



Product: [7136WS](#)

MachFlex™, 3+1G C #14 Str BC, PVC-NYL Ins, OA TC Brd, TPE Jkt, TPE Jkt, 1000V WTTTC, 600V TC-ER

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Product Description

MachFlex™ for High Flex, 3+1G Conductor 14AWG (259(7x37)x38) Bare Copper, PVC-NYL Insulation, Overall Tinned Copper Braid(85%) Shield, TPE Inner Jacket, TPE Outer Jacket, 1000V WTTTC, 600V TC-ER

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)	3	14 AWG	259x38	BC - Bare Copper
Ground Wire	1	14 AWG	259x38	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC/Nylon - Polyvinyl Chloride + Nylon	0.021 in (0.53 mm)	0.122 in (3.10 mm)	Black and Numbered
Ground Wire	PVC/Nylon - Polyvinyl Chloride + Nylon	0.021 in (0.53 mm)	0.122 in (3.10 mm)	Green/Yellow

Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	86%

Inner Jacket

Separator	Material	Nom. Thickness	Nom. Diameter	Color
non-Woven Tape	TPE - Thermoplastic Elastomer	0.030 in (0.76 mm)	0.360 in (9.14 mm)	Orange

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
TPE - Thermoplastic Elastomer	0.053 in (1.3 mm)	0.488 in

Overall Cable Diameter (Nominal):	0.488 in
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Current
Conductor(s)	2.62 Ohm/1000ft	29 Amps per Conductor at 30°C
Ground Wire	2.73 Ohm/1000ft (8.96 Ohm/km)	46.4 Amps per Conductor at 30°C

Voltage

UL Voltage Rating
1000 V (WTTTC), 600 V (TC-ER)

Mechanical Characteristics

Temperature

UL Temperature	Operating
UL : 90°C Dry, 75°C Wet; AWM 20328 : 105°C	-40°C To 105°C

Bend Radius

Stationary Min.	Installation Min.
1.95 in (49.5 mm)	2.44 in

Max. Pull Tension:	190 lbs (86 kg)
Bulk Cable Weight:	167 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 336
AWM Compliance:	AWM 20328, AWM I/II A/B
CEC / C(UL) Compliance:	CIC, TC
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: 0.194 Revision Date: 01-10-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7136WS 003250	Orange	Reel	250 ft	612825182559	C
7136WS 0031000	Orange	Reel	1,000 ft	612825182542	C
7136WS 0035000	Orange	Reel	5,000 ft	612825182566	

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