Instrumentation Cable



Features

- Typical applications include industrial instrumentation, control, alarm, audio, intercom, and energy management circuits
- Dual listed Type ITC and Type PLTC
- Suitable for use in hazardous locations
- 20AWG, 18AWG, and 16AWG with 2, 4 or 8 twisted pairs, overall shield or individually shielded pairs with overall shield
- Conductor pairs with black and white premium PVC insulation and alpha-numeric identification
- Communication (Talk) wire included on multi-pair 18AWG and 16AWG cables for use during installation or instrument calibration
- Sunlight resistant PVC outer jacket with sequential foot markings
- Cut to length in 1 foot increments
- · Low 20 foot minimum length
- · Made in the USA

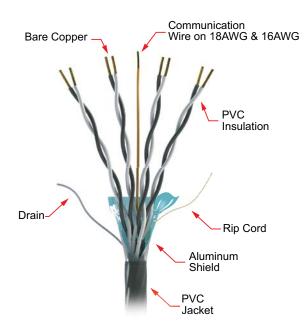
Overview

AutomationDirect offers 300V UL Instrumentation Cable available with 20AWG, 18AWG and 16AWG conductors in 1, 2, 4, or 8 twisted pairs with an overall shield or in 2, 4, or 8 individually shielded twisted pairs with an overall shield. The overall shielded cables have an aluminum/polyester foil shield with 100% coverage and a tinned copper continuous drain wire for protection against external electrical noise interference. Cables with both individually shielded pairs and an overall shield have aluminum/polyester foil shields with 100% coverage complete with separate tinned copper continuous drain wires for maximum effectiveness against both external electrical noise interference and crosstalk between pairs. Individual conductor pairs are stranded bare copper with black and white premium grade PVC insulation and marked with alpha-numeric print for easy identification. The cable's outer jacket is a black premium grade PVC that is sunlight resistant. A convenient 22AWG orange PVC insulated communications conductor is included on 18AWG and 16AWG multi-pair cables. Cut to length in 1 foot increments with a 20 foot minimum length.

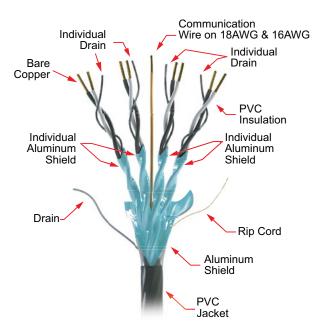
Our instrumentation cables are dual listed as UL 2250 Type ITC (Instrumentation Tray Cables) and UL 13 Type PLTC (Power Limited Tray Cables). Type ITC cables can be used for instrumentation and control circuits operating at 150 volts or less and 5 amperes or less as described in NEC Article 727. Type PLTC cables can be used for Class 2 and Class 3 remote-control, signaling, and power-limited circuits as described in NEC Article 725. Additionally, certain cables are permitted for use in hazardous locations as described in NEC Articles 501 through 505.



Overall Cable Shield



Individual and Overall Cable Shields



| 20AWG Instrumentation Cable - Overall Shield Specifications | | | | | | | | |
|---|---|-----------------------|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 20AWG Class B 7 stranded bare copper per ASTM B-3 and B-8 | Shield and Drain Wire | Overall aluminum polyester foil shield with a tinned copper drain wire | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | | OLIABBIN BIN (III) TYPE PLTO OP ITO OCANIO | | | | | |
| Conductor Insulation | PVC | Print Legend* | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 20AWG SHEILDED 105C SUN RES OR C(UL)US CM OR AWM 2464-Rohs-(LOT#) | | | | | |
| Pair Lay Length | 1.25 twists per inch | | 2101 10010 (2011) | | | | | |
| Resistance | 10.50Ω/1000' @ 20°C per conductor | Flame Rating | UL 1581 Section 1061 Cable Flame, UL 1581 Vertical Tray | | | | | |
| Capacitance | 31 pF/ft | | UL Standard 13 Type PLTC | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Applicable Standards | UL Standard 2250 Type ITC NEC Article 725 (Type PLTC) NEC Article 727 (Type ITC) | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | | | | | | | |

