



Product: [77805W](#)

MachFlex™, 5+G C #18 Str BC, PVC Ins, PVC Jkt, AWM 2587

Request Sample

Product Description

MachFlex™ for High Flex, 5+G Conductor 18AWG (105(7x15)x38) Bare Copper, PVC Insulation, PVC Outer Jacket, AWM 2587

Technical Specifications

Product Overview

Suitable Applications:	Robotics, Robots, Continuous Flex
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	4	18	105x38	BC - Bare Copper
Ground	1	18	105x30	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	0.022 in (0.56 mm)	0.096 in (2.4 mm)	Red and Numbered
Ground	PVC - Polyvinyl Chloride	0.022 in (0.56 mm)	0.096 in (2.4 mm)	Yellow/Green/Green

Outer Shield

Shield Type	Material
No Shield	No Shield

Outer Jacket

Separator	Material	Nom. Thickness	Nom. Diameter
Tissue Tape	PVC - Polyvinyl Chloride	0.035 in (0.89 mm)	0.355 in

Overall Cable Diameter (Nominal):	0.355 in (9.02 mm)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Max. Current
Conductor(s)	6.6 Ohm/1000ft	31 pF/ft (100 pF/m)	11.2 Amps per Conductor at 30°C
Ground Wire	6.66 Ohm/1000ft (21.9 Ohm/km)		

Voltage

UL Voltage Rating	Voltage Rating
600 V (AWM 2587)	600 V (CSA AWM I/II A/B)

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C	-40°C To 90°C (Static), -5°C To 90°C (Flexing)

Bend Radius

Flexing Min.
2.8 in (71 mm)

Max. Pull Tension:	66 lbs (30 kg)
Bulk Cable Weight:	200 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Oil Resistance
AWM Compliance:	AWM 2587, AWM 10012, AWM I/II A/B
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: 0.257 Revision Date: 12-22-2023
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Part Numbers

Variants

Item #	Color	Putup Type	UPC
77805W 010100	Black	Reel	612825412342
77805W 0101000	Black	Reel	612825412359

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