

# Control and Signal Cable

## Q7115-1 Unshielded 2-Conductor 22AWG Cable Specifications

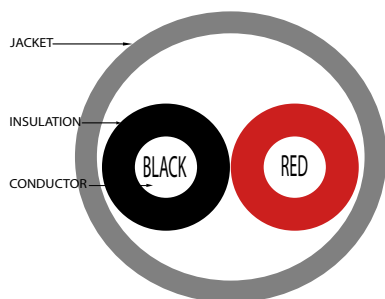
|                                            |                                   |                                     |                                                                                                                     |
|--------------------------------------------|-----------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                 |
| <b>Voltage Rating</b>                      | 300V                              | <b>Twisted Conductor Diameter</b>   | 0.100 inch; nominal                                                                                                 |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)       | <b>Overall Diameter</b>             | 0.164 inch; nominal                                                                                                 |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                      | <b>Jacket Color</b>                 | Chrome Gray                                                                                                         |
| <b>Capacitance, Mutual, Nom.</b>           | 26 pF/ft                          | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                 |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                               | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                            |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                         | <b>Sunlight Resistant</b>           | No                                                                                                                  |
| <b>D.C. Resistance, Max.</b>               | 16.7 $\Omega$ / 1000ft.           | <b>Oil Resistance</b>               | No                                                                                                                  |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch            | <b>Flame Retardant</b>              | FT-4                                                                                                                |
| <b>Shield</b>                              | None                              | <b>Approvals*</b>                   | NEC (UL) TYPE CM<br>UL AWM STYLE 2464<br>CSA AWM FT4                                                                |
| <b>Drain</b>                               | None                              |                                     |                                                                                                                     |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)          |                                     |                                                                                                                     |
| <b>Conductor Identification</b>            | Black, Red                        | <b>Sample Print Legend</b>          | QUABBIN 7115 (UL) TYPE CM 22 AWG OR<br>AWM 2464 -- CSA LL51726 AWM I/II A/B<br>80C 300V -- RoHS -- (LOT DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal               |                                     |                                                                                                                     |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal               |                                     |                                                                                                                     |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7115-1 Unshielded 2-Conductor 22AWG Cable Specifications

| Part Number                                                                         | Number of Conductors | AWG | Strand | Maximum O.D. (Inches $\pm 10\%$ ) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|-------------------------------------------------------------------------------------|----------------------|-----|--------|-----------------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                                   |                                                     |                           |                            |                |
| <b>Q7115-1</b>                                                                      | 2                    | 22  | 7      | 0.164 [4.17 mm]                   | 1.64                                                | 30                        | 0.0146                     | \$0.19         |

1. Installed bend radius  $\geq 10 \times$  diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



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# Control and Signal Cable

## Q0190-1 Unshielded 3-Conductor 22AWG Cable Specifications

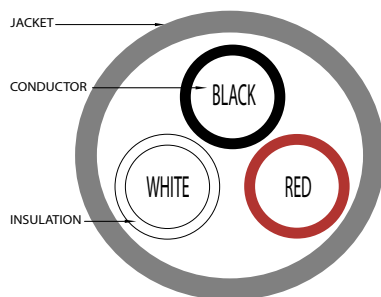
|                                            |                                               |                                     |                                                                                                                                                                                       |
|--------------------------------------------|-----------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper             | <b>Insulated Conductor Diameter</b> | 0.062 inch; nominal                                                                                                                                                                   |
| <b>Voltage Rating</b>                      | 300V                                          | <b>Twisted Conductor Diameter</b>   | 0.133 inch; nominal                                                                                                                                                                   |
| <b>Temperature Rating, Max.</b>            | 80°C, 90°C & 105°C<br>(176°F, 194°F & 221°F ) | <b>Overall Diameter</b>             | 0.224 inch; nominal                                                                                                                                                                   |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                                  | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                                                                           |
| <b>Capacitance, Mutual, Nom.</b>           | 20 pF/ft                                      | <b>Jacket Thickness</b>             | 0.038 inch; nominal                                                                                                                                                                   |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                                           | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                                                                              |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                                     | <b>Sunlight Resistant</b>           | Yes                                                                                                                                                                                   |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                              | <b>Oil Resistance</b>               | No                                                                                                                                                                                    |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch                        | <b>Flame Retardant</b>              | FT-4                                                                                                                                                                                  |
| <b>Shield</b>                              | None                                          | <b>Approvals*</b>                   | NEC (UL) TYPE PLTC 105C 300V<br>NEC (UL) TYPE ITC 105C 300V<br>UL AWM STYLE 2464 80C 300V<br>CSA FAS 105 FT4<br>CSA AWM FT4 90C 300V                                                  |
| <b>Drain</b>                               | None                                          |                                     |                                                                                                                                                                                       |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)                      |                                     |                                                                                                                                                                                       |
| <b>Conductor Identification</b>            | Black, red, white                             | <b>Sample Print Legend</b>          | QUABBIN 0190 (UL) TYPE PLTC OR ITC 22<br>AWG 105C SUN RES OR AWM 2464 -- CSA<br>LL66965 FAS 105 22 AWG 3 CONDUCTOR<br>FT4 OR AWM I/II A/B 90C 300V FT4 --<br>RoHS -- (LOT DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.016 inch; nominal                           |                                     |                                                                                                                                                                                       |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                           |                                     |                                                                                                                                                                                       |

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## Q0190-1 Unshielded 3-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ± 10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|-----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                             |                                                     |                           |                            |                |
| <b>Q0190-1</b>                                                                       | 3                    | 22  | 7      | 0.209 [5.31 mm]             | 2.09                                                | 30                        | 0.0231                     | \$0.40         |

1. Installed bend radius  $\geq 10 \times$  diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



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# Control and Signal Cable

## Q7121-1 Unshielded 3-Conductor 22AWG Cable Specifications

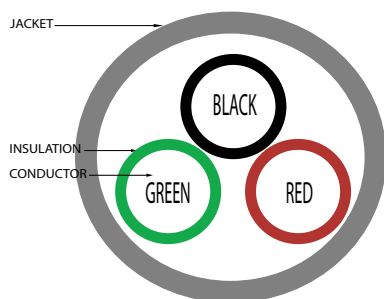
|                                            |                                   |                                     |                                                                                                                              |
|--------------------------------------------|-----------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                          |
| <b>Voltage Rating</b>                      | 300V                              | <b>Twisted Conductor Diameter</b>   | 0.108 inch; nominal                                                                                                          |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)       | <b>Overall Diameter</b>             | 0.172 inch; nominal                                                                                                          |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                      | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                  |
| <b>Capacitance, Mutual, Nom.</b>           | 26 pF/ft                          | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                          |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                               | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                     |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                         | <b>Sunlight Resistant</b>           | No                                                                                                                           |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                  | <b>Oil Resistance</b>               | No                                                                                                                           |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch            | <b>Flame Retardant</b>              | FT-4                                                                                                                         |
| <b>Shield</b>                              | None                              | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                             |
| <b>Drain</b>                               | None                              |                                     |                                                                                                                              |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)          |                                     |                                                                                                                              |
| <b>Conductor Identification</b>            | Black, Red, Green                 | <b>Sample Print Legend</b>          | QUABBIN 7121R (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM I/<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal               |                                     |                                                                                                                              |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal               |                                     |                                                                                                                              |

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## Q7121-1 Unshielded 3-Conductor 22AWG Cable Specifications

| Part Number                                                                         | Number of Conductors | AWG | Strand | Maximum O.D.<br>(Inches ±10%) | Minimum Installed Bend Radius<br>(inches) <sup>1</sup> | Minimum Cut Length<br>(ft)** | Approximate Weight<br>(lb/ft) | Price per foot |
|-------------------------------------------------------------------------------------|----------------------|-----|--------|-------------------------------|--------------------------------------------------------|------------------------------|-------------------------------|----------------|
|  |                      |     |        |                               |                                                        |                              |                               |                |
| <b>Q7121-1</b>                                                                      | 3                    | 22  | 7      | 0.172 [4.37 mm]               | 1.72                                                   | 30                           | 0.0179                        | \$0.26         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