^{*} XX = Number of shielded pairs

20AWG Instrumentation Cable - Overall Shield Overall Overall Nominal Installed Approximate Weight Conductor **Conductor** Minimum Price Number Jacket 0.D. Bend Part Number AWG Stranding Insulation Approx. O.D. **Cut Length** of Pairs **Thickness** (Inches Radius per foot Thickness (lb/ft) (Inches) (ft)* (Mils) (Inches) ±10%) (Mils) PLTC3-20-1S-1 2.03 \$0.29 1 0.203 20 0.02 37 0.264 2.64 20 PLTC3-20-2S-1 0.04 \$0.47 20 7 15 0.063 PLTC3-20-4S-1 4 42 0.333 3.33 20 0.06 \$0.76 PLTC3-20-8S-1 0.453 4.53 0.11 \$1.40





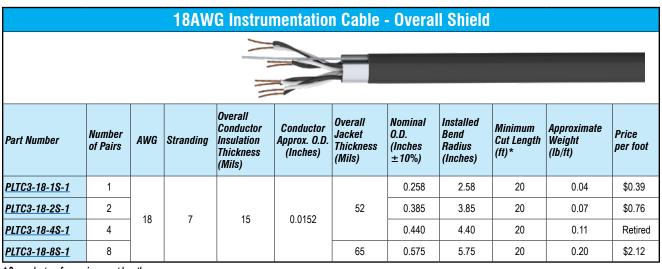
^{**} Included on multi-pair cables

^{*} See web store for maximum cut lengths

| 18A | 18AWG Instrumentation Cable - Overall Shield Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|---|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 18AWG Class B 7 stranded bare copper per ASTM B-3 and B-8 | Shield and Drain Wire | Overall aluminum polyester foil shield with a tinned copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight and moisture resistant black PVC (polyvinyl chloride) | Print Legend* | CCI ROYAL 18 AWG XX SHIELDED PAIRS PVC/PVC TYPE PLTC/ITC E176494 (UL) 105C SUN RES FT4/IEEE | | | | | | | |
| Conductor Insulation | PVC | rimi Leyenu | 1202 SEQUENTIAL MARKING | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | Flame Rating | Passes FT4/EEE 1202 Flame Test | | | | | | | |
| Resistance | 6.60Ω/1000' @ 20°C per conductor | riame namy | Passes IEEE 383 Flame Test (70,000btu) | | | | | | | |
| Capacitance | 40.66 pF/ft | | UL Standard 13 Type PLTC UL Standard 2250 Type ITC | | | | | | | |
| Inductance | 0.0957 μH/ft | | EPA 40 CFR, Part 26, Subpart C, heavy metals per Table 1, TCLP method NEC Article 725 (Type PLTC) | | | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Applicable Standards | NEC Article 727 (Type ITC) Hazardous Locations: NEC Article 501.10 (Class I, Div 2) | | | | | | | |
| emperature Rating | -30°C to 105°C (-22°F to 221°F) | | NEC Article 502.10 (Class II, Div 2) NEC Article 502.10 (Class II, Div 2) NEC Article 503.10 (Class III, Div 1 and 2) NEC Article 504 (Intrinsically Safe Systems) NEC Article 505.15 (Class I, Zone 2) | | | | | | | |

^{*} XX = Number of shielded pairs

^{**} Included on 18AWG and 16AWG multi-pair cables



^{*} See web store for maximum cut lengths





| | 18AWG Instrumentation Cable - Overall Shield Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|--|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 18AWG 7-stranded bare copper | Shield and Drain Wire | Overall aluminum polyester foil shield with a tinned copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | Print Legend | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 18AWG SHEILDED 105C SUN RES OR C(UL)US CM OR AWM | | | | | | | |
| Conductor Insulation | PVC | Film Legenu | 2464–RoHS(LOT#) | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | Flame Rating | UL 1685 Vertical Tray, Section 1061 of UL 1581 Cable | | | | | | | |
| Resistance | 6.64Ω/1000' @ 20°C per conductor | Traine nauny | Flame | | | | | | | |
| Conductor Markings | Black / White | | UL Standard 444 Type CM | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | Applicable Standards | UL Standard 758 AWM 2464 UL Standard 13 Type PLTC | | | | | | | |
| Communication Wire* | 22AWG PVC (orange) | | UL Standard 2250 Type ITC | | | | | | | |

