Power Machine Tray Cable

Power Machine Tray Cable from AutomationDirect is available in sizes from 18AWG to 8AWG with 3 to 25 unshielded conductors. Individual conductors are bare copper and stranded for flexibility, with black PVC/Nylon insulation and marked with numbers for easy identification. A convenient ground conductor is included in the conductor count of each cable and has insulation that is green with a yellow stripe. The cable’s outer jacket is a flexible, premium grade Thermoplastic Elastomer (TPE) that is resistant to sunlight, oil, and moisture penetration, making these cables suitable for wet and dry locations as well as outdoors. Although not suitable for continuous flexing applications, these cables are ideal for both stationary and flexible applications with limited mechanical stress and free movement without any tensile stress, loads or forced movements.

With multiple ratings and approvals, AutomationDirect Power Machine Tray Cable has the versatility to meet a wide range of industrial applications. Given its Tray Cable Exposed Run rating, UL Type TC-ER, our cable can be installed between a cable tray and the utilization equipment or device without the need for metal conduit and/or armor resulting in installation and maintenance savings. With the Machine Tool Wire rating, UL Type MTW, these cables meet NFPA 79, Electrical Standard for Industrial Machinery. Other ratings and approvals include Wind Turbine Tray Cable UL Type WTTC, Class 1 Division 2 Hazardous Locations and Direct Burial. Cut to length in 1 foot increments with a 20 foot minimum length.

Features

- 18AWG to 8AWG, 3 to 25 conductors including a ground
- Individual conductors have black PVC/Nylon insulation and are marked with identification numbers
- Rugged Thermoplastic Elastomer (TPE) outer jacket
- Green/yellow ground wire included
- Multiple ratings and approvals include Type TC-ER (eliminates need for conduit/armor), Type MTW (meets NFPA 79), WTTC, Class 1 Division 2, Direct Burial, Wet and Dry Location, Oil Resistant, Sunlight Resistant
- Flexibility for easy installation
- Cut to length in 1 foot increments
- Low 20 foot minimum length
- Made in the USA

Click on the above thumbnail or go to https://www.automationdirect.com/VID-WD-0012 for a short introduction on our cut to length cable
# 18 Gauge Multi-Conductor Flexible Power/Control Cable Specifications (Unshielded)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Number of Conductors (includes ground)</th>
<th>AWG</th>
<th>Strand</th>
<th>Overall Conductor Insulation Thickness (Mils)</th>
<th>Nominal O.D. (Inches ±10%)</th>
<th>Minimum Installed Bend Radius (Inches)*</th>
<th>Minimum Cut Length (ft)**</th>
<th>Approximate Weight (lb/ft)</th>
<th>Price per foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMTC-18U-3BK-1</td>
<td>3</td>
<td>18</td>
<td>16</td>
<td>20</td>
<td>0.28</td>
<td>1.12</td>
<td>20</td>
<td>0.05</td>
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<td>PMTC-18U-4BK-1</td>
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<td>PMTC-18U-5BK-1</td>
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<td>1.32</td>
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<td>0.07</td>
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<td>1.44</td>
<td>20</td>
<td>0.09</td>
<td>$0.99</td>
</tr>
<tr>
<td>PMTC-18U-9BK-1</td>
<td>9</td>
<td>18</td>
<td>16</td>
<td>20</td>
<td>0.41</td>
<td>1.64</td>
<td>20</td>
<td>0.11</td>
<td>$1.40</td>
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<td>PMTC-18U-12BK-1</td>
<td>12</td>
<td>18</td>
<td>16</td>
<td>20</td>
<td>0.46</td>
<td>1.84</td>
<td>20</td>
<td>0.14</td>
<td>$1.67</td>
</tr>
<tr>
<td>PMTC-18U-25BK-1</td>
<td>25</td>
<td>18</td>
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<td>0.64</td>
<td>2.56</td>
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<td>0.25</td>
<td>$2.37</td>
</tr>
</tbody>
</table>