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# Control and Signal Cable

## Q7120-1 Unshielded 3-Conductor 22AWG Cable Specifications

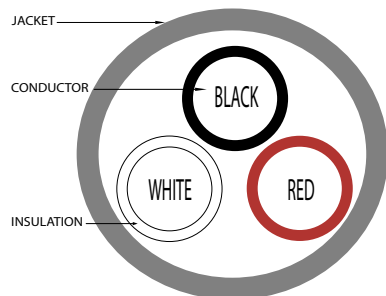
|                                            |                                   |                                     |                                                                                                                             |
|--------------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                         |
| <b>Voltage Rating</b>                      | 300V                              | <b>Twisted Conductor Diameter</b>   | 0.108 inch; nominal                                                                                                         |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)       | <b>Overall Diameter</b>             | 0.172 inch; nominal                                                                                                         |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                      | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                 |
| <b>Capacitance, Mutual, Nom.</b>           | 27 pF/ft                          | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                         |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                               | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                    |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                         | <b>Sunlight Resistant</b>           | No                                                                                                                          |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                  | <b>Oil Resistance</b>               | No                                                                                                                          |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch            | <b>Flame Retardant</b>              | FT-4                                                                                                                        |
| <b>Shield</b>                              | None                              | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                            |
| <b>Drain</b>                               | None                              |                                     |                                                                                                                             |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)          |                                     |                                                                                                                             |
| <b>Conductor Identification</b>            | Black, Red, White                 | <b>Sample Print Legend</b>          | QUABBIN 7120 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM I/<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal               |                                     |                                                                                                                             |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal               |                                     |                                                                                                                             |

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## Q7120-1 Unshielded 3-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ±10%) | Minimum Installed Bend Radius (inches) <sup>†</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                            |                                                     |                           |                            |                |
| <b>Q7120-1</b>                                                                       | 3                    | 22  | 7      | 0.227 [5.77 mm]            | 1.72                                                | 30                        | 0.0179                     | \$0.24         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



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# Control and Signal Cable

## Q7125-1 Unshielded 4-Conductor 22AWG Cable Specifications

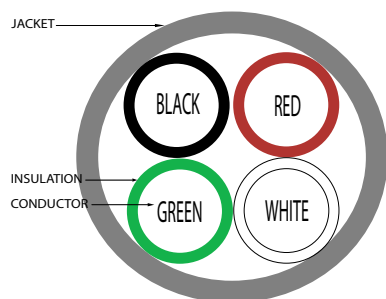
|                                            |                                   |                                     |                                                                                                                             |
|--------------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                         |
| <b>Voltage Rating</b>                      | 300V                              | <b>Twisted Conductor Diameter</b>   | 0.121 inch; nominal                                                                                                         |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)       | <b>Overall Diameter</b>             | 0.185 inch; nominal                                                                                                         |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                      | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                 |
| <b>Capacitance, Mutual, Nom.</b>           | 25 pF/ft                          | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                         |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                               | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                    |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                         | <b>Sunlight Resistant</b>           | No                                                                                                                          |
| <b>D.C. Resistance, Max.</b>               | 16.7 $\Omega$ / 1000ft.           | <b>Oil Resistance</b>               | No                                                                                                                          |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch            | <b>Flame Retardant</b>              | FT-4                                                                                                                        |
| <b>Shield</b>                              | None                              | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                            |
| <b>Drain</b>                               | None                              |                                     |                                                                                                                             |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)          |                                     |                                                                                                                             |
| <b>Conductor Identification</b>            | Black, Red, White, Green          | <b>Sample Print Legend</b>          | QUABBIN 7125 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM I/<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal               |                                     |                                                                                                                             |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal               |                                     |                                                                                                                             |

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## Q7125-1 Unshielded 4-Conductor 22AWG Cable Specifications

| Part Number                                                                         | Number of Conductors | AWG | Strand | Maximum O.D.<br>(Inches $\pm 10\%$ ) | Minimum Installed Bend Radius<br>(inches) <sup>†</sup> | Minimum Cut Length<br>(ft)** | Approximate Weight<br>(lb/ft) | Price per foot |
|-------------------------------------------------------------------------------------|----------------------|-----|--------|--------------------------------------|--------------------------------------------------------|------------------------------|-------------------------------|----------------|
|  |                      |     |        |                                      |                                                        |                              |                               |                |
| <b>Q7125-1</b>                                                                      | 4                    | 22  | 10     | 0.185 [4.70 mm]                      | 1.72                                                   | 30                           | 0.0224                        | \$0.32         |

1. Installed bend radius  $\geq 10 \times$  diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



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# Control and Signal Cable

## Q7131-1 Unshielded 5-Conductor 22AWG Cable Specifications

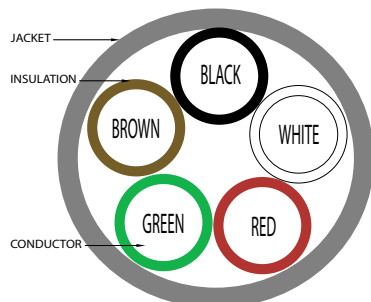
|                                            |                                   |                                     |                                                                                                                             |
|--------------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                         |
| <b>Voltage Rating</b>                      | 300V                              | <b>Twisted Conductor Diameter</b>   | 0.135 inch; nominal                                                                                                         |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)       | <b>Overall Diameter</b>             | 0.199 inch; nominal                                                                                                         |
| <b>Temperature Rating, Min.</b>            | -30°C (-22°F)                     | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                 |
| <b>Capacitance, Mutual, Nom.</b>           | 28 pF/ft                          | <b>Jacket Thickness</b>             | 0.010 inch; nominal                                                                                                         |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                               | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                    |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                         | <b>Sunlight Resistant</b>           | No                                                                                                                          |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                  | <b>Oil Resistance</b>               | No                                                                                                                          |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch            | <b>Flame Retardant</b>              | FT-4                                                                                                                        |
| <b>Shield</b>                              | None                              | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                            |
| <b>Drain</b>                               | None                              |                                     |                                                                                                                             |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)          |                                     |                                                                                                                             |
| <b>Conductor Identification</b>            | Black, white, red, green, brown   | <b>Sample Print Legend</b>          | QUABBIN 7131 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM I/<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal               |                                     |                                                                                                                             |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal               |                                     |                                                                                                                             |

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## Q7131-1 Unshielded 5-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ± 10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|-----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                             |                                                     |                           |                            |                |
| <b>Q7131-1</b>                                                                       | 5                    | 22  | 7      | 0.199 [5.05 mm]             | 1.99                                                | 30                        | 0.0245                     | \$0.41         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



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# Control and Signal Cable

## Q7135-1 Unshielded 6-Conductor 22AWG Cable Specifications

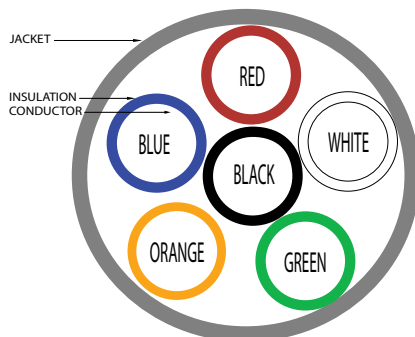
|                                            |                                        |                                     |                                                                                                                               |
|--------------------------------------------|----------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper      | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                           |
| <b>Voltage Rating</b>                      | 300V                                   | <b>Twisted Conductor Diameter</b>   | 0.145 inch; nominal                                                                                                           |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)            | <b>Overall Diameter</b>             | 0.209 inch; nominal                                                                                                           |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                           | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                   |
| <b>Capacitance, Mutual, Nom.</b>           | 18 pF/ft                               | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                           |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                                    | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                      |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                              | <b>Sunlight Resistant</b>           | No                                                                                                                            |
| <b>D.C. Resistance, Max.</b>               | 16.4 Ω / 1000ft.                       | <b>Oil Resistance</b>               | No                                                                                                                            |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch                 | <b>Flame Retardant</b>              | FT-4                                                                                                                          |
| <b>Shield</b>                              | None                                   | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                              |
| <b>Drain</b>                               | None                                   |                                     |                                                                                                                               |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)               |                                     |                                                                                                                               |
| <b>Conductor Identification</b>            | Black, Red, White, Green, Orange, Blue | <b>Sample Print Legend</b>          | QUABBIN 7135 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM II /<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal                    |                                     |                                                                                                                               |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                    |                                     |                                                                                                                               |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7135-1 Unshielded 6-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ±10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                            |                                                     |                           |                            |                |
| <b>Q7135-1</b>                                                                       | 6                    | 22  | 7      | 0.209 [5.31 mm]            | 2.09                                                | 30                        | 0.0284                     | \$0.38         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

