



Product: [73809W](#)

MachFlex™, 9 C #18 Str BC, PVC Ins, PVC Jkt, AWM 2587 CLASS K

Request Sample

Product Description

MachFlex™ for Moderate Flex, 9 Conductor 18AWG (16x30) Bare Copper, PVC Insulation, PVC Outer Jacket, AWM 2587 CLASS K

Technical Specifications

Product Overview

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

Construction Details

Conductor

| Element      | No. of Elements | Size | Stranding | Material         |
|--------------|-----------------|------|-----------|------------------|
| Conductor(s) | 8               | 18   | 16x30     | BC - Bare Copper |
| Ground       | 1               | 18   | 16x30     | BC - Bare Copper |

Insulation

| Element      | Material                 | Nom. Thickness     | Nom. Insulation Diameter | Color Code         |
|--------------|--------------------------|--------------------|--------------------------|--------------------|
| Conductor(s) | PVC - Polyvinyl Chloride | 0.022 in (0.56 mm) | 0.091 in (2.3 mm)        | Black and Numbered |
| Ground       | PVC - Polyvinyl Chloride | 0.022 in (0.56 mm) | 0.091 in (2.3 mm)        | Yellow/Green       |

Outer Shield

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

Outer Jacket

| Separator  | Material                 | Nom. Thickness     | Nom. Diameter |
|------------|--------------------------|--------------------|---------------|
| Paper Tape | PVC - Polyvinyl Chloride | 0.035 in (0.89 mm) | 0.445 in      |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.445 in (11.3 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element      | Nom. Conductor DCR            | Nom. Capacitance Cond-to-Cond | Max. Current                   |
|--------------|-------------------------------|-------------------------------|--------------------------------|
| Conductor(s) | 6.7 Ohm/1000ft                | 31 pF/ft (100 pF/m)           | 9.8 Amps per Conductor at 30°C |
| Ground Wire  | 6.66 Ohm/1000ft (21.9 Ohm/km) |                               |                                |

Voltage

| UL Voltage Rating | Voltage Rating           |
|-------------------|--------------------------|
| 600 V (AWM 2587)  | 600 V (CSA AWM I/II A/B) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating                                      |
|----------------|------------------------------------------------|
| 90°C           | -40°C To 90°C (Static), -5°C To 90°C (Flexing) |

Bend Radius

|                |
|----------------|
| Flexing Min.   |
| 2.2 in (56 mm) |

|                    |                   |
|--------------------|-------------------|
| Max. Pull Tension: | 113 lbs (51.3 kg) |
| Bulk Cable Weight: | 300 lbs/1000ft    |

Standards and Compliance

|                                |                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:     | Oil Resistance                                                                                                            |
| AWM Compliance:                | AWM 2587, AWM I/II A/B                                                                                                    |
| 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: 0.141 Revision Date: 05-31-2024 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #         | Color | Putup Type | UPC          |
|----------------|-------|------------|--------------|
| 73809W 008100  | Gray  | Reel       | 612825410263 |
| 73809W 0081000 | Gray  | Reel       | 612825410270 |

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