



**Product:** <u>77805WS</u> ☑

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

# **Product Description**

MachFlex™ for High Flex, 5+G Conductor 18AWG (105(7x15)x38) Bare Copper, PVC Insulation, Overall Tinned Copper Braid(85%) Shield, PVC Inner Jacket, PVC Outer Jacket, AWM 2587

## **Technical Specifications**

## **Physical Characteristics (Overall)**

# Conductor

Element	AWG	Stranding	Material	No. of Conductors
Conductor(s)	18	105x38	BC - Bare Copper	4
Ground	18	105x30	BC - Bare Copper	1
Conductor Co	unt:		5	

#### Insulation

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

# Color Chart



### Inner Jacket

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

### Outer Shield

Type	Material	Coverage [%]
Braid	Tinned Copper (TC)	85%

### Outer Jacket

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

# Inductance

Nominal Inductance

#### Voltage



## **Temperature Range**

UL Temp Rating:	90°C
Operating Temperature 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. Pull Tension:	75 lbs
Min. Bend Radius (Continuous Flexing):	3.6 in
Min. Bend Radius/Minor Axis:	3.6 in

#### **Standards**

	UL AWM Style Compliance:	AWM 2587, AWM 10012
ı	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 - Oil Resistance:	Yes	
•		

# Flammability, LS0H, Toxicity Testing

CSA Flammability:	FT1
UL voltage rating:	600 V RMS

### **Related Part Numbers**

#### Variants

Item #	Color	Put-Up Type	UPC
77805WS 010100	Black	Reel	612825412366
77805WS 0101000	Black	Reel	612825412373

### **History**

Update and Revision:	Revision Number: 0.138 Revision Date: 05-31-2024

© 2024 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

 $\label{eq:All sales} \mbox{ All sales of Belden products are subject to Belden's standard terms and conditions of sale.}$ 

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.