



Product: [7106WS](#) 

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

 [Request Sample](#)

Product Description

MachFlex™ for High Flex, 11+1G Conductor 20AWG (74x38) Bare Copper, PVC Insulation, Overall Tinned Copper Braid(85%) Shield, TPE Inner Jacket, TPE Outer Jacket, PLTC

Technical Specifications

Product Overview

Suitable Applications:	Robotics, Robot, Continuous Flex
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Construction Details

Conductor

Element	Size	Stranding	Material
	20	74x38	BC - Bare Copper
Ground Wire	20	74x38	BC - Bare Copper

Insulation

Material	Nom. Thickness	Color Code
PVC - Polyvinyl Chloride	0.015 in (0.38 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, Green/Yellow

Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	85%

Inner Jacket

Material	Nom. Thickness	Nom. Diameter
TPE - Thermoplastic Elastomer	0.025 in (0.64 mm)	0.361 in (9.17 mm)

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
TPE - Thermoplastic Elastomer	0.053 in (1.3 mm)	0.489 in

Electrical Characteristics

Electricals

Nom. Conductor DCR
8.8 Ohm/1000ft (29 Ohm/km)

Voltage

UL Voltage Rating
300 V RMS, 600 V RMS

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C	-50°C (-5°C Flexing) To 90°C

Bend Radius

Flexing Min.
4.9 in

Max. Pull Tension:	194 lbs (88.0 kg)
Bulk Cable Weight:	141 lbs/1000ft (210 kg/km)

Standards and Compliance

Environmental Suitability:	Sunlight Resistance, UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, IEEE 1202
NEC / UL Compliance:	TC
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: 0.384 Revision Date: 09-07-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7106WS 003250	Orange	Reel	250 ft	612825182047	C
7106WS 0031000	Orange	Reel	1,000 ft	612825182030	C
7106WS 0035000	Orange	Reel	5,000 ft	612825182054	

Footnote:	C - CRATE REEL PUT-UP.
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