



Part Number: 77805WS

MachFlex™ Continuous 600V Control, (5) 18 AWG (105x38) BC, PVC/PVC/PVC, TC Braid Shld, AWM, CE

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Product Description

Four 18 AWG stranded (105x38) bare copper conductors plus ground wire, lubricated PVC insulation, PVC inner jacket, tinned copper braid shield (85% coverage), oil-resistant PVC outer jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor	18	105x38	BC - Bare Copper	4
Ground	18	105x30	BC - Bare Copper	1

Conductor Count:	5
Total Number of Pairs:	N/A
Conductor Size:	18 AWG

Insulation

Element	Material	Nominal Diameter	Nominal Wall Thickness
Conductor	PVC - Polyvinyl Chloride	0.096 in	0.022 in
Ground	PVC - Polyvinyl Chloride		

Color Chart

Color
Red and Numbered

Inner Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.345 in	0.030 in

Outer Shield Material

Type	Material	Coverage [%]
Braid	TC - Tinned Copper	85 %

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.453 in	0.040 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
6.4 Ohm/1000ft	2.9 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor
45 pF/ft

Shielding:	Braid(s)
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Inductance

Nominal Inductance

.19 µH/ft

Voltage

UL Voltage Rating

600 V

Temperature Range

UL Temp Rating:	90°C
Operating Temp Range:	-40°C To 90°C (Static), -5°C To 90°C (Flexing)

Mechanical Characteristics

Oil Resistance:	Yes
Flex Cycle Rating:	14 Million Cycles
Bulk Cable Weight:	246 lbs/1000ft
Max Recommended Pulling Tension:	75 lbs
Min Bend Radius (Continuous Flexing):	3.6 in
Min Bend Radius/Minor Axis:	3.6 in

Standards

UL AWM Style:	AWM 2587, AWM 10012
CSA AWM Specification:	AWM I/II A/B
Other Specification:	VDE 0472, Section 803 Oil Test

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 II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes

Flammability, LSOH, Toxicity Testing

CSA Flammability:	FT1
UL voltage rating:	600 V RMS

Part Number

Variants

Item #	Color
77805WS 010100	Black
77805WS 0101000	Black

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