# Control and Signal Cable

## Q7140-1 Unshielded 7-Conductor 22AWG Cable Specifications

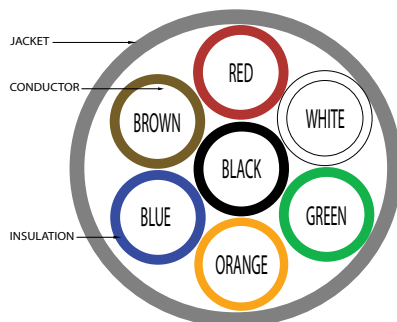
|                                            |                                               |                                     |                                                                                                                             |
|--------------------------------------------|-----------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper             | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                         |
| <b>Voltage Rating</b>                      | 300V                                          | <b>Overall Diameter</b>             | 0.214 inch; nominal                                                                                                         |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)                   | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                 |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                                  | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                         |
| <b>Capacitance, Mutual, Nom.</b>           | 28 pF/ft                                      | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                    |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                                           | <b>Sunlight Resistant</b>           | No                                                                                                                          |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                                     | <b>Oil Resistance</b>               | No                                                                                                                          |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                              | <b>Flame Retardant</b>              | FT-4                                                                                                                        |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch                        | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                            |
| <b>Shield</b>                              | None                                          |                                     |                                                                                                                             |
| <b>Drain</b>                               | None                                          |                                     |                                                                                                                             |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)                      | <b>Sample Print Legend</b>          | QUABBIN 7140 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM I/<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Identification</b>            | Black, red, white, green, orange, blue, brown |                                     |                                                                                                                             |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal                           |                                     |                                                                                                                             |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                           |                                     |                                                                                                                             |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7140-1 Unshielded 7-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ±10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                            |                                                     |                           |                            |                |
| <b>Q7140-1</b>                                                                       | 7                    | 22  | 7      | 0.214 [5.44 mm]            | 2.14                                                | 20                        | 0.0329                     | \$0.54         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

# Control and Signal Cable

## Q7145-1 Unshielded 8-Conductor 22AWG Cable Specifications

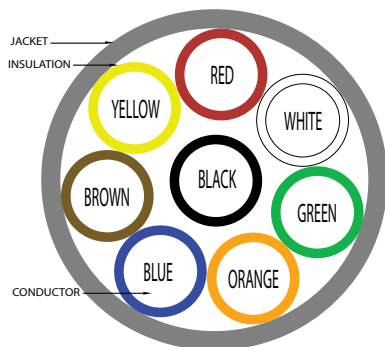
|                                            |                                                       |                                     |                                                                                                                              |
|--------------------------------------------|-------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper                     | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                          |
| <b>Voltage Rating</b>                      | 300V                                                  | <b>Twisted Conductor Diameter</b>   | 0.168 inch; nominal                                                                                                          |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)                           | <b>Overall Diameter</b>             | 0.232 inch; nominal                                                                                                          |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                                          | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                  |
| <b>Capacitance, Mutual, Nom.</b>           | 25 pF/ft                                              | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                          |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                                                   | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                     |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                                             | <b>Sunlight Resistant</b>           | No                                                                                                                           |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                                      | <b>Oil Resistance</b>               | No                                                                                                                           |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch                                | <b>Flame Retardant</b>              | FT-4                                                                                                                         |
| <b>Shield</b>                              | None                                                  | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464<br>MEETS VW-1 FLAME TEST                                                    |
| <b>Drain</b>                               | None                                                  |                                     |                                                                                                                              |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)                              | <b>Sample Print Legend</b>          | QUABBIN 7145 (UL) TYPE CM 22 AWG<br>OR AWM 2464 VW-1 -- CSA LL51726 AWM<br>I/II A/B 80C 300V FT4 -- RoHS -- (LOT DESIGNATOR) |
| <b>Conductor Identification</b>            | Black, Red, White, Green, Orange, Blue, Brown, Yellow |                                     |                                                                                                                              |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal                                   |                                     |                                                                                                                              |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                                   |                                     |                                                                                                                              |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7145-1 Unshielded 8-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ± 10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|-----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                             |                                                     |                           |                            |                |
| <b>Q7145-1</b>                                                                       | 8                    | 22  | 10     | 0.232 [5.90 mm]             | 2.32                                                | 30                        | 0.0375                     | \$0.53         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

# Control and Signal Cable

## Q7150-1 Unshielded 9-Conductor 22AWG Cable Specifications

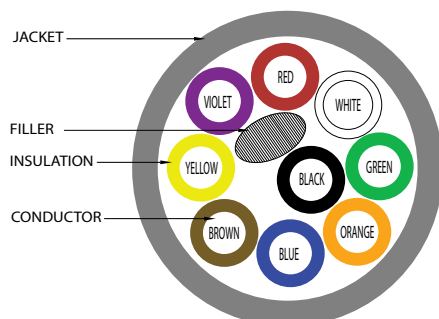
|                                            |                                                               |                                     |                                                                                                                               |
|--------------------------------------------|---------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper                             | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                           |
| <b>Voltage Rating</b>                      | 300V                                                          | <b>Twisted Conductor Diameter</b>   | 0.182 inch; nominal                                                                                                           |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)                                   | <b>Overall Diameter</b>             | 0.246 inch; nominal                                                                                                           |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                                                  | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                   |
| <b>Capacitance, Mutual, Nom.</b>           | 28 pF/ft                                                      | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                           |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                                                           | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                      |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                                                     | <b>Sunlight Resistant</b>           | No                                                                                                                            |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                                              | <b>Oil Resistance</b>               | No                                                                                                                            |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch                                        | <b>Flame Retardant</b>              | FT-4                                                                                                                          |
| <b>Shield</b>                              | None                                                          | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                              |
| <b>Drain</b>                               | None                                                          |                                     |                                                                                                                               |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)                                      |                                     |                                                                                                                               |
| <b>Conductor Identification</b>            | Black, red, white, green, orange, blue, brown, yellow, purple | <b>Sample Print Legend</b>          | QUABBIN 7150 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM II /<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal                                           |                                     |                                                                                                                               |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                                           |                                     |                                                                                                                               |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7150-1 Unshielded 9-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ± 10%) | Minimum Installed Bend Radius (inches) <sup>†</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|-----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                             |                                                     |                           |                            |                |
| <b>Q7150-1</b>                                                                       | 9                    | 22  | 7      | 0.246 [6.24 mm]             | 2.46                                                | 30                        | 0.0422                     | \$0.69         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

