



Product: 7102W ☑

MachFlex™, 3+1G C #20 Str BC, PVC Ins, TPE Jkt, PLTC

Product Description

MachFlex™ for High Flex, 3+1G Conductor 20AWG (74x38) Bare Copper, PVC Insulation, TPE Outer Jacket, PLTC

Technical Specifications

Construction Details

Conductor

| Element | Number of Element | Size | Stranding | Material |
|--------------|-------------------|--------|-----------|------------------|
| Conductor(s) | 3 | 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

| Sepa | arator | Material | Nom. Thickness | Nom. Diameter |
|--|-----------|-------------------------------|--------------------|---------------|
| non-Wo | oven Tape | TPE - Thermoplastic Elastomer | 0.037 in (0.94 mm) | 0.256 in |
| Overall Cable Diameter (Nominal): 0.256 in | | | | |

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Max. Current |
|--------------|-------------------------------|---------------------------------|
| Conductor(s) | 10.7 Ohm/1000ft | 9 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. |
|-------------------|-------------------|
| 2.56 in (65.0 mm) | 2.56 in |
| | |

Max. Pull Tension: 50.4 lbs

| Bulk Cable Weight: | 40 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: | UL AWM Style 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: 0.371 Revision Date: 12-20-2021 |
|----------------------|--|
|----------------------|--|

Variants

| ľ | Item # | Color | Putup Type | Length | UPC |
|---|---------------|--------|------------|----------|--------------|
| ľ | 7102W 003250 | Orange | Reel | 250 ft | 612825181941 |
| ľ | 7102W 0031000 | Orange | Reel | 1,000 ft | 612825181934 |
| ľ | 7102W 0035000 | Orange | Reel | 5,000 ft | 612825181958 |

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