



Product: [7418W](#)

MachFlex™, 33+1G C #18 Str BC, PVC-NYL Ins, TPE Jkt, 1000V WTTC, 600V TC-ER

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Product Description

MachFlex™ for High Flex, 33+1G Conductor 18AWG (16x30) Bare Copper, PVC-NYL Insulation, TPE Outer Jacket, 1000V WTTC, 600V TC-ER

Technical Specifications

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Conductors |
|-----|-----------|------------------|-------------------|
| 18 | 16x30 | BC - Bare Copper | 33 |
| 18 | | BC - Bare Copper | 1 |

Conductor Count: 34

Insulation

| Material | Nominal Diameter |
|--|------------------|
| PVC/Nylon - Polyvinyl Chloride + Nylon | 0.089 in |

Color Chart

| Number | Color |
|--------|-----------------------|
| 1 | Black and Numbered 1 |
| 2 | Black and Numbered 2 |
| 3 | Black and Numbered 3 |
| 4 | Black and Numbered 4 |
| 5 | Black and Numbered 5 |
| 6 | Black and Numbered 6 |
| 7 | Black and Numbered 7 |
| 8 | Black and Numbered 8 |
| 9 | Black and Numbered 9 |
| 10 | Black and Numbered 10 |
| 11 | Black and Numbered 11 |
| 12 | Black and Numbered 12 |
| 13 | Black and Numbered 13 |
| 14 | Black and Numbered 14 |
| 15 | Black and Numbered 15 |
| 16 | Black and Numbered 16 |
| 17 | Black and Numbered 17 |
| 18 | Black and Numbered 18 |
| 19 | Black and Numbered 19 |
| 20 | Black and Numbered 20 |
| 21 | Black and Numbered 21 |
| 22 | Black and Numbered 22 |
| 23 | Black and Numbered 23 |
| 24 | Black and Numbered 24 |
| 25 | Black and Numbered 25 |
| 26 | Black and Numbered 26 |

| | |
|----|-----------------------|
| 27 | Black and Numbered 27 |
| 28 | Black and Numbered 28 |
| 29 | Black and Numbered 29 |
| 30 | Black and Numbered 30 |
| 31 | Black and Numbered 31 |
| 32 | Black and Numbered 32 |
| 33 | Black and Numbered 33 |
| 34 | Green/Yellow |

Outer Shield Material

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

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|-------------------------------|------------------|------------------------|
| TPE - Thermoplastic Elastomer | 0.762 in | 0.063 in |

Electrical Characteristics

Conductor DCR

| |
|------------------------------|
| Nominal Conductor DCR |
| 6.5 Ohm/1000ft |

Voltage

| |
|--------------------------|
| UL Voltage Rating |
| 1000 V RMS |
| 600 V RMS |

Temperature Range

| | |
|-------------------|-------------------------|
| UL Temp Rating: | 75°C Dry, 90°C Wet |
| Other Temp Range: | Flexing: -5°C To +90 °C |

Mechanical Characteristics

| | |
|---------------------------------------|------------------|
| Oil Resistance: | Yes |
| Flex Cycle Rating: | 1 Million Flexes |
| Bulk Cable Weight: | 346 lbs/1000ft |
| Max. Pull Tension: | 782 lbs |
| Min Bend Radius (Continuous Flexing): | 7.7 in |

Standards

| | |
|--------------------------|--------------|
| NEC/(UL) Compliance: | TC-ER, WTTC |
| CEC/C(UL) Compliance: | CIC, TC |
| UL AWM Style Compliance: | 20328 |
| CSA AWM Compliance: | AWM I/II A/B |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU: | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-10-01 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|------------------|
| Suitability - Non-Halogenated: | No |
| Suitability - Oil Resistance: | Yes - Oil Res II |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LS0H, Toxicity Testing

| | |
|------------------|-------------------|
| UL Flammability: | UL1685 UL Loading |
|------------------|-------------------|

| | |
|--------------------|------------|
| CSA Flammability: | FT4 |
| IEEE Flammability: | 1202 |
| UL voltage rating: | 1000 V RMS |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|--------|------------|----------|--------------|
| 7418W 060250 | Chrome | Reel | 250 ft | 612825186120 |
| 7418W 0601000 | Chrome | Reel | 1,000 ft | 612825186113 |

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

History

| | |
|----------------------|--|
| Update and Revision: | Revision Number: 0.269 Revision Date: 06-24-2020 |
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