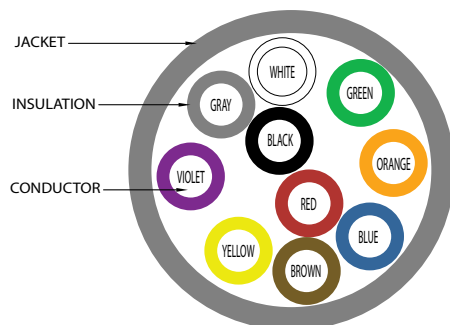
# Control and Signal Cable

| Q7155-1 Unshielded 10-Conductor 22AWG Cable Specifications |                                                                     |                                     |                                                                                                                             |
|------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>                    | 22AWG 7/30 Stranded Tinned Copper                                   | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                         |
| <b>Voltage Rating</b>                                      | 300V                                                                | <b>Twisted Conductor Diameter</b>   | 0.185 inch; nominal                                                                                                         |
| <b>Temperature Rating, Max.</b>                            | 60°C & 80°C (140°F & 176°F)                                         | <b>Overall Diameter</b>             | 0.249 inch; nominal                                                                                                         |
| <b>Temperature Rating, Min.</b>                            | -20°C (-4°F)                                                        | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                 |
| <b>Capacitance, Mutual, Nom.</b>                           | 28 pF/ft                                                            | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                         |
| <b>Capacitance, Grounded, Nom.</b>                         | N/A                                                                 | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                    |
| <b>Dielectric Withstanding, Min.</b>                       | 1500V RMS                                                           | <b>Sunlight Resistant</b>           | No                                                                                                                          |
| <b>D.C. Resistance, Max.</b>                               | 16.7 $\Omega$ / 1000ft.                                             | <b>Oil Resistance</b>               | No                                                                                                                          |
| <b>Conductor Twist / Lay</b>                               | Left hand / 2-1/2 Inch                                              | <b>Flame Retardant</b>              | FT-4                                                                                                                        |
| <b>Shield</b>                                              | None                                                                | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                            |
| <b>Drain</b>                                               | None                                                                |                                     |                                                                                                                             |
| <b>Conductor Insulation Material</b>                       | Polyvinyl chloride (PVC)                                            |                                     |                                                                                                                             |
| <b>Conductor Identification</b>                            | Black, red, white, green, orange, blue, brown, yellow, purple, gray | <b>Sample Print Legend</b>          | QUABBIN 7155 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM I/<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b>                 | 0.010 inch; nominal                                                 |                                     |                                                                                                                             |
| <b>Bare Conductor Diameter</b>                             | 0.030 inch; nominal                                                 |                                     |                                                                                                                             |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

| Q7155-1 Unshielded 10-Conductor 22AWG Cable Specifications                           |                      |     |        |                                      |                                                        |                              |                               |                |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|--------------------------------------|--------------------------------------------------------|------------------------------|-------------------------------|----------------|
| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D.<br>(Inches $\pm 10\%$ ) | Minimum Installed Bend Radius<br>(inches) <sup>1</sup> | Minimum Cut Length<br>(ft)** | Approximate Weight<br>(lb/ft) | Price per foot |
|  |                      |     |        |                                      |                                                        |                              |                               |                |
| <b>Q7155-1</b>                                                                       | 10                   | 22  | 7      | 0.249 [6.32 mm]                      | 2.49                                                   | 30                           | 0.0423                        | \$0.74         |

1. Installed bend radius  $\geq 10 \times$  diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

# Control and Signal Cable

## Q7160-1 Unshielded 12-Conductor 22AWG Cable Specifications

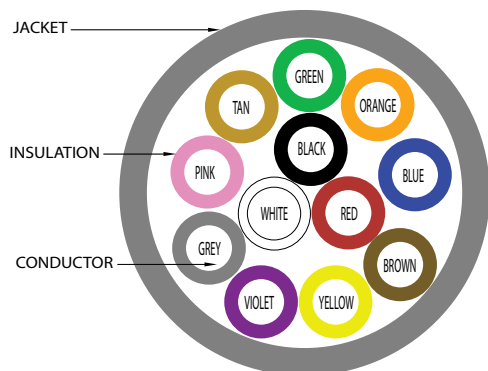
|                                            |                                                                                |                                     |                                                                                                               |
|--------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper                                              | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                           |
| <b>Voltage Rating</b>                      | 300V                                                                           | <b>Twisted Conductor Diameter</b>   | 0.202 inch; nominal                                                                                           |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)                                                    | <b>Overall Diameter</b>             | 0.266 inch; nominal                                                                                           |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                                                                   | <b>Jacket Color</b>                 | Chrome Gray                                                                                                   |
| <b>Capacitance, Mutual, Nom.</b>           | 30 pF/ft                                                                       | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                           |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                                                                            | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                      |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                                                                      | <b>Sunlight Resistant</b>           | No                                                                                                            |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                                                               | <b>Oil Resistance</b>               | No                                                                                                            |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch                                                         | <b>Flame Retardant</b>              | FT-4                                                                                                          |
| <b>Shield</b>                              | None                                                                           | <b>Approvals*</b>                   | NEC (UL) TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464 80C 300V                                                     |
| <b>Drain</b>                               | None                                                                           |                                     |                                                                                                               |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)                                                       |                                     |                                                                                                               |
| <b>Conductor Identification</b>            | Black, Red, White, Green, Orange, Blue, Brown, Yellow, Purple, Gray, Pink, Tan | <b>Sample Print Legend</b>          | QUABBIN 7160 (UL) TYPE CM 22 OR AWM 2464 -- CSA LL51726 AWM I/II A/B 80C 300V FT4 -- RoHS -- (LOT DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal                                                            |                                     |                                                                                                               |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                                                            |                                     |                                                                                                               |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7160-1 Unshielded 12-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ±10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                            |                                                     |                           |                            |                |
| <b>Q7160-1</b>                                                                       | 12                   | 22  | 7      | 0.266 [6.76 mm]            | 2.66                                                | 30                        | 0.0493                     | \$0.70         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

# Control and Signal Cable

## Q7165-1 Unshielded 15-Conductor 22AWG Cable Specifications

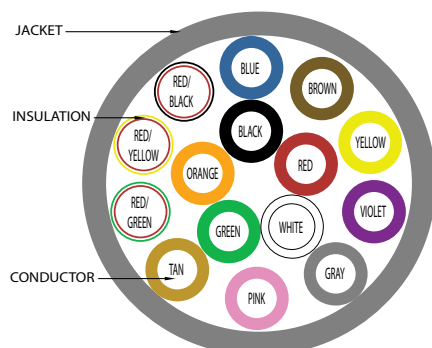
|                                            |                                                                                                                  |                                     |                                                                                                                             |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper                                                                                | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                         |
| <b>Voltage Rating</b>                      | 300V                                                                                                             | <b>Twisted Conductor Diameter</b>   | 0.234 inch; nominal                                                                                                         |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)                                                                                      | <b>Overall Diameter</b>             | 0.298 inch; nominal                                                                                                         |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                                                                                                     | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                 |
| <b>Capacitance, Mutual, Nom.</b>           | 28 pF/ft                                                                                                         | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                         |
| <b>Capacitance, Grounded, Nom.</b>         | N/A                                                                                                              | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                    |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                                                                                                        | <b>Sunlight Resistant</b>           | No                                                                                                                          |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                                                                                                 | <b>Oil Resistance</b>               | No                                                                                                                          |
| <b>Conductor Twist / Lay</b>               | Left hand / 2-1/2 Inch                                                                                           | <b>Flame Retardant</b>              | FT-4                                                                                                                        |
| <b>Shield</b>                              | None                                                                                                             | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                            |
| <b>Drain</b>                               | None                                                                                                             |                                     |                                                                                                                             |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)                                                                                         |                                     |                                                                                                                             |
| <b>Conductor Identification</b>            | Black, red, white, green, orange, blue, brown, yellow, purple, gray, pink, tan, red-green, red-yellow, red-black | <b>Sample Print Legend</b>          | QUABBIN 7165 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM I/<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal                                                                                              |                                     |                                                                                                                             |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                                                                                              |                                     |                                                                                                                             |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7165-1 Unshielded 15-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ± 10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|-----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                             |                                                     |                           |                            |                |
| <b>Q7165-1</b>                                                                       | 15                   | 22  | 7      | 0.298 [7.57 mm]             | 2.98                                                | 30                        | 0.0621                     | \$1.08         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