^{*}Included on 18AWG and 16AWG multi-pair cables

| | 18AWG Instrumentation Cable - Overall Shield | | | | | | | | | | | |
|--------------|--|-----|-----------|---|---------------------------------------|--|------------------------|-------------------------------------|---|--------------------------------|----------------------------------|-------------------|
| | | | | | | | | | | | | |
| Part Number | Number of Pairs | AWG | Stranding | Overall Conductor Insulation Thickness (Mils) | Conductor Approx. O.D. (Inches) | Overall Jacket Thickness (Mils) | Capacitance (pF/ft) | Nominal O.D. (Inches ±10%) | Installed Bend Radius (Inches) | Minimum Cut Length (ft)* | Approximate Weight (lb/ft) | Price per foot |
| PLTC-18-1S-1 | 1 | | | | | 37 | 62 | 0.233 | 2.33 | 20 | 0.03 | \$0.33 |
| PLTC-18-2S-1 | 2 | 18 | 7 | 16 | 0.078 | 42 | 47 | 0.318 | 3.18 | 20 | 0.06 | \$0.61 |
| PLTC-18-4S-1 | 4 | 10 | / | 16 | | 52 | 43 | 0.417 | 4.17 | 20 | 0.10 | \$1.07 |
| PLTC-18-8S-1 | 8 | | | | | 52 | 41 | 0.535 | 5.35 | 20 | 0.17 | \$1.86 |

^{*} See web store for maximum cut lengths

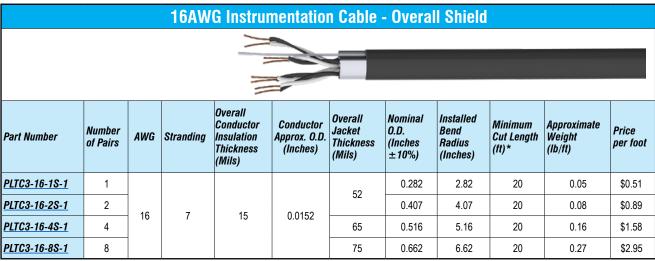




| 16A | 16AWG Instrumentation Cable - Overall Shield Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|--|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 16AWG Class B 7 stranded bare copper per ASTM B-3 and B-8 | Shield and Drain Wire | Overall aluminum polyester foil shield with a tinned coppe drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight and moisture resistant black PVC (polyvinyl chloride) | Print Legend* | CCI ROYAL 16 AWG XX SHIELDED PAIRS PVC/PVC TYPE PLTC/ITC E176494 (UL) 105C SUN RES FT4/IEEE | | | | | | | |
| Conductor Insulation | PVC | rriiit Legena | 1202 SEQUENTIAL MARKING | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | Flame Rating | Passes FT4/EEE 1202 Flame Test | | | | | | | |
| Resistance | 4.18Ω/1000' @ 20°C per conductor | riame nauny | Passes IEEE 383 Flame Test (70,000btu) | | | | | | | |
| Capacitance | 48.51 pF/ft | | UL Standard 13 Type PLTC UL Standard 2250 Type ITC | | | | | | | |
| Inductance | 0.0895 µH/ft | | EPA 40 CFR, Part 26, Subpart C, heavy metals per Table 1, TCLP method | | | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Applicable Standards | NEC Article 725 (Type PLTC) NEC Article 727 (Type ITC) Hazardous Locations: NEC Article 501.10 (Class I, Div 2) | | | | | | | |
| Temperature Rating | -30°C to 105°C (-22°F to 221°F) | | NEC Article 501.10 (Class I, Div 2) NEC Article 502.10 (Class II, Div 2) NEC Article 503.10 (Class III, Div 1 and 2) | | | | | | | |
| Communication Wire** | 22AWG PVC (orange) | | NEC Article 504 (Intrinsically Safe Systems) NEC Article 505.15 (Class I, Zone 2) | | | | | | | |

^{*} XX = Number of shielded pairs

^{**} Included on 18AWG and 16AWG multi-pair cables



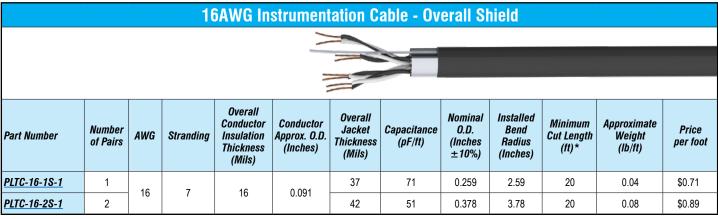
^{*} See web store for maximum cut lengths





