



Product: [76012WS](#)

MachFlex™, 12 C #28 Str TC, SRPVC Ins, OS+TC Srv, PVC Jkt, CMG

[Request Sample](#)

Product Description

MachFlex™ for High Flex, 12 Conductor 28AWG (7x36) Tinned Copper, SRPVC Insulation, Overall Beldfoil®+Tinned Copper Serve(90%) Shield, PVC Outer Jacket, CMG

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)	12	28	7x36	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	0.010 in (0.25 mm)	0.035 in (0.89 mm)	Black, Red, White, Green, Orange, Blue, Brown, Yellow, Violet, Slate, Pink, Tan

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	26 AWG (7x34) TC
Spiral Serve / Screen	Tinned Copper (TC)	90%	

Outer Jacket

Separator	Material	Nom. Thickness	Nom. Diameter
Paper Tape	PVC - Polyvinyl Chloride	0.040 in (1.0 mm)	0.283 in

Overall Cable Diameter (Nominal):	0.283 in (7.19 mm)
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Electrical Characteristics

Electricals

Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Max. Current
67 Ohm/1000ft	25 pF/ft (82 pF/m)	1.4 Amps per Conductor at 25°C

Voltage

UL Voltage Rating	Voltage Rating
300 V (AWM 2661)	300 V (CSA AWM I/II A/B)

Mechanical Characteristics

Temperature

UL Temperature	Operating
105°C	-10°C To 105°C (Static), 5°C To 105°C (Flexing)

Bend Radius

Flexing Min.
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2.3 in (58 mm)

Max. Pull Tension:	23.1 lbs (10.5 kg)
Bulk Cable Weight:	45 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Sunlight Resistance
Flammability / Reaction to Fire:	UL 1685 UL loading, FT4
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	AWM 2661, AWM 10002, AWM I/II A/B
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, 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: 0.142 Revision Date: 03-27-2024
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Part Numbers

Variants

Item #	Color	Putup Type	UPC
76012WS 008100	Gray	Reel	612825410461
76012WS 0081000	Gray	Reel	612825410478
76012WS 008500	Gray	Reel	612825410485

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