# Control and Signal Cable

## Q7170-1 Unshielded 20-Conductor 22AWG Cable Specifications

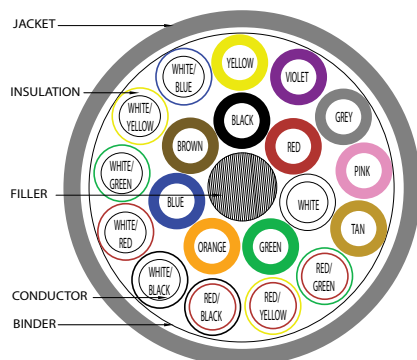
|                                            |                                                                                                                  |                                     |                                                                                                                               |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Conductors Gauge &amp; Stranding</b>    | 22AWG 7/30 Stranded Tinned Copper                                                                                | <b>Insulated Conductor Diameter</b> | 0.050 inch; nominal                                                                                                           |
| <b>Voltage Rating</b>                      | 300V                                                                                                             | <b>Twisted Conductor Diameter</b>   | 0.276 inch; nominal                                                                                                           |
| <b>Temperature Rating, Max.</b>            | 60°C & 80°C (140°F & 176°F)                                                                                      | <b>Overall Diameter</b>             | 0.340 inch; nominal                                                                                                           |
| <b>Temperature Rating, Min.</b>            | -20°C (-4°F)                                                                                                     | <b>Jacket Color</b>                 | Chrome Gray                                                                                                                   |
| <b>Capacitance, Mutual, Nom.</b>           | 28 pF/ft                                                                                                         | <b>Jacket Thickness</b>             | 0.032 inch; nominal                                                                                                           |
|                                            |                                                                                                                  | <b>Jacket Material</b>              | Polyvinyl chloride (PVC)                                                                                                      |
| <b>Dielectric Withstanding, Min.</b>       | 1500V RMS                                                                                                        | <b>Sunlight Resistant</b>           | No                                                                                                                            |
| <b>D.C. Resistance, Max.</b>               | 16.7 Ω / 1000ft.                                                                                                 | <b>Oil Resistance</b>               | No                                                                                                                            |
| <b>Shield</b>                              | None                                                                                                             | <b>Flame Retardant</b>              | FT-4                                                                                                                          |
| <b>Drain</b>                               | None                                                                                                             | <b>Approvals*</b>                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                              |
| <b>Conductor Insulation Material</b>       | Polyvinyl chloride (PVC)                                                                                         |                                     |                                                                                                                               |
| <b>Conductor Identification</b>            | Black, red, white, green, orange, blue, brown, yellow, purple, gray, pink, tan, red-green, red-yellow, red-black | <b>Sample Print Legend</b>          | QUABBIN 7170 (UL) TYPE CM 22 AWG<br>OR AWM 2464 -- CSA LL51726 AWM II /<br>II A/B 80C 300V FT4 -- RoHS -- (LOT<br>DESIGNATOR) |
| <b>Conductor Insulation Wall Thickness</b> | 0.010 inch; nominal                                                                                              |                                     |                                                                                                                               |
| <b>Bare Conductor Diameter</b>             | 0.030 inch; nominal                                                                                              |                                     |                                                                                                                               |

\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

## Q7170-1 Unshielded 20-Conductor 22AWG Cable Specifications

| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches ±10%) | Minimum Installed Bend Radius (inches) <sup>1</sup> | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|----------------------------|-----------------------------------------------------|---------------------------|----------------------------|----------------|
|  |                      |     |        |                            |                                                     |                           |                            |                |
| <b>Q7170-1</b>                                                                       | 20                   | 22  | 7      | 0.340 [8.63 mm]            | 3.40                                                | 30                        | 0.0862                     | \$1.22         |

1. Installed bend radius ≥ 10x diameter



\*\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths



Please Note: Our prices on Control and Sensor 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.

| Q7175-1 Unshielded 25-Conductor 22AWG Cable Specifications |                                                                                                                                                                                                                                                        |                              |                                                                                                                    |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Conductors Gauge & Stranding                               | 22AWG 7/30 Stranded Tinned Copper                                                                                                                                                                                                                      | Insulated Conductor Diameter | 0.050 inch; nominal                                                                                                |
| Voltage Rating                                             | 300V                                                                                                                                                                                                                                                   | Twisted Conductor Diameter   | 0.290 inch; nominal                                                                                                |
| Temperature Rating, Max.                                   | 60°C & 80°C (140°F & 176°F)                                                                                                                                                                                                                            | Overall Diameter             | 0.354 inch; nominal                                                                                                |
| Temperature Rating, Min.                                   | -20°C (-4°F)                                                                                                                                                                                                                                           | Jacket Color                 | Chrome Gray                                                                                                        |
| Capacitance, Mutual, Nom.                                  | 28 pF/ft                                                                                                                                                                                                                                               | Jacket Thickness             | 0.032 inch; nominal                                                                                                |
| Capacitance, Grounded, Nom.                                | N/A                                                                                                                                                                                                                                                    | Jacket Material              | Polyvinyl chloride (PVC)                                                                                           |
| Dielectric Withstanding, Min.                              | 1500V RMS                                                                                                                                                                                                                                              | Sunlight Resistant           | No                                                                                                                 |
| D.C. Resistance, Max.                                      | 16.7 Ω / 1000ft.                                                                                                                                                                                                                                       | Oil Resistance               | No                                                                                                                 |
| Conductor Twist / Lay                                      | Left hand / 2-1/2 Inch                                                                                                                                                                                                                                 | Flame Retardant              | FT-4                                                                                                               |
| Shield                                                     | None                                                                                                                                                                                                                                                   | Approvals*                   | (UL) NEC TYPE CM<br>CSA AWM FT4<br>UL STYLE 2464                                                                   |
| Drain                                                      | None                                                                                                                                                                                                                                                   |                              |                                                                                                                    |
| Conductor Insulation Material                              | Polyvinyl chloride (PVC)                                                                                                                                                                                                                               |                              |                                                                                                                    |
| Conductor Identification                                   | Black, red, white, green, orange, blue, brown, yellow, purple, gray, pink, tan, red-green, red-yellow, red-black, white-black, white-red, white-green, white-yellow, white-blue, white-brown, white-orange, white -gray, white-purple, white-black-red | Sample Print Legend          | QUABBIN 7175 (UL) TYPE CM 22 AWG OR AWM 2464 -- CSA LL51726 AWM I/ II A/B 80C 300V FT4 -- RoHS -- (LOT DESIGNATOR) |
| Conductor Insulation Wall Thickness                        | 0.010 inch; nominal                                                                                                                                                                                                                                    |                              |                                                                                                                    |
| Bare Conductor Diameter                                    | 0.030 inch; nominal                                                                                                                                                                                                                                    |                              |                                                                                                                    |

| Q7175-1 Unshielded 25-Conductor 22AWG Cable Specifications                           |                      |     |        |                                   |                                        |                           |                            |                |
|--------------------------------------------------------------------------------------|----------------------|-----|--------|-----------------------------------|----------------------------------------|---------------------------|----------------------------|----------------|
| Part Number                                                                          | Number of Conductors | AWG | Strand | Maximum O.D. (Inches $\pm 10\%$ ) | Minimum Installed Bend Radius (inches) | Minimum Cut Length (ft)** | Approximate Weight (lb/ft) | Price per foot |
|  |                      |     |        |                                   |                                        |                           |                            |                |
| <a href="#">Q7175-1</a>                                                              | 25                   | 22  | 7      | 0.354 [8.99 mm]                   | 3.54                                   | 30                        | 0.0974                     | \$1.85         |

The diagram illustrates a cross-section of a composite material, likely a cable or pipe, with four distinct layers:

- JACKET:** The outermost layer, shown as a thick gray ring.
- INSULATION:** The layer immediately inside the jacket, containing numerous small, colored circles representing different insulating materials. The colors include: White/Black/Red, Tan, Red/ Green, Red/ Yellow, Red/ Black, White/ Black, White/ Red, White/ Brown, White/ Blue, White/ Yellow, White/ Green, White/ Orange, White/ Gray, Gray, Black, Blue, Brown, Red, White, Pink, Green, Orange, Purple, Violet, and White/ Violet.
- CONDUCTOR:** The central layer, represented by a thin white ring.
- BINDER:** The layer immediately inside the conductor, represented by a thin gray ring.

**Wires Cords and Cables**      **tCBL-286**

# Control and Signal Cable



Control and signal cable from Quabbin is available in sizes from 24 AWG to 16 AWG with up to 25 conductors. These are available either in unshielded or shielded constructions. Individual conductors are stranded tinned copper with color coded insulation for easy identification, with an industry standard PVC chrome gray jacket. Shielded versions include an overall aluminum mylar foil tape with a tinned copper drain wire for maximum effectiveness against external electrical noise interference.

With a 300 and 600 volt rating, these cables are ideal for low voltage control signals and audio applications.

The 4-conductor unshielded versions are designed to work directly with our SureStep® STP-DRV drives for applications where a longer cable is required. The cables carry both UL and CSA approvals and are proudly made in the USA. Combining all that with our cut to length ordering, eliminates unnecessary expense and waste by ordering only the length needed, in 1 foot increments with a low 30 foot minimum, makes these cables a great value.