* Installed bend radius ≥ 4x diameter
** See web store for maximum cut lengths

* Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specific part number’s web page at www.AutomationDirect.com

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# 18 Gauge Multi-Conductor Flexible Power/Control Cable (Unshielded)

- **Conductor Gauge & Stranding**: 18AWG 16/30 bare copper, Class K
- **Voltage Rating**: 600V (Type TC-ER), 1000V (Type WTTTC), 1000V (UL/CSA AWM)
- **Capacitance**: 28.2 pF/ft Nom. Conductor to Conductor
- **Impedance**: 55.0 Ω
- **Operating Temperature**: -40°C to 90°C (-40°F to 194°F)
- **Applicable Standards**: ASTM B3, B172, B174
- **Voltage Rating**: UL 1277 - Type TC-ER, UL 2277 - Type WTTTC, UL 1063 - Machine Tool Wiring (MTW)
- **Resistance**: 6.53 Ω/ft*  
- **Jacket Material**: Flexible Black Thermoplastic Elastomer (TPE) - sunlight & oil resistant
- **Conductor Insulation**: 0.015 Inch, PVC + 0.005 Inch, NYLON
- **Conductor Markings**: "#1-ONE", "2-TWO", "3-THREE", etc... @ 4.5 inch intervals, ICEA Method 4
- **Temperature Rating**: 75°C (167°F) Wet, 90°C (194°F) Dry
- **Flame Rating**: FT4, UL1685, UL MTW NFPA 79 2007
- **Approvals**: UL (E75755), CSA (90458)
- **Sample Print Legend**: Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 UL 600V 90°C Dry 75°C Wet Sun Res Oil Res II DIR BUR - 40°C OR MTW Flexing OR DP-1 OR WTTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - LL90458 CSA AWM I/II A/B 105°C 1000V -40°C FT4 – CE
- **Cold Impact**: -40°C (-40°F) per UL 1277
- **Min. Bend Radius**: 4x diameter
- **Flame Rating**: FT4, IEEE 1202/383, ICEA T-29-520
- **Oil Resistance**: Oil Res I & II

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* Please Note: Our prices on flexible power/control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.
16 Gauge Multi-Conductor Power/Control Cable (Unshielded)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Number of Conductors (Includes ground)</th>
<th>AWG</th>
<th>Strand</th>
<th>Overall Conductor Insulation Thickness (Mils)</th>
<th>Overall Jacket Thickness (Mils)</th>
<th>Nominal O.D. (Inches ±10%)</th>
<th>Minimum Installed Bend Radius (Inches) *</th>
<th>Minimum Cut Length (ft) **</th>
<th>Approximate Weight (lb/ft)</th>
<th>Price per foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMTC-16U-3BK-1</td>
<td>3</td>
<td>16</td>
<td>26</td>
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<td>50</td>
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<td>$0.65</td>
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<tr>
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<td></td>
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<td>1.36</td>
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<td>0.46</td>
<td>1.84</td>
<td>20</td>
<td>0.14</td>
<td>$1.81</td>
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<tr>
<td>PMTC-16U-12BK-1</td>
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<td></td>
<td>0.51</td>
<td>2.04</td>
<td>20</td>
<td>0.20</td>
<td>$2.28</td>
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</tbody>
</table>