| | 16AWG Instrumentation Cable - Overall Shield Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|--|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 16AWG 7-stranded bare copper | Shield and Drain Wire | Overall aluminum polyester foil shield with a tinned copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | Print Legend | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 16AWG SHEILDED 105C SUN RES OR C(UL)US CM OR AWM | | | | | | | |
| Conductor Insulation | PVC | rimi Legenu | 2464–RoHS(LOT#) | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | Flame Rating | UL 1685 Vertical Tray, Section 1061 of UL 1581 Cable | | | | | | | |
| Resistance | 4.15Ω/1000' @ 20°C per conductor | Traile natily | Flame | | | | | | | |
| Conductor Markings | Black / White | | UL Standard 444 Type CM | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | Applicable Standards | UL Standard 758 AWM 2464 UL Standard 13 Type PLTC | | | | | | | |
| Communication Wire* | 22AWG PVC (orange) | | UL Standard 2250 Type ITC | | | | | | | |

^{*}Included on 18AWG and 16AWG multi-pair cables



^{*} See web store for maximum cut lengths





| 20AWG Inst | 20AWG Instrumentation Cable - Individual and Overall Shields Specifications | | | | | | | | | |
|-----------------------------|---|----------------------|---|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | Conductor Gauge & Stranding 20AWG Class B 7 stranded bare copper per ASTM B-3 and B-8 Shi | | Individual and overall aluminum polyester foil shield with a tinned copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | | CHARDIN DIN (III) TVPF DI TO OD ITO CONVO | | | | | | | |
| Conductor Insulation | PVC | Print Legend* | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 20AWG SHEILDED 105C SUN RES OR C(UL)US CM OR AWM 2464-Rohs(LOT#) | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | | | | | | | | | |
| Resistance | 10.50Ω/1000' @ 20°C per conductor | Flame Rating | UL 1581 Section 1061 Cable Flame, UL 1581 Vertical Tra | | | | | | | |
| Capacitance | 31 pF/ft | | | | | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Applicable Standards | UL Standard 13 Type PLTC UL Standard 2250 Type ITC NEC Article 725 (Type PLTC) | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | | NEC Article 727 (Type ITC) | | | | | | | |
| Communication Wire** | 22AWG PVC (orange) | | | | | | | | | |

^{*} XX = Number of shielded pairs

20AWG Instrumentation Cable - Individual and Overall Shields Overall **Overall** Nominal Installed Approximate Weight Conductor Conductor Minimum Number Jacket 0.D. Bend Price Part Number Stranding Insulation Cut Length Approx. O.D. of Pairs Thickness (Inches Radius per foot (lb/ft) Thickness (Inches) (ft)* (Mils) ±10%) (Inches) (Mils) 2 PLTC3-20-2SS-1 42 0.312 3.12 20 0.05 \$0.60 4 20 7 0.063 0.411 4.11 20 0.09 \$1.03 PLTC3-20-4SS-1 15 52 0.520 0.14 PLTC3-20-8SS-1 8 5.20 20 \$1.76





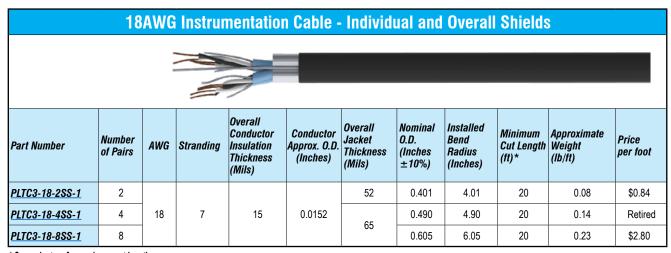
^{**} Included on 18AWG and 16AWG multi-pair cables

