Bare Copper	17
Ground Wire	18	16x30	BC - Bare Copper	1

Conductor Count: 18

Insulation

Element	Material	Nominal Diameter
Conductor(s)	PVC/Nylon - Polyvinyl Chloride/Nylon Skin	0.089 in
Ground Wire		

Color Chart

Number	Color
1	Black and Numbered
2	Black and Numbered
3	Black and Numbered
4	Black and Numbered
5	Black and Numbered
6	Black and Numbered
7	Black and Numbered
8	Black and Numbered
9	Black and Numbered
10	Black and Numbered
11	Black and Numbered
12	Black and Numbered
13	Black and Numbered
14	Black and Numbered
15	Black and Numbered
16	Black and Numbered
17	Black and Numbered
18	Green/Yellow

Outer Shield Material

Material
No Shield

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.576 in	0.063 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
6.5 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:	1 Million Flexes
Bulk Cable Weight:	195 lbs/1000ft
Max Recommended Pulling Tension:	414 lbs
Min Bend Radius (Continuous Flexing):	5.8 in

Standards

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

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	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
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
7416W 060250	Chrome	Reel	250 ft	612825186007
7416W 0601000	Chrome	Reel	1,000 ft	612825185994

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.281 Revision Date: 05-11-2020
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