



Product: [7405W](#)

MachFlex™, 8+1G C #20 Str BC, PVC Ins, TPE Jkt, PLTC

[Request Sample](#)

Product Description

MachFlex™ for High Flex, 8+1G Conductor 20AWG (19x32) Bare Copper, PVC Insulation, TPE Outer Jacket, PLTC

Technical Specifications

Product Overview

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

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Conductor(s)	8	20 AWG	19x32	BC - Bare Copper
Ground Wire	1	20 AWG	19x32	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.066 in (1.7 mm)	Black and Numbered
Ground Wire	PVC - Polyvinyl Chloride	0.015 in (0.38 mm)	0.066 in (1.7 mm)	Green/Yellow

Outer Shield

Material
No Shield

Outer Jacket

Separator	Material	Nom. Thickness	Nom. Diameter
non-Woven Tape	TPE - Thermoplastic Elastomer	0.042 in (1.1 mm)	0.345 in

Overall Cable Diameter (Nominal):	0.345 in
-----------------------------------	----------

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Current
Conductor(s)	10.8 Ohm/1000ft	6.3 Amps per Conductor at 30°C
Ground Wire	10.7 Ohm/1000ft (35.1 Ohm/km)	14.4 Amps per Conductor at 30°C

Voltage

UL Voltage Rating	Voltage Rating
300 V	600 V

Mechanical Characteristics

Temperature

UL Temperature	Operating
UL : 90°C, AWM 20327 : 105°C	-40°C To 105°C

Bend Radius

Stationary Min.	Installation Min.
3.45 in (87.6 mm)	3.45 in

Max. Pull Tension:	135 lbs (61.2 kg)
Bulk Cable Weight:	74 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Outdoor, Sunlight Resistance, UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, IEEE 1202 FT4
NEC / UL Compliance:	Article 725, PLTC
AWM Compliance:	AWM 20327, AWM I/II A/B
European Directive Compliance:	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: 0.357 Revision Date: 01-10-2024
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7405W 060250	Chrome	Reel	250 ft	612825185505	C
7405W 0601000	Chrome	Reel	1,000 ft	612825185499	C
7405W 0605000	Chrome	Reel	5,000 ft	612825185512	

© 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Belden Wire & Cable:](#)

[7405W 0601000](#) [7405W 060250](#)