^{*} See web store for maximum cut lengths

| 18AWG Inst | rumentation Cable - Ind | lividual and Overa | II Shields Specifications |
|-----------------------------|---|-----------------------|---|
| Conductor Gauge & Stranding | ctor Gauge & Stranding 18AWG Class B 7 stranded bare copper per ASTM B-3 and B-8 | | 10x diameter |
| Voltage Rating | 300V | Shield and Drain Wire | Individual and overall aluminum polyester foil shield with a tinned copper drain wire |
| Jacket Material | Sunlight and moisture resistant black PVC (polyvinyl chloride) | Print Legend* | CCI ROYAL 18 AWG XX SHIELDED PAIRS PVC/PVC TYPE PLTC/ITC E176494 (UL) 105C SUN RES FT4/IEEE |
| Conductor Insulation | PVC | Frink Leyenu | 1202 SEQUENTIAL MARKING |
| Pair Lay Length | 1.25 twists per inch | Flame Rating | Passes FT4/EEE 1202 Flame Test |
| Resistance | 6.60Ω/1000' @ 20°C per conductor | Traine nating | Passes IEEE 383 Flame Test (70,000btu) |
| Capacitance | 40.66 pF/ft | | UL Standard 13 Type PLTC UL Standard 2250 Type ITC |
| Inductance | 0.0957 µH/ft | | EPA 40 CFR, Part 26, Subpart C, heavy metals per Table 1, TCLP method NEC Article 725 (Type PLTC) |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Applicable Standards | NEC Article 727 (Type ITC) Hazardous Locations: NEC Article 501.10 (Class I, Div 2) |
| Temperature Rating | -30°C to 105°C (-22°F to 221°F) | | NEC Article 501.10 (Class II, Div 2) NEC Article 503.10 (Class II, Div 2) NEC Article 503.10 (Class III, Div 1 and 2) |
| Communication Wire** | 22AWG PVC (orange) | | NEC Article 504 (Intrinsically Safe Systems) NEC Article 505.15 (Class I, Zone 2) |

^{*} XX = Number of shielded pairs

^{**} Included on 18AWG and 16AWG multi-pair cables



^{*} See web store for maximum cut lengths





| 18AW(| 18AWG Instrumentation Cable - Individual and Overall Shields Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|---|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 18AWG 7-stranded bare copper | Min. Bend Radius | 10x diameter | | | | | | | |
| Voltage Rating | 300V | Shield and Drain Wire | Individual and overall aluminum polyester foil shield with a tinned copper drain wire | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | Drint Logand | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 18AWG | | | | | | | |
| Conductor Insulation | PVC | Print Legend | SHEILDED 105C SUN RES OR C(UL)US CM OR AW 2464-RoHS(LOT#) | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | Flame Rating | UL 1685 Vertical Tray, Section 1061 of UL 1581 Cable | | | | | | | |
| Resistance | 6.64Ω/1000' @ 20°C per conductor | Traine nating | Flame | | | | | | | |
| Conductor Markings | Black / White | | UL Standard 444 Type CM | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | Applicable Standards | UL Standard 758 AWM 2464 UL Standard 13 Type PLTC | | | | | | | |
| Communication Wire* | 22AWG PVC (orange) | | UL Standard 2250 Type ITC | | | | | | | |

^{*}Included on 18AWG and 16AWG multi-pair cables

18AWG Instrumentation Cable - Individual and Overall Shields Overall Nominal Installed **Overall** Conductor Conductor Minimum Approximate Capacitance Number Jacket 0.D. Bend Price Cut Length Part Number AWG Stranding Insulation Approx. O.D. . Weight (Inches of Pairs **Thickness** (pF/ft) Radius per foot (Inches) Thickness (ft)* (lb/ft) ±10%) (Mils) (Inches) (Mils) PLTC-18-2SS-1 2 42 0.365 3.65 20 0.07 \$0.77 PLTC-18-4SS-1 4 18 7 16 0.078 52 62 0.483 4.83 20 0.12 \$1.37 PLTC-18-8SS-1 0.639 6.39 \$2.51