## Quabbin Control and Signal Cable Application Examples

| Part Number                    | Common Application                                                                                          |
|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>Q8508-1</u></a> | Low capacitance, RS-232 computer interconnect, extended distance cable, RoHS compliant materials            |
| <a href="#"><u>Q8215-1</u></a> |                                                                                                             |
| <a href="#"><u>Q8205-1</u></a> | RS-232 computer interconnect, instrumentation, audio, broadcast, Class 2 circuits, RoHS compliant materials |
| <a href="#"><u>Q8200-1</u></a> |                                                                                                             |
| <a href="#"><u>Q8195-1</u></a> |                                                                                                             |
| <a href="#"><u>Q8190-1</u></a> | Computer interconnect, instrumentation, audio, broadcast, RoHS compliant materials                          |
| <a href="#"><u>Q8185-1</u></a> |                                                                                                             |
| <a href="#"><u>Q8180-1</u></a> |                                                                                                             |
| <a href="#"><u>Q8175-1</u></a> | RS-232 computer interconnect, instrumentation, audio, broadcast, Class 2 circuits, RoHS compliant materials |
| <a href="#"><u>Q8170-1</u></a> |                                                                                                             |
| <a href="#"><u>Q8165-1</u></a> |                                                                                                             |
| <a href="#"><u>Q8138-1</u></a> | Instrumentation, audio, control cable                                                                       |
| <a href="#"><u>Q8138-1</u></a> | RS-232 computer interconnect, audio, and instrumentation cable, RoHS compliant materials                    |
| <a href="#"><u>Q8110-1</u></a> | RoHS compliant materials                                                                                    |
| <a href="#"><u>Q7565-1</u></a> | Communication, data and control cable, RoHS compliant materials                                             |
| <a href="#"><u>Q7560-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7555-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7545-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7535-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7525-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7465-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7395-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7325-1</u></a> | Instrumentation, audio, control cable                                                                       |
| <a href="#"><u>Q7320-1</u></a> | Instrumentation, audio, and broadcast cable, RoHS compliant materials                                       |
| <a href="#"><u>Q7315-1</u></a> | Instrumentation, audio, control cable                                                                       |
| <a href="#"><u>Q7175-1</u></a> | RS-232 computer interconnect, control and audio cable, RoHS compliant materials                             |
| <a href="#"><u>Q7170-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7165-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7160-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7155-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7150-1</u></a> | Instrumentation, audio, control cable                                                                       |
| <a href="#"><u>Q7145-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7140-1</u></a> |                                                                                                             |
| <a href="#"><u>Q7135-1</u></a> | RS-232 computer interconnect, control and audio cable, RoHS compliant materials                             |
| <a href="#"><u>Q7131-1</u></a> | Instrumentation, audio, control cable, stepper motor control                                                |
| <a href="#"><u>Q7125-1</u></a> |                                                                                                             |



# Control and Signal Cable

## Quabbin Control and Signal Cable Application Examples (continued)

| <b>Part Number</b>             | <b>Common Application</b>                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <a href="#"><u>Q7121-1</u></a> | Instrumentation, audio, control cable                                                                                         |
| <a href="#"><u>Q7120-1</u></a> | RS-232 computer interconnect, control and audio cable, RoHS compliant materials                                               |
| <a href="#"><u>Q7115-1</u></a> | Instrumentation, audio, control cable                                                                                         |
| <a href="#"><u>Q6151-1</u></a> | Data and computer interconnect cable, RoHS compliant materials                                                                |
| <a href="#"><u>Q6145-1</u></a> | Instrumentation, audio, broadcast cable, RoHS compliant materials                                                             |
| <a href="#"><u>Q6140-1</u></a> | Instrumentation, audio, broadcast cable                                                                                       |
| <a href="#"><u>Q6130-1</u></a> | Instrumentation, audio and control cable, RoHS compliant materials                                                            |
| <a href="#"><u>Q6100-1</u></a> | Instrumentation, audio, control cable, stepper motor control                                                                  |
| <a href="#"><u>Q4560-1</u></a> | Instrumentation, audio, broadcast cable                                                                                       |
| <a href="#"><u>Q4177-1</u></a> | Instrumentation, audio, broadcast cable, RoHS compliant materials                                                             |
| <a href="#"><u>Q4175-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4170-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4165-1</u></a> | Instrumentation, audio, broadcast cable                                                                                       |
| <a href="#"><u>Q4140-1</u></a> | Instrumentation, audio and control cable, RoHS compliant materials                                                            |
| <a href="#"><u>Q4135-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4130-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4125-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4120-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4110-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4105-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q4100-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q3130-1</u></a> | Instrumentation, audio and control cable, RoHS compliant materials                                                            |
| <a href="#"><u>Q3100-1</u></a> | Instrumentation, audio, control cable, stepper motor control                                                                  |
| <a href="#"><u>Q0225-1</u></a> | Process system interconnect, power limited tray cable, instrumentation tray cable, class 3 circuits, RoHS compliant materials |
| <a href="#"><u>Q0220-1</u></a> | Process system interconnect, power limited tray cable, instrumentation tray cable, class 3 circuits                           |
| <a href="#"><u>Q0200-1</u></a> | Process system interconnect, power limited tray cable, instrumentation tray cable, class 3 circuits, RoHS compliant materials |
| <a href="#"><u>Q0195-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q0190-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q0170-1</u></a> |                                                                                                                               |
| <a href="#"><u>Q0165-1</u></a> | Process system interconnect, power limited tray cable, instrumentation tray cable, class 3 circuits                           |
| <a href="#"><u>Q0160-1</u></a> | Process system interconnect, power limited tray cable, instrumentation tray cable, class 3 circuits, RoHS compliant materials |
| <a href="#"><u>Q0140-1</u></a> | Process system interconnect, power limited tray cable, instrumentation tray cable, class 3 circuits                           |

