



Product: [77004W](#)

MachFlex™, 4+G C #20 Str BC, PVC Ins, PVC Jkt, AWM 2587

[Request Sample](#)

Product Description

MachFlex™ for High Flex, 4+G Conductor 20AWG (63(7x9)x38) Bare Copper, PVC Insulation, PVC Outer Jacket, AWM 2587

Technical Specifications

Product Overview

Suitable Applications:	Robotics, Robot, Continuous Flex
------------------------	----------------------------------

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	3	20	63x38	BC - Bare Copper
Ground	1	20	63x38	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	0.022 in (0.56 mm)	0.084 in (2.1 mm)	Red and Numbered
Ground	PVC - Polyvinyl Chloride	0.022 in (0.56 mm)	0.084 in (2.1 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)	0.297 in

Overall Cable Diameter (Nominal):	0.297 in (7.54 mm)
-----------------------------------	--------------------

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Max. Current
Conductor(s)	10.9 Ohm/1000ft	28 pF/ft (92 pF/m)	6.4 Amps per Conductor at 30°C
Ground Wire	10.6 Ohm/1000ft (34.8 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.
2.4 in (61 mm)

Max. Pull Tension:	32 lbs (15 kg)
Bulk Cable Weight:	120 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: 0.140 Revision Date: 03-27-2024
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	UPC
77004W 010100	Black	Reel	612825412014
77004W 010500	Black	Reel	612825412021

© 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.

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.