* Installed bend radius ≥ 4x diameter
** See web store for maximum cut lengths

Please Note: Our prices on flexible power/control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.
## 14 Gauge Multi-Conductor Flexible Power/Control Cable Specifications (Unshielded)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Number of Conductors (includes ground)</th>
<th>AWG Strand</th>
<th>Overall Conductor Insulation Thickness (Mils)</th>
<th>Overall Jacket Thickness (Mils)</th>
<th>Nominal O.D. (Inches ±10%)</th>
<th>Minimum Installed Bend Radius (inches)*</th>
<th>Minimum Cut Length (ft)**</th>
<th>Approximate Weight (lb/ft)</th>
<th>Price per foot</th>
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</thead>
<tbody>
<tr>
<td>PMTC-14U-3BK-1</td>
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<td>41</td>
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<td>0.37</td>
<td>1.48</td>
<td>20</td>
<td>0.11</td>
<td>$1.12</td>
</tr>
<tr>
<td>PMTC-14U-9BK-1</td>
<td>9</td>
<td>41</td>
<td>50</td>
<td>50</td>
<td>0.52</td>
<td>2.08</td>
<td>20</td>
<td>0.21</td>
<td>$2.51</td>
</tr>
<tr>
<td>PMTC-14U-12BK-1</td>
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<td>41</td>
<td>65</td>
<td>50</td>
<td>0.60</td>
<td>2.40</td>
<td>20</td>
<td>0.28</td>
<td>$3.40</td>
</tr>
<tr>
<td>PMTC-14U-18BK-1</td>
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<td>41</td>
<td>70</td>
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<td>2.80</td>
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<td>0.40</td>
<td>$4.88</td>
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</table>

* Installed bend radius ≥ 4x diameter
** * See web store for maximum cut lengths

** Per ASTM B174

** To obtain the most current agency approval information, see Agency Approval Checklist section on the specific part number’s web page at www.AutomationDirect.com

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**Please Note:** Our prices on flexible power/control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.
# 12 Gauge Multi-Conductor Power/Control Cable (Unshielded)

## 12 Gauge Multi-Conductor Flexible Power/Control Cable Specifications (Unshielded)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Number of Conductors (includes ground)</th>
<th>AWG</th>
<th>Strand</th>
<th>Overall Conductor Insulation Thickness (Mils)</th>
<th>Overall Jacket Thickness (Mils)</th>
<th>Nominal O.D. (Inches ±10%)</th>
<th>Minimum Installed Bend Radius (inches)*</th>
<th>Minimum Cut Length (ft) **</th>
<th>Approximate Weight (lb/ft)</th>
<th>Price per foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMTC-12U-3BK-1</td>
<td>3</td>
<td>12</td>
<td>65</td>
<td>20</td>
<td>50</td>
<td>0.39</td>
<td>20</td>
<td>0.11</td>
<td>$1.46</td>
<td></td>
</tr>
<tr>
<td>PMTC-12U-4BK-1</td>
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<td></td>
<td></td>
<td></td>
<td>0.42</td>
<td>20</td>
<td>0.15</td>
<td>$1.81</td>
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<tr>
<td>PMTC-12U-5BK-1</td>
<td>5</td>
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<td></td>
<td></td>
<td></td>
<td>0.46</td>
<td>20</td>
<td>0.18</td>
<td>$1.98</td>
<td></td>
</tr>
<tr>
<td>PMTC-12U-7BK-1</td>
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<td></td>
<td></td>
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<td>0.50</td>
<td>20</td>
<td>0.23</td>
<td>$2.75</td>
<td></td>
</tr>
</tbody>
</table>

* Per ASTM B174  
** To obtain the most current agency approval information, see Agency Approval Checklist section on the specific part number’s web page at www.AutomationDirect.com

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**Conductor Gauge & Stranding**  
12AWG 65/30 bare copper, Class K  

**Voltage Rating**  
- 600V (Type TC-ER)  
- 1000V (Type WTTC)  
- 1000V (UL/CSA AWM)

**Capacitance**  
40.4 pF/ft Nom. Conductor to Conductor

**Resistance**  
1.62 Ω/kft  

**Impedance**  
36.1 Ω

**Operating Temperature**  
-40°C to 90°C (-40°F to 194°F)

**Jacket Material**  
Flexible Black Thermoplastic Elastomer (TPE) - sunlight & oil resistant

**Conductor Insulation**  
0.015 Inch, PVC + 0.005 Inch, NYLON

**Conductor Markings**  
*A1*-ONE", "2-TWO", "3-THREE", etc... @ 4.5 inch intervals, ICEA Method 4

**Approvals**  
- UL (E75755), CSA (90458)
- CSA C22.2 No. 210 - CSA AWM I/II A/B
- C22.2 No. 230 - c(UL) Type TC
- CSA C22.2 No. 239 - c(UL) Type CIC
- Class 1 Division II per NEC 336, 501, 502

