

Product: 7122W

MachFlex™, 2+1G C #16 Str BC, PVC-NYL Ins, TPE Jkt, 1000V WTTC, 600V TC-ER

Request Sample

Product Description

MachFlex™ for High Flex, 2+1G Conductor 16AWG (168(7x24) x38) Bare Copper, PVC-NYL Insulation, TPE Outer Jacket, 1000V WTTC, 600V TC-ER

Technical Specifications

Product Overview

Suitable Applications:	Robotics, Robot, Continuous Flex

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
	16	168x38	BC - Bare Copper	2
Ground Wire	16	168x38	BC - Bare Copper	1

Conductor Count:	3

Insulation

Material	Nominal Diameter
PVC/Nylon - Polyvinyl Chloride + Nylon	0.109 in

Color Chart

Number	Color
1	Black and Numbered 1
2	Black and Numbered 2
3	Green/Yellow

Outer Shield

Material
No Shield

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
TPE - Thermoplastic Elastomer	0.333 in	0.047 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR
5.7 Ohm/1000ft

Voltage

UL Voltage Rating
1000 V RMS
600 V RMS

Temperature Range

UL Temp Rating:	75°C Dry, 90°C Wet
Other Temp Range:	Flexing: -5°C To +90 °C

Mechanical Characteristics

Oil Resistance:	Yes
UV Resistance:	Yes
Flex Cycle Rating:	10 Million Flexes
Bulk Cable Weight:	69 lbs/1000ft
Max. Pull Tension:	114 lbs
Min. Bend Radius (Continuous Flexing):	3.3 in

Standards

NEC/(UL) Compliance:	TC-ER, WTTC
CEC/C(UL) Compliance:	CIC, TC
UL AWM Style Compliance:	AWM 20328
CSA AWM Compliance:	AWM I/II A/B

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	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:	IEEE 1202
UL voltage rating:	1000 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
7122W 003250	Orange	Reel	250 ft	612825182313
7122W 0031000	Orange	Reel	1,000 ft	612825182306
7122W 0035000	Orange	Reel	5,000 ft	612825182320

Footnote:	C - CRATE REEL PUT-UP.

History

Update and Revision:	Revision Number: 0.389 Revision Date: 01-10-2024

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