

Product: 7406W

MachFlex™, 11+1G C #20 Str BC, PVC Ins, TPE Jkt, PLTC

Request Sample

Product Description

MachFlex™ for High Flex, 11+1G Conductor 20AWG (19x32) Bare Copper, PVC Insulation, TPE Outer Jacket, PLTC

Technical Specifications

Product Overview

Suitable Applications:	Robotics, Robot, Continuous Flex

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	20	19x32	BC - Bare Copper	11
Ground Wire	20	19x32	BC - Bare Copper	1

Conductor Count:	12

Insulation

Material	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.015 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Black and Numbered 3
4	Black and Numbered 4
5	Black and Numbered 5
6	Black and Numbered 6
7	Black and Numbered 7
8	Black and Numbered 8
9	Black and Numbered 9
10	Black and Numbered 10
11	Black and Numbered 11
12	Green/Yellow

Outer Shield

Material
No Shield

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.363 in	0.042 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
8.8 Ohm/1000ft

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

UL Temp Rating:	90°C
Operating Temperature Range:	-40°C (-5°C Flexing) To +90°C
Other Temp Range:	Flexing: -5°C To +90 °C

Mechanical Characteristics

Oil Resistance:	Yes
Flex Cycle Rating:	1 Million Flexes
Bulk Cable Weight:	82 lbs/1000ft
Max. Pull Tension:	156 lbs
Min. Bend Radius (Continuous Flexing):	3.6 in

Standards

NEC/(UL) Compliance:	PLTC
UL AWM Style Compliance:	AWM 20327
CSA AWM Compliance:	AWM I/II A/B

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
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:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7406W 060250	Chrome	Reel	250 ft	612825185550
7406W 0601000	Chrome	Reel	1,000 ft	612825185543
7406W 0605000	Chrome	Reel	5,000 ft	612825185567

Footnote:	C - CRATE REEL PUT-UP.

History

Update and Revision:	Revision Number: 0.375 Revision Date: 01-10-2024

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