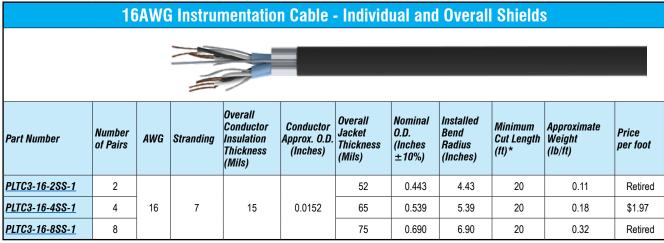


^{*} See web store for maximum cut lengths

| 16AWG Inst | 16AWG Instrumentation Cable - Individual and Overall Shields Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|---|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 16AWG Class B 7 stranded bare copper per ASTM B-3 and B-8 | Shield and Drain Wire | Individual and overall aluminum polyester foil shield with a tinned copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight and moisture resistant black PVC (polyvinyl chloride) | | | | | | | | | |
| Conductor Insulation | PVC | Print Legend* | CCI ROYAL 16 AWG XX SHIELDED PAIRS PVC/PVC TYPE PLTC/ITC E176494 (UL) 105C SUN RES FT4/IEEE 1202 SEQUENTIAL MARKING | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | | | | | | | | | |
| Resistance | 4.18Ω/1000' @ 20°C per conductor | Flame Rating | Passes FT4/EEE 1202 Flame Test Passes IEEE 383 Flame Test (70,000btu) | | | | | | | |
| Capacitance | 48.51 pF/ft | | UL Standard 13 Type PLTC UL Standard 2250 Type ITC | | | | | | | |
| Inductance | 0.0895 µH/ft | | EPA 40 CFR, Part 26, Subpart C, heavy metals per Table 1, TCLP method NEC Article 725 (Type PLTC) | | | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Applicable Standards | NEC Article 727 (Type ITC) Hazardous Locations: NEC Article 501.10 (Class I, Div 2) | | | | | | | |
| Temperature Rating | -30°C to 105°C (-22°F to 221°F) | | NEC Article 501.10 (Class II, Div 2) NEC Article 502.10 (Class II, Div 2) NEC Article 503.10 (Class III, Div 1 and 2) | | | | | | | |
| Communication Wire** | 22AWG PVC (orange) | | NEC Article 504 (Intrinsically Safe Systems) NEC Article 505.15 (Class I, Zone 2) | | | | | | | |

^{*} XX = Number of shielded pairs

^{**} Included on 18AWG and 16AWG multi-pair cables



^{*} See web store for maximum cut lengths





| 16AWG | 16AWG Instrumentation Cable - Individual and Overall Shields Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|---|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 16AWG 7-stranded bare copper | Shield and Drain Wire | Individual and overall aluminum polyester foil shield with a tinned copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | | | | | | | | | |
| Conductor Insulation | PVC | Print Legend | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 16AWG SHEILDED 105C SUN RES OR C(UL)US CM OR AWM 2464-Rohs(LOT#) | | | | | | | |
| Pair Lay Length | 1.25 twists per inch | | Zioi none (Eeilil) | | | | | | | |
| Resistance | 4.18Ω/1000' @ 20°C per conductor | Flame Rating | UL 1685 Vertical Tray, Section 1061 of UL 1581 Cable Flame | | | | | | | |
| Conductor Markings | Black / White | | UL Standard 444 Type CM | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | Applicable Standards | UL Standard 758 AWM 2464 UL Standard 13 Type PLTC | | | | | | | |
| Communication Wire* | 22AWG PVC (orange) | | UL Standard 2250 Type ITC | | | | | | | |

^{*}Included on 18AWG and 16AWG multi-pair cables

| 16AWG Instrumentation Cable - Individual and Overall Shields | | | | | | | | | | | | |
|--|--------------------|-----|-----------|---|---------------------------------------|--|------------------------|-------------------------------------|---|--------------------------------|----------------------------------|-------------------|
| | | | | | | | | | | | | |
| Part Number | Number of Pairs | AWG | Stranding | Overall Conductor Insulation Thickness (Mils) | Conductor Approx. O.D. (Inches) | Overall Jacket Thickness (Mils) | Capacitance (pF/ft) | Nominal O.D. (Inches ±10%) | Installed Bend Radius (Inches) | Minimum Cut Length (ft)* | Approximate Weight (lb/ft) | Price per foot |
| PLTC-16-2SS-1 | 2 | 16 | 7 | 16 | 0.091 | 52 | 71 | 0.432 | 4.32 | 20 ft | 0.10 | \$1.09 |

^{*} See web store for maximum cut lengths





| 20AW0 | 20AWG Triad Instrumentation Cable - Overall Shield Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|--|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 20AWG Class B 10 stranded bare copper per ASTM B-3 and B-8 | Shield and Drain Wire | Overall aluminum polyester foil shield with a 22AWG tinne copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | | | | | | | | | |
| Conductor Insulation | PVC | Print Legend* | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 20AWG SHEILDED 105C SUN RES OR C(UL)US CM OR AWM | | | | | | | |
| Conductor Insulation Colors | (1) Black/ (1) Red/ (1) White | Trint Legena^ | 2464–RoHS(LOT#) | | | | | | | |
| Set Lay Length | 1 twist per inch | | | | | | | | | |
| Resistance | 10.50Ω/1000' @ 20°C per conductor | Flame Rating | UL 1581 Section 1061 Cable Flame, UL 1581 Vertical Tray | | | | | | | |
| Capacitance | 42 pF/ft | | NEC (UL) Type PLTC | | | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Applicable Standards | NEC (UL) Type ITC NEC (UL) Type CM CEC C(UL)Type CM | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | | UL AWM STYLE 2464 | | | | | | | |

