



Product: [7404W](#) 

MachFlex™, 6+1G C #20 Str BC, PVC Ins, TPE Jkt, PLTC

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Product Description

MachFlex™ for High Flex, 6+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) | 6 | 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) | 0.309 in (7.85 mm) |

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|-----------------------------------|---|
| Outer Jacket1 Table Notes: | JACKET PRINT "BELDEN (-PLANT ID) MACHFLEX(R) FCC 7404W 6C20+GROUND (UL) PLTC (-40C) 90C SUN RES OIL RES II OR AWM 20327 105C OR C(UL LOGO) AWM I/II A/B 600V 105C FT2---FT4 IEEE1202 (2 FT., 6 DIGIT SEQUENTIAL NUMBER) FT" |
| Overall Cable Diameter (Nominal): | 0.309 in (7.85 mm) |

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Max. Current |
|--------------|-------------------------------|---------------------------------|
| Conductor(s) | 10.8 Ohm/1000ft (35.4 Ohm/km) | 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. |
|-------------------|-------------------|
| 3.09 in (78.5 mm) | 3.09 in (78.5 mm) |

| | |
|--------------------|--------------------------|
| Max. Pull Tension: | 105 lbs (47.6 kg) |
| Bulk Cable Weight: | 57 lbs/1000ft (85 kg/km) |

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

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| Update and Revision: | Revision Number: 0.599 Revision Date: 11-12-2025 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---------------|--------|------------|----------|--------------|----------|
| 7404W 060250 | Chrome | Reel | 250 ft | 612825185444 | C |
| 7404W 0601000 | Chrome | Reel | 1,000 ft | 612825185437 | C |
| 7404W 0605000 | Chrome | Reel | 5,000 ft | 612825185451 | |

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