



Product: [76005WS](#)

MachFlex™, 5 C #28 Str TC, SRPVC Ins, OS+TC Srv, PVC Jkt, CMG

[Request Sample](#)

Product Description

MachFlex™ for High Flex, 5 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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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	28	7x36	TC - Tinned Copper	5

Conductor Count:	5
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Insulation

Element	Material	Nominal Wall Thickness
Conductor(s)	PVC - Polyvinyl Chloride	0.010 in

Outer Shield

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

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.200 in	0.040 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
66 Ohm/1000ft	6.9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor
25 pF/ft

Inductance

Nominal Inductance
.220 µH/ft

Voltage

UL Voltage Rating
300 V

Temperature Range

UL Temp Rating:	105°C
Operating Temperature Range:	-10°C To 105°C (Static), 5°C To 105°C (Flexing)

Mechanical Characteristics

Flex Cycle Rating:	6 Million Cycles
Bulk Cable Weight:	26 lbs/1000ft
Max. Pull Tension:	10 lbs
Min. Bend Radius (Continuous Flexing):	1.6 in
Min. Bend Radius/Minor Axis:	1.6 in

Standards

NEC/(UL) Compliance:	CM
CEC/C(UL) Compliance:	CMG
UL AWM Style Compliance:	AWM 2661, AWM 10002
CSA AWM Compliance:	AWM I/II A/B

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/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)
EU CE Mark:	Yes

Suitability

Suitability - Sunlight Resistance:	Yes
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Flammability, LSOH, Toxicity Testing

CSA Flammability:	FT4
UL voltage rating:	300 V RMS

Related Part Numbers

Variants

Item #	Color	Put-Up Type	UPC
76005WS 008100	Gray	Reel	612825410409
76005WS 0081000	Gray	Reel	612825410416
76005WS 008500	Gray	Reel	612825410423

History

Update and Revision:	Revision Number: 0.250 Revision Date: 09-26-2023
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