| 20AWG Triad Instrumentation Cable - Overall Shield | | | | | | | | | | | |
|--|---------------------|-----|-----------|---|---------------------------------------|--|-------------------------------------|---|--------------------------------|----------------------------------|-------------------|
| Part Number | Number of Triads | AWG | Stranding | Overall Conductor Insulation Thickness (Mils) | Conductor Approx. O.D. (Inches) | Overall Jacket Thickness (Mils) | Nominal O.D. (Inches ±10%) | Installed Bend Radius (Inches) | Minimum Cut Length (ft)* | Approximate Weight (lb/ft) | Price per foot |
| PLTC3-20-1TS-1 | 1 | | | | | 37 | 0.212 | 2.12 | 20 | 0.03 | \$0.35 |
| PLTC3-20-2TS-1 | 2 | 20 | 10 | 13 | 0.037 | 42 | 0.358 | 3.58 | 20 | 0.05 | \$0.72 |
| PLTC3-20-4TS-1 | 4 | 20 | 10 | | | 52 | 0.432 | 4.32 | 20 | 0.09 | \$1.17 |
| PLTC3-20-8TS-1 * See web store for max | 8 | | | | | 52 | 0.560 | 5.60 | 20 | 0.16 | \$2.01 |

^{*} See web store for maximum cut lengths





| 18AWG | Triad Instrumentation | Cable - Overall Si | nield Specifications | | |
|-----------------------------|---|-----------------------|---|--|--|
| Conductor Gauge & Stranding | 18AWG 7 stranded bare copper | Shield and Drain Wire | Overall aluminum polyester foil shield with a 22AWG tinned copper drain wire | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | | | | |
| Conductor Insulation | PVC | Print Legend* | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 18 AWG SHIELDED 105C SUN RES OR C(UL)US CM OR AWM 2464 RoHS (LOT DESIGNATOR) | | |
| Conductor Insulation Colors | (1) Black/ (1) Red/ (1) White | | 2.0 | | |
| Set Lay Length | 1 twist per inch | Flame Rating | UL 1581 Section 1061 Cable Flame, UL 1581 Vertical Tray | | |
| Resistance | 6.64Ω/1000' @ 20°C per conductor | riallie naully | | | |
| Capacitance | 42 pF/ft | | N=0 (44) = -0.70 | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Agency Approvals | NEC (UL) Type PLTC NEC (UL) Type ITC NEC (UL) Type CM | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | | CEC C(UL)Type CM UL AWM STYLE 2464 | | |

| 18AWG Triad Instrumentation Cable - Overall Shield | | | | | | | | | | | |
|--|---------------------|-----|-----------|---|---------------------------------------|--|-------------------------------------|---|--------------------------------|----------------------------------|-------------------|
| Part Number | Number of Triads | AWG | Stranding | Overall Conductor Insulation Thickness (Mils) | Conductor Approx. O.D. (Inches) | Overall Jacket Thickness (Mils) | Nominal O.D. (Inches ±10%) | Installed Bend Radius (Inches) | Minimum Cut Length (ft)* | Approximate Weight (lb/ft) | Price per foot |
| PLTC3-18-1TS-1 | 1 | | | | | 37 | 0.245 | 2.45 | 20 | 0.04 | \$0.41 |
| PLTC3-18-2TS-1 | 2 | 40 | 7 | 16 | 0.046 | F0. | 0.442 | 4.42 | 20 | 0.08 | \$0.80 |
| PLTC3-18-4TS-1 | 4 | 18 | 18 7 | | | 52 | 0.513 | 5.13 | 20 | 0.13 | \$1.42 |
| PLTC3-18-8TS-1 | 8 | | | | | 62 | 0.681 | 6.81 | 20 | 0.24 | \$2.48 |

^{*} See web store for maximum cut lengths





| 20AWG Triad In | 20AWG Triad Instrumentation Cable - Individual and Overall Shields Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|--|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 20AWG Class B 10 stranded bare copper per ASTM B-3 and B-8 | Shield and Drain Wire | Individual and overall aluminum polyester foil shield wit a 22AWG tinned copper drain wire | | | | | | | |
| Voltage Rating | 300V | Min. Bend Radius | 10x diameter | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | | | | | | | | | |
| Conductor Insulation | PVC | Print I egend* | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 20AWG SHEILDED 105C SUN RES OR C(UL)US CM OR AWM | | | | | | | |
| Conductor Insulation Colors | (1) Black/ (1) Red/ (1) White | | 2464–RoHS(LOT#) | | | | | | | |
| Set Lay Length | 1 twist per inch | | | | | | | | | |
| Resistance | 10.50Ω/1000' @ 20°C per conductor | Flame Rating | UL 1581 Section 1061 Cable Flame, UL 1581 Vertical Tray | | | | | | | |
| Capacitance | 57 pF/ft | | NEC (UL) Type PLTC | | | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Agency Approvals | NEC (UL) Type ITC NEC (UL) Type CM CEC C(UL)Type CM | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | | UL AWM STYLE 2464 | | | | | | | |

