



Product: [76002WS](#)

MachFlex™, 2 C #28 Str TC, SRPVC Ins, OS+TC Srv, PVC Jkt, CMG

Request Sample

Product Description

MachFlex™ for High Flex, 2 Conductor 28AWG (7x36) Tinned Copper, SRPVC Insulation, Overall Beldfoil®+Tinned Copper Serve(90%) Shield, PVC Outer Jacket, CMG

Technical Specifications

Product Overview

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

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Material |
|--------------|-----------------|--------|-----------|--------------------|
| Conductor(s) | 2 | 28 AWG | 7x36 | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
|--------------|--------------------------|--------------------|--------------------------|------------|
| Conductor(s) | PVC - Polyvinyl Chloride | 0.010 in (0.25 mm) | 0.035 in mm | Black, Red |

Outer Shield

| Shield Type | Material | Coverage | Drainwire Type |
|-----------------------|-------------------------|----------|------------------|
| Tape | Bi-Laminate (Alum+Poly) | 100% | 26 AWG (7x34) TC |
| Spiral Serve / Screen | Tinned Copper (TC) | 90% | |

Outer Jacket

| Separator | Material | Nom. Thickness | Nom. Diameter |
|------------|--------------------------|-------------------|---------------|
| Paper Tape | PVC - Polyvinyl Chloride | 0.040 in (1.0 mm) | 0.174 in |

Overall Cable Diameter (Nominal): 0.174 in

Electrical Characteristics

Electricals

| Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Characteristic Impedance |
|--------------------|-------------------------------|-------------------------------|
| 66 Ohm/1000ft | 27 pF/ft (89 pF/m) | 70 Ohm |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|---|
| 105°C | -10°C To 105°C (Static), 5°C To 105°C (Flexing) |

Bend Radius

| Stationary Min. | Installation Min. | Flexing Min. |
|-----------------|-------------------|--------------|
| | | |

| | | |
|-------------------|---------|----------------|
| 1.74 in (44.2 mm) | 1.74 in | 1.4 in (36 mm) |
|-------------------|---------|----------------|

| | |
|--------------------|------------------|
| Max. Pull Tension: | 6.9 lbs (3.1 kg) |
| Bulk Cable Weight: | 19 lbs/1000ft |

Standards and Compliance

| | |
|--------------------------------|---|
| Environmental Suitability: | Sunlight Resistance |
| NEC / UL Compliance: | Article 800, CM |
| AWM Compliance: | AWM 2661, AWM 10002, AWM I/II A/B |
| CEC / C(UL) Compliance: | CMG |
| European Directive Compliance: | EU CE Mark, 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: 0.145 Revision Date: 05-31-2024 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | UPC |
|-----------------|-------|------------|--------------|
| 76002WS 008100 | Gray | Reel | 612825410324 |
| 76002WS 0081000 | Gray | Reel | 612825410331 |

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