



**Product:** [7106W](#) 

MachFlex™, 11+1G C #20 Str BC, PVC Ins, TPE Jkt, PLTC

 [Request Sample](#)

## Product Description

MachFlex™ for High Flex, 11+1G Conductor 20AWG (74x38) 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) | 11              | 20 AWG | 74x38     | BC - Bare Copper |
| Ground Wire  | 1               | 20 AWG | 74x38     | BC - Bare Copper |

#### Insulation

| Element      | Material                 | Nom. Thickness     | Nom. Insulation Diameter | Color Code         |
|--------------|--------------------------|--------------------|--------------------------|--------------------|
| Conductor(s) | PVC - Polyvinyl Chloride | 0.015 in (0.38 mm) | 0.074 in (1.9 mm)        | Black and Numbered |
| Ground Wire  | PVC - Polyvinyl Chloride | 0.015 in (0.38 mm) | 0.074 in (1.9 mm)        | Green/Yellow       |

#### Outer Shield

| Material  |
|-----------|
| No Shield |

#### Outer Jacket

| Separator      | Material                      | Nom. Thickness    | Nom. Diameter |
|----------------|-------------------------------|-------------------|---------------|
| non-Woven Tape | TPE - Thermoplastic Elastomer | 0.053 in (1.3 mm) | 0.417 in      |

|                                   |          |
|-----------------------------------|----------|
| Overall Cable Diameter (Nominal): | 0.417 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. |
|------------------|-------------------|
| 4.17 in (106 mm) | 4.17 in           |

|                    |                      |
|--------------------|----------------------|
| Max. Pull Tension: | 151.2 lbs (68.58 kg) |
| Bulk Cable Weight: | 97 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                                                                                       |
| CEC / C(UL) Compliance:          | .                                                                                                             |
| 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: 0.356 Revision Date: 09-07-2025 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color  | Putup Type | Length   | UPC          | Footnote |
|---------------|--------|------------|----------|--------------|----------|
| 7106W 003250  | Orange | Reel       | 250 ft   | 612825182016 | C        |
| 7106W 0035000 | Orange | Reel       | 5,000 ft | 612825182023 |          |

|           |                        |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

© 2026 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.