# Control and Signal Cable

| Control & Signal Cable Cross-Reference |        |         |        |          |                |                                                     |                                                                                                                                                       |
|----------------------------------------|--------|---------|--------|----------|----------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADC                                    | Belden | Quabbin | Carol  | Alpha    | Lake           | Description                                         | Colors                                                                                                                                                |
| <a href="#"><u>Q8508-1</u></a>         | ---    | 8508    | ---    | ---      | ---            | 24AWG, 4 twisted pairs, shielded, PVC, chrome gray, | bk-wh/wh-bk/gn-wh/rd-wh                                                                                                                               |
| <a href="#"><u>Q8215-1</u></a>         | 9543   | 8215    | ---    | 6309     | C2425CST-45BLD | 24AWG, 25-conductor, shielded, PVC, chrome gray     | bk/wh/rd/gn/or/bu/wh-bk/rd-bk/gn-bk/or-bk/<br>bu-bk/bk-wh/rd-wh/gn-wh/bu-wh/bk-rd/wh-rd/<br>or-wh/bu-rd/rd-gn/bk-wh-rd/wh-bk-rd/<br>rd-bk-wh/gn-bk-wh |
| <a href="#"><u>Q8205-1</u></a>         | 9541   | 8205    | ---    | 6307     | C2415CST-45    | 24AWG, 15-conductor, shielded, PVC, chrome gray     | bk/wh/rd/gn/or/bu/wh-bk/rd-bk/gn-bk/or-bk/<br>bu-bk/bk-wh/rd-wh/gn-wh/bu-wh                                                                           |
| <a href="#"><u>Q8200-1</u></a>         | 9540   | 8200    | ---    | ---      | C2410CST-45    | 24AWG, 10-conductor, shielded, PVC, chrome gray     | bk/wh/rd/gn/br/bu/or/yl/vi/gr                                                                                                                         |
| <a href="#"><u>Q8195-1</u></a>         | 9539   | 8195    | ---    | ---      | C2410CST-45    | 24AWG, 9-conductor, shielded, PVC, chrome gray      | bk/wh/rd/gn/br/bu/or/yl/vi                                                                                                                            |
| <a href="#"><u>Q8190-1</u></a>         | 9538   | 8190    | ---    | ---      | C2410CST-45    | 24AWG, 8-conductor, shielded, PVC, chrome gray      | bk/wh/rd/gn/br/bu/or/yl                                                                                                                               |
| <a href="#"><u>Q8185-1</u></a>         | 9537   | 8185    | ---    | ---      | C247CST-45     | 24AWG, 7-conductor, shielded, PVC, chrome gray      | bk/wh/rd/gn/br/bu/or                                                                                                                                  |
| <a href="#"><u>Q8165-1</u></a>         | 9533   | 8165    | C0741A | 6300/3   | C243CST-45     | 24AWG, 3-conductor, shielded, PVC, chrome gray      | bk/rd/wh                                                                                                                                              |
| <a href="#"><u>Q8170-1</u></a>         | 9534   | 8170    | C0742A | 6300/4   | C244CST-BLD    | 24AWG, 4-conductor, shielded, PVC, chrome gray      | bk/rd/wh/gn                                                                                                                                           |
| <a href="#"><u>Q8175-1</u></a>         | 9535   | 8175    | C0753A | 6305     | C245CST-45     | 24AWG, 5-conductor, shielded, PVC, chrome gray,     | bk/rd/wh/gn/bn                                                                                                                                        |
| <a href="#"><u>Q8180-1</u></a>         | 9536   | 8180    | C0743A | 6306     | B246CST        | 24AWG, 6-conductor, shielded, PVC, chrome gray      | bk/rd/wh/gn/bn/bu                                                                                                                                     |
| <a href="#"><u>Q8138-1</u></a>         | 9508   | 8138    | ---    | 5478/C   | B248PRCST-45   | 24AWG, 8 twisted pairs, shielded, PVC, chrome gray  | bk.rd/bk.wh/bk.gn/bk.bu/bk.yl/bk.br/bk.or/rd.wh                                                                                                       |
| <a href="#"><u>Q8110-1</u></a>         | 9502   | 8110    | ---    | 5472/C   | B242PRCS       | 24AWG, 2 twisted pairs, shielded, PVC, chrome gray  | bk.rd/bk.wh                                                                                                                                           |
| <a href="#"><u>Q7115-1</u></a>         | 8442   | 7115    | C6348A | 1172C    | B222CT         | 22AWG, 2-conductor, unshielded, PVC, chrome gray    | bk/rd                                                                                                                                                 |
| <a href="#"><u>Q7120-1</u></a>         | ---    | 7120    | ---    | 1173C    | ---            | 22AWG, 3-conductor, unshielded, PVC, chrome gray    | bk/rd/wh                                                                                                                                              |
| <a href="#"><u>Q7121-1</u></a>         | 9443   | 7121    | C4062A | 1173C    | C223CT         | 22AWG, 3-conductor, unshielded, PVC, chrome gray    | bk/rd/gn                                                                                                                                              |
| <a href="#"><u>Q7125-1</u></a>         | 8444   | 7125    | C4063A | 1174C    | B224CT         | 22AWG, 4-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn                                                                                                                                           |
| <a href="#"><u>Q7131-1</u></a>         | 8445   | 7131    | C4064  | 1175C    | 225CT          | 22AWG, 5-conductor, unshielded, PVC, chrome gray    | bk/wh/rd/gn/br                                                                                                                                        |
| <a href="#"><u>Q7135-1</u></a>         | ---    | 7135    | ---    | 1176C    | ---            | 22AWG, 6-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn/bu/or                                                                                                                                     |
| <a href="#"><u>Q7140-1</u></a>         | 9430   | 7140    | C4088  | 1177C    | ---            | 22AWG, 7-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn/or/bu/br                                                                                                                                  |
| <a href="#"><u>Q7145-1</u></a>         | 9421   | 7145    | C4065  | 1178C    | B228CT-45      | 22AWG, 8-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn/bn/bu/or/yl                                                                                                                               |
| <a href="#"><u>Q7150-1</u></a>         | 9423   | 7150    | C4070  | 1179C    | ---            | 22AWG, 9-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn/or/bu/br/yl/vi                                                                                                                            |
| <a href="#"><u>Q7155-1</u></a>         | 8456   | 7155    | C4071  | 1180C    | ---            | 22AWG, 10-conductor, unshielded, PVC, chrome gray   | bk/rd/wh/gn/or/bu/br/yl/vi/gr                                                                                                                         |
| <a href="#"><u>Q7160-1</u></a>         | 8457   | 7160    | C4607  | 1181C    | C2212CT-2464   | 22AWG, 12-conductor, unshielded, PVC, chrome gray   | bk/rd/wh/gn/bn/bu/or/yl/vi/gr/pk/tn                                                                                                                   |
| <a href="#"><u>Q7165-1</u></a>         | ---    | 7165R   | ---    | 1181/15C | ---            | 22AWG, 15-conductor, unshielded, PVC, chrome gray   | bk/rd/wh/gn/or/bu/br/yl/vi/gr/pk/tn/<br>rd-gn/rd-yl/rd-bk                                                                                             |
| <a href="#"><u>Q7170-1</u></a>         | ---    | 7170    | ---    | 1181/20C | ---            | 22AWG, 20-conductor, unshielded, PVC, chrome gray   | bk/rd/wh/gn/or/bu/br/yl/vi/gr/pk/tn/rd-gn/<br>rd-yl/rd-bk/wh-bk/wh-rd/wh-gn/wh-yl/wh-bl                                                               |
| <a href="#"><u>Q7175-1</u></a>         | ---    | 7175    | ---    | 1181/25C | ---            | 22AWG, 25-conductor, unshielded, PVC, chrome gray   | bk/rd/wh/gn/or/bu/br/yl/vi/gr/pk/tn/rd-gn/<br>rd-yl/rd-bk/wh-bk/wh-rd/wh-gn/wh-yl/wh-bl/<br>wh-br/wh-or/wh-gr/wh-vi/wh-bk-rd                          |