**Sample Print Legend**  
Southwire XXAWG (XXmm2) XX/C PVC/Nylon Type TC-ER E75755 (UL) 600V 90°C Dry 75°C Wet Sun Res Oil Res I/II DIR BUR -40°C OR MTW Flexing OR DP-1 OR WTTC 1000V OR AWM 20886 105°C 1000V OR c(UL) CIC/TC FT4 - L10458 CSA AWM I/II A/B 105°C 1000V -40°C FT4 -- CE

**Temperature Rating**  
75°C (167°F) Wet, 90°C (194°F) Dry

**Cold Impact**  
-40°C (-40°F) per UL 1277

**Min. Bend Radius**  
4x diameter

**Flame Rating**  
FT4, IEEE 1202/383, ICEA T-29-520  
UL1685, UL MTW NFPA 79 2007

**Oil Resistance**  
Oil Res I & II

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**Please Note:** Our prices on flexible power/control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.
Please Note: Our prices on flexible power/control cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.

### 10 Gauge Multi-Conductor Flexible Power/Control Cable Specifications (Unshielded)

<table>
<thead>
<tr>
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<th>Number of Conductors (includes ground)</th>
<th>AWG</th>
<th>Strand</th>
<th>Overall Conductor Insulation Thickness (Mils)</th>
<th>Overall Jacket Thickness (Mils)</th>
<th>Nominal O.D. (Inches ±10%)</th>
<th>Minimum Installed Bend Radius (inches)*</th>
<th>Minimum Cut Length (ft)**</th>
<th>Approximate Weight (lb/ft)</th>
<th>Price per foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMTC-10U-4BK-1</td>
<td>4</td>
<td>10</td>
<td>105</td>
<td>50</td>
<td>0.50</td>
<td>2.00</td>
<td>20</td>
<td>0.21</td>
<td>$1.88</td>
<td></td>
</tr>
<tr>
<td>PMTC-10U-5BK-1</td>
<td>5</td>
<td>10</td>
<td>105</td>
<td>25</td>
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<td>2.12</td>
<td>20</td>
<td>0.26</td>
<td>$2.97</td>
<td></td>
</tr>
</tbody>
</table>

* Installed bend radius ≥ 4x diameter
** * See web store for maximum cut lengths

For the latest prices, please check AutomationDirect.com.
8 Gauge Multi-Conductor Flexible Power/Control Cable Specifications (Unshielded)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Number of Conductors (includes ground)</th>
<th>AWG</th>
<th>Strand</th>
<th>Overall Conductor Insulation Thickness (Mils)</th>
<th>Overall Jacket Thickness (Mils)</th>
<th>Nominal O.D. (Inches ±10%)</th>
<th>Minimum Installed Bend Radius (Inches)*</th>
<th>Minimum Cut Length (ft)**</th>
<th>Approximate Weight (lb/ft)</th>
<th>Price per foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMTC-8U-4BK-1</td>
<td>4</td>
<td>8</td>
<td>168</td>
<td>37</td>
<td>70</td>
<td>0.68</td>
<td>2.72</td>
<td>20</td>
<td>0.37</td>
<td>$3.63</td>
</tr>
</tbody>
</table>

* Per ASTM B174
** To obtain the most current agency approval information, see Agency Approval Checklist section on the specific part number’s web page at www.AutomationDirect.com

For the latest prices, please check AutomationDirect.com.