



Product: [7418W](#) 

MachFlex™, 33+1G C #18 Str BC, PVC-NYL Ins, TPE Jkt, 1000V WTTC, 600V TC-ER

 [Request Sample](#)

Product Description

MachFlex™ for High Flex, 33+1G Conductor 18AWG (16x30) Bare Copper, PVC-NYL Insulation, TPE Outer Jacket, 1000V WTTC, 600V TC-ER

Technical Specifications

Product Overview

Suitable Applications: Robotics, Robot, Continuous Flex

Construction Details

Conductor

Element	Size	Stranding	Material
	18	16x30	BC - Bare Copper
Ground Wire	18	16x30	BC - Bare Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
PVC/Nylon - Polyvinyl Chloride + Nylon	0.089 in (2.3 mm)	Black and Numbered 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, Black and Numbered 19, Black and Numbered 20, Black and Numbered 21, Black and Numbered 22, Black and Numbered 23, Black and Numbered 24, Black and Numbered 25, Black and Numbered 26, Black and Numbered 27, Black and Numbered 28, Black and Numbered 29, Black and Numbered 30, Black and Numbered 31, Black and Numbered 32, Black and Numbered 33, Green/Yellow

Outer Shield

Material
No Shield

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
TPE - Thermoplastic Elastomer	0.063 in (1.6 mm)	0.762 in

Electrical Characteristics

Electricals

Nom. Conductor DCR
6.5 Ohm/1000ft (21 Ohm/km)

Voltage

UL Voltage Rating
1000 V RMS, 600 V RMS

Mechanical Characteristics

Temperature

UL Temperature
75°C Dry, 90°C Wet

Bend Radius

Flexing Min.
7.7 in

Max. Pull Tension:	782 lbs (355 kg)
Bulk Cable Weight:	346 lbs/1000ft (515 kg/km)

Standards and Compliance

Environmental Suitability:	Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, 1202
NEC / UL Compliance:	TC-ER, WTTC
AWM Compliance:	AWM 20328, AWM I/II A/B
CEC / C(UL) Compliance:	CIC, TC
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.365 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7418W 060250	Chrome	Reel	250 ft	612825186120	C
7418W 0601000	Chrome	Reel	1,000 ft	612825186113	C

Footnote:	C - CRATE REEL PUT-UP.
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