# Control and Signal Cable

## Control & Signal Cable Cross-Reference

| ADC                     | Belden | Quabbin | Carol  | Alpha    | Lake             | Description                                         | Colors                                                                                                                                                      |
|-------------------------|--------|---------|--------|----------|------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Q7315-1</a> | 8451   | 7315    | C2516A | 2461C    | 222CSTPP         | 22AWG, 2-conductor, shielded, PVC, chrome gray      | bk/rd                                                                                                                                                       |
| <a href="#">Q7320-1</a> | 8761   | 7320    | C2514  | 2401/C   | C222CSTP-45      | 22AWG, 2-conductor, shielded, PVC, chrome gray      | cl/bk                                                                                                                                                       |
| <a href="#">Q7325-1</a> | 8771   | 7325    | C2526  | 1294C    | 223CSP           | 22AWG, 3-conductor, shielded, PVC, chrome gray      | bk/rd/cl                                                                                                                                                    |
| <a href="#">Q7395-1</a> | 8723   | 7395    | C1352  | 2466C    | B222PRT          | 22AWG, 2 twisted pairs, shielded, PVC, chrome gray  | bk/rd/wh/gn                                                                                                                                                 |
| <a href="#">Q7465-1</a> | 8724   | 7465    | C1340  | 2464/C   | B222PROT         | 22AWG, 2 twisted pair, shielded, PVC, chrome gray   | bk-rd-wh-gn                                                                                                                                                 |
| <a href="#">Q7565-1</a> | ---    | 7565    | ---    | 1299/15C | ---              | 22AWG, 15-conductor, shielded, PVC, chrome gray     | bk/rd/wh/gn/or/bu/br/yl/vi/gr/pk/tn/<br>rd-gn/rd-yl/rd-bk                                                                                                   |
| <a href="#">Q7560-1</a> | ---    | 7560    | ---    | 1299/12C | ---              | 22AWG, 12-conductor, shielded, PVC, chrome gray     | bk/rd/wh/gn/or/bu/br/yl/vi/gr/pk/tn                                                                                                                         |
| <a href="#">Q7555-1</a> | ---    | 7555    | ---    | 1299/10C | ---              | 22AWG, 10-conductor, shielded, PVC, chrome gray     | bk/rd/wh/gn/or/bu/br/yl/vi/gr                                                                                                                               |
| <a href="#">Q7545-1</a> | ---    | 7545    | ---    | 1298C    | ---              | 22AWG, 8-conductor, shielded, PVC, chrome gray      | bk/rd/wh/gn/or/bu/br/yl                                                                                                                                     |
| <a href="#">Q7535-1</a> | ---    | 7535    | C0763  | 1296C    | ---              | 22AWG, 6-conductor, shielded, PVC, chrome gray      | bk/rd/wh/gn/bu/or                                                                                                                                           |
| <a href="#">Q7525-1</a> | ---    | 7525    | C0762  | 1294C    | ---              | 22AWG, 4-conductor, shielded, PVC, chrome gray      | bk/rd/wh/gn                                                                                                                                                 |
| <a href="#">Q6100-1</a> | 9444   | 6100    | C6353A | 1317C    | C204Ct           | 20AWG, 4-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn                                                                                                                                                 |
| <a href="#">Q6130-1</a> | 8205   | 6130    | C6351  | 1895C    | B202CT           | 20AWG, 1 twisted pair, unshielded, PVC, chrome gray | bk/rd                                                                                                                                                       |
| <a href="#">Q6140-1</a> | 8762   | 6140    | C2524A | 2411C    | 202CSP           | 20AWG, 2-conductor, shielded, PVC, chrome gray      | bk/cl                                                                                                                                                       |
| <a href="#">Q6145-1</a> | 8772   | 6145    | C2528  | 2413C    | 203CSP           | 20AWG, 3-conductor, shielded, PVC, chrome gray      | bk/rd/cl                                                                                                                                                    |
| <a href="#">Q6151-1</a> | ---    | 6151    | ---    | ---      | ---              | 20AWG, 2 twisted pair, shielded, PVC, chrome gray   | bk/rd x gn/wh                                                                                                                                               |
| <a href="#">Q4560-1</a> | 9740   | 4560    | C8116  | 1897C    | B182CT16         | 18AWG, 2-conductor, unshielded, PVC, chrome gray    | bk/rd                                                                                                                                                       |
| <a href="#">Q4100-1</a> | 8489   | 4100    | C2404A | 1858/4C  | C184T(16)-2598   | 18AWG, 4-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn                                                                                                                                                 |
| <a href="#">Q4105-1</a> | 8465   | 4105    | C2420  | 1898/5C  | B185CT(19)-45    | 18AWG, 5-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn/bn                                                                                                                                              |
| <a href="#">Q4110-1</a> | 8489   | 4110    | C2404  | 1898/4C  | B184CT(19)-45    | 18AWG, 7-conductor, unshielded, PVC, chrome gray    | bk/wh/rd/gn/bn/bu/or                                                                                                                                        |
| <a href="#">Q4120-1</a> | 8466   | 4120    | C2412  | 1898/12C | B1812CT(19)-45   | 18AWG, 12-conductor, unshielded, PVC, chrome gray   | bk/wh/rd/gn/bu/wh-bk/<br>rd-bk/gn-bk/or-bk/bu-bk/bk-wh                                                                                                      |
| <a href="#">Q4125-1</a> | 8468   | 4125    | C2423  | 1898/15C | B1815CT(19)      | 18AWG, 15-conductor, unshielded, PVC, chrome gray   | bk/wh/rd/gn/or/bu/wh-bk/rd-bk/<br>gn-bk/or-bk/bu-bk/bk-wh/gn-wh/bu-wh                                                                                       |
| <a href="#">Q4130-1</a> | 8619   | 4130    | C2424  | 1898/19C | B1819CT19-45     | 18AWG, 19-conductor, unshielded, PVC, chrome gray   | bk/wh/rd/gn/or/bn/bu/wh-bk/rd-bk/gn-pk/<br>or-bk/bu-bk/bk-wh/rd-wh/gn-wh/bu-wh/bk-<br>rd/wh-rd/or-rd/bu-rd                                                  |
| <a href="#">Q4135-1</a> | 9626   | 4135    | C2433  | 1898/25C | C1825CT-45BLD    | 18AWG, 25-conductor, unshielded, PVC, chrome gray   | bk/wh/rd/gn/or/bu/wh-bk/rd-bk/gn-pk/<br>or-bk/bu-bk/bk-wh/rd-wh/gn-wh/bu-wh/bk-<br>rd/wh-rd/or-rd/bu-rd/rd-gn/or-gn/<br>bk-wh-rd/wh-bk-rd/rd-bk-wh/gn-bk-wh |
| <a href="#">Q4140-1</a> | 8461   | 4140    | C2830  | ---      | ---              | 18AWG, 2-conductor, unshielded, PVC, chrome gray    | bk/wh                                                                                                                                                       |
| <a href="#">Q4165-1</a> | 8760   | 4165    | C2534A | 2421C    | C182CSTP(16)-4S  | 18AWG, 2-conductor, shielded, PVC, chrome gray      | bk/cl                                                                                                                                                       |
| <a href="#">Q4170-1</a> | 8770   | 4170    | C2535A | 2423C    | 183CSP           | 18AWG, 3-conductor, shielded, PVC, chrome gray      | bk/rd/cl                                                                                                                                                    |
| <a href="#">Q4175-1</a> | 9418   | 4175    | C2543  | M13244   | C184CST(19)-45BL | 18AWG, 4-conductor, shielded, PVC, chrome gray      | bk/rd/wh/gn                                                                                                                                                 |
| <a href="#">Q4177-1</a> | ---    | 4177    | ---    | ---      | ---              | 18AWG, 6-conductor, shielded, PVC, chrome gray      | bk/rd/wh/gn/bn/bu                                                                                                                                           |
| <a href="#">Q3100-1</a> | 8620   | 3100    | C2425A | ---      | B164T-20811      | 16AWG, 4-conductor, unshielded, PVC, chrome gray    | bk/rd/wh/gn                                                                                                                                                 |
| <a href="#">Q3130-1</a> | 8471   | 3130    | C2405  | 1899C    | 162CPT19         | 16AWG, 2-conductor, unshielded, PVC, chrome gray    | bk/wh                                                                                                                                                       |

# Control and Signal Cable

| Control & Signal Cable Cross-Reference |               |                |              |              |                |                                                  |               |
|----------------------------------------|---------------|----------------|--------------|--------------|----------------|--------------------------------------------------|---------------|
| <b>ADC</b>                             | <b>Belden</b> | <b>Quabbin</b> | <b>Carol</b> | <b>Alpha</b> | <b>Lake</b>    | <b>Description</b>                               | <b>Colors</b> |
| <b><u>Q0225-1</u></b>                  | 9365          | 0225           | C0455        | 5640B1801    | T183ST(19)-BLD | 18AWG, 3-conductor, shielded, PVC, chrome gray   | bk/rd/wh      |
| <b><u>Q0220-1</u></b>                  | 9364          | 0220           | C0453A       | M39116       | ----           | 20AWG, 3-conductor, shielded, PVC, chrome gray   | bk/rd/wh      |
| <b><u>Q0200-1</u></b>                  | 9493          | 0200           | C0436        | 5630B1801    | T183T(19)-45   | 18AWG, 3-conductor, unshielded, PVC, chrome gray | bk/rd/wh      |
| <b><u>Q0195-1</u></b>                  | 9492          | 0195           | C0434        | 5630B2001    | ----           | 20AWG, 3-conductor, unshielded, PVC, chrome gray | bk/rd/wh      |
| <b><u>Q0190-1</u></b>                  | ---           | 0190           | ---          | ---          | ---            | 22AWG, 3-conductor, unshielded, PVC, chrome gray | bk/rd/wh      |
| <b><u>Q0170-1</u></b>                  | 9318          | 170            | C0454        | ---          | ---            | 18AWG, 2-conductor, shielded, PVC, chrome gray   | bk/rd         |
| <b><u>Q0165-1</u></b>                  | 9320          | 0165           | ---          | M39115       | ---            | 20AWG, 2-conductor, shielded, PVC, chrome gray   | bk/rd         |
| <b><u>Q0160-1</u></b>                  | 9322          | 0160           | C0450        | 5610B2201    | B222CST-45     | 22AWG, 2-conductor, shielded, PVC, chrome gray   | bk/rd         |
| <b><u>Q0140-1</u></b>                  | 9409          | 140            | C0435        | M39075       | ---            | 18AWG, 2-conductor, unshielded, PVC, chrome gray | bk/rd         |