



**Product:** [7407W](#) 

MachFlex™, 17+1G C #20 Str BC, PVC Ins, TPE Jkt, PLTC

 [Request Sample](#)

## Product Description

MachFlex™ for High Flex, 17+1G Conductor 20AWG (19x32) Bare Copper, PVC Insulation, TPE Outer Jacket, PLTC

## Technical Specifications

### Product Overview

Suitable Applications:	Robotics, Robot, Continuous Flex
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### Construction Details

#### Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	17	20 AWG	19x32	BC - Bare Copper
Ground Wire	1	20 AWG	19x32	BC - Bare Copper

#### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.066 in (1.7 mm)	Black and Numbered
Ground Wire	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.066 in (1.7 mm)	Green/Yellow

#### Outer Shield

<b>Material</b>
No Shield

#### Outer Jacket

Separator	Material	Nom. Thickness	Nom. Diameter
non-Woven Tape	TPE - Thermoplastic Elastomer	0.053 in (1.3 mm)	0.441 in

Overall Cable Diameter (Nominal): 0.441 in

### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR	Max. Current
Conductor(s)	10.8 Ohm/1000ft	5.4 Amps per Conductor at 30°C
Ground Wire	10.7 Ohm/1000ft (35.1 Ohm/km)	14.4 Amps per Conductor at 30°C

#### Voltage

UL Voltage Rating	Voltage Rating
300 V	600 V

### Mechanical Characteristics

#### Temperature

UL Temperature	Operating
UL : 90°C, AWM 20327 : 105°C	-40°C To 105°C

#### Bend Radius

Stationary Min.	Installation Min.
4.41 in (112 mm)	4.41 in

Max. Pull Tension:	270 lbs (120 kg)
Bulk Cable Weight:	126 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Outdoor, Sunlight Resistance, UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, IEEE 1202 FT4
NEC / UL Compliance:	Article 725, PLTC
AWM Compliance:	AWM 20327, AWM I/II A/B
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: 0.376 Revision Date: 09-07-2025
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7407W 060250	Chrome	Reel	250 ft	612825185598	C
7407W 0601000	Chrome	Reel	1,000 ft	612825185581	C
7407W 0605000	Chrome	Reel	5,000 ft	612825185604	

Footnote:	C - CRATE REEL PUT-UP.
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