



Product Description

MachFlex™ for High Flex, 11+1G Conductor 20AWG (74x38) Bare Copper, PVC Insulation, TPE Outer Jacket, PLTC

Technical Specifications

Product Overview

Suitable Applie	Roboti	Robotics, Robot, Continuous Flex					
Constructi	on Details						
onductor							
Element	No. of Elements	Size	Stranding		Material		
Conductor(s)	11	20 AWG	74x38	BC	- Bare Copper		
Ground Wire	1	20 AWG	74x38	BC	- Bare Copper		
nsulation							
Element	Material		Nom. Thickn	ess	Nom. Insulati	ion Diameter	Color Code

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.074 in (1.9 mm)	Black and Numbered
Ground Wire	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.074 in (1.9 mm)	Green/Yellow

Outer Shield

Material

No Shield

Outer Jacket

Separator	Material	Nom. Thickness	Nom. Diameter			
non-Woven Tape	TPE - Thermoplastic Elastomer	0.053 in (1.3 mm)	0.417 in			
Overall Cable Diameter (Nominal): 0.417 in						

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Current
Conductor(s)	10.8 Ohm/1000ft	6.3 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.
4.17 in (106 mm)	4.17 in
Max. Pull Tension:	
Bulk Cable Weight	t:

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: 0.355 Revision Date: 01-10-2024

Part Numbers

Variants

ltem #	Color	Putup Type	Length	UPC	Footnote
7106W 003250	Orange	Reel	250 ft	612825182016	С
7106W 0035000	Orange	Reel	5,000 ft	612825182023	

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