



**Product:** [7414W](#)

MachFlex™, 8+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, 8+1G Conductor 18AWG (16X30) Bare Copper, PVC-NYL Insulation, TPE Outer Jacket, 1000V WTTC, 600V TC-ER

**Technical Specifications**

**Construction Details**

**Conductor**

Element	Number of Element	Size	Stranding	Material
Conductor(s)	8	18 AWG	16x30	BC - Bare Copper
Ground Wire	1	18 AWG	16x30	BC - Bare Copper

**Insulation**

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC/Nylon - Polyvinyl Chloride + Nylon	0.021 in (0.53 mm)	0.089 in (2.3 mm)	Black and Numbered
Ground Wire	PVC/Nylon - Polyvinyl Chloride + Nylon	0.021 in (0.53 mm)	0.089 in (2.3 mm)	Green/Yellow

**Outer Shield**

Material
No Shield

**Outer Jacket**

Material	Nom. Thickness	Nom. Diameter
TPE - Thermoplastic Elastomer	0.047 in (1.2 mm)	0.451 in

Overall Cable Diameter (Nominal): 0.451 in

**Electrical Characteristics**

**Electricals**

Element	Nom. Conductor DCR	Max. Current
Conductor(s)	6.5 Ohm/1000ft	10.5 Amps per Conductor at 30°C
Ground Wire	7.06 Ohm/1000ft (23.2 Ohm/km)	24 Amps per Conductor at 30°C

**Voltage**

UL Voltage Rating
1000 V (WTTC), 600 V (TC-ER)

**Mechanical Characteristics**

**Temperature**

UL Temperature	Operating
UL : 90°C Dry, 75°C Wet; AWM 20328 : 105°C	-40°C To 105°C

**Bend Radius**

Stationary Min.	Installation Min.
1.80 in (45.7 mm)	2.25 in

Max. Pull Tension: 187.2 lbs (84.91 kg)

Bulk Cable Weight:	114 lbs/1000ft
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## Standards and Compliance

Environmental Suitability:	Outdoor, Sunlight Resistance, UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, FT4, IEEE 1202 FT4
NEC / UL Compliance:	Article 336, TC-ER, WTTTC
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: 0.369 Revision Date: 04-08-2022
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC
7414W 060250	Chrome	Reel	250 ft	612825185918
7414W 0601000	Chrome	Reel	1,000 ft	612825185901

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