



**Product:** [7405W](#)

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

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**Product Description**

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

**Technical Specifications**

**Construction Details**

**Conductor**

| Element      | Number of Element | 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

|                    |               |
|--------------------|---------------|
| 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, FT2, 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: 0.348 Revision Date: 12-20-2021 |
|----------------------|--|

## Variants

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

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