20AWG Triad Instrumentation Cable - Individual and Overall Shields Overall Nominal Installed Overall 0 Conductor Conductor Minimum Approximate Number of Jacket 0.D. Bend Price Part Number AWG Stranding Insulation Approx. O.D. Cut Length Weight Triads Thickness (Inches Radius per foot Thickness (Inches) (ft)* (lb/ft) (Mils) ±10%) (Inches) (Mils) PLTC3-20-2TSS-1 2 0.367 \$0.85 42 3.67 20 0.06 PLTC3-20-4TSS-1 4 20 10 13 0.37 0.444 4.44 20 0.11 \$1.38 52 PLTC3-20-8TSS-1 8 0.576 5.76 20 0.18 \$2.48





^{*} See web store for maximum cut lengths

| 18AWG Triad In | 18AWG Triad Instrumentation Cable - Individual and Overall Shields Specifications | | | | | | | | | |
|-----------------------------|---|-----------------------|---|--|--|--|--|--|--|--|
| Conductor Gauge & Stranding | 18AWG 7 stranded bare copper | Min. Bend Radius | 10x diameter | | | | | | | |
| Voltage Rating | 300V | Shield and Drain Wire | Individual and overall aluminum polyester foil shield with a 22AWG tinned copper drain wire | | | | | | | |
| Jacket Material | Sunlight resistant black PVC (polyvinyl chloride) | | OLIA DDINI DINI (III) TVDE DI TO OD ITO 40 ANO | | | | | | | |
| Conductor Insulation | PVC | Print Legend* | QUABBIN P/N xxxx (UL) TYPE PLTC OR ITC 18 AWG SHIELDED 105C SUN RES OR C(UL)US CM OR AWM 2464 RohS (LOT DESIGNATOR) | | | | | | | |
| Conductor Insulation Colors | (1) Black/ (1) Red/ (1) White | | (====================================== | | | | | | | |
| Set Lay Length | 1 twist per inch | Flame Rating | UL 1581 Section 1061 Cable Flame, UL 1581 Vertical Tray | | | | | | | |
| Resistance | 6.64Ω/1000' @ 20°C per conductor | Traine nating | | | | | | | | |
| Capacitance | 57 pF/ft | | NEC (UL) Type PLTC | | | | | | | |
| Conductor Markings | Black / White; Alpha-numeric print; alternate & inverted @ 2.5 inch intervals | Agency Approvals | NEC (UL) Type ITC NEC (UL) Type CM CEC C(UL) Type CM | | | | | | | |
| Temperature Rating | -40°C to 105°C (-40°F to 221°F) | | UL AWM STYLE 2464 | | | | | | | |

| | 18AWG Triad Instrumentation Cable - Individual and Overall Shields | | | | | | | | | | |
|-----------------|--|-----|-----------|--|---------------------------------------|--|-------------------------------------|---|--------------------------------|----------------------------------|-------------------|
| | | | | | | | | | | | |
| | | | | Overall | | 0 | Manainal | In a to Hard | | | |
| Part Number | Number of Triads | AWG | Stranding | Conductor Insulation Thickness (Mils) | Conductor Approx. O.D. (Inches) | Overall Jacket Thickness (Mils) | Nominal O.D. (Inches ±10%) | Installed Bend Radius (Inches) | Minimum Cut Length (ft)* | Approximate Weight (lb/ft) | Price per foot |
| PLTC3-18-2TSS-1 | 2 | | | | | 52 | 0.454 | 4.54 | 20 | 0.09 | \$1.05 |
| PLTC3-18-4TSS-1 | 4 | 18 | 7 | 16 | 0.046 | 52 | 0.527 | 5.27 | 20 | 0.15 | \$1.68 |
| PLTC3-18-8TSS-1 | 8 | | | | | 62 | 0.701 | 7.01 | 20 | 0.28 | \$3.03 |

^{*} See web store for maximum cut lengths



