

9770 Multi-Conductor - Audio, Control and Instrumentation Cable



Description:

22 AWG stranded (7x30) tinned copper conductors, conductors cabled, polypropylene insulation, overall Beldfoil® aluminum-polyester shield (100% coverage), 22 AWG stranded tinned copper drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 3 | 22 | 7x30 | TC - Tinned Copper |

Insulation

Insulation Material:

| Insulation Material | Wall Thickness (in.) |
|---------------------|----------------------|
| PP - Polypropylene | .008 |

Outer Shield

Outer Shield Material:

| Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|-------------------------|------|------------------------------|--------------|
| Beldfoil® (Z-Fold®) | Tape | Aluminum Foil-Polyester Tape | 100 |

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire | Conductor Material |
|-----|-----------|--------------------|--------------------|
| 22 | 19x34 | TC - Tinned Copper | |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | .020 |

Overall Cabling

Overall Cabling Lay Length & Direction:

| Length (in.) | Twists (ft.) |
|--------------|--------------|
| 1.600 | 7.5 |

Overall Cabling Color Code Chart:

| Number | Color |
|--------|-------|
| 1 | Black |
| 2 | Red |
| 3 | White |

Overall Nominal Diameter: 0.145 in.

Mechanical Characteristics (Overall)

| | |
|--|---------------------|
| Operating Temperature Range: | -20°C To +90°C |
| Bulk Cable Weight: | 15.600 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 29 lbs. |
| Min. Bend Radius (Install)/Minor Axis: | 1.500 in. |

9770 Multi-Conductor - Audio, Control and Instrumentation Cable

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|------------|
| NEC/(UL) Specification: | CM |
| CEC/C(UL) Specification: | CM |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Flame Test

| | |
|----------------|-------------------|
| UL Flame Test: | UL1685 UL Loading |
|----------------|-------------------|

Plenum/Non-Plenum

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

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

| |
|---------------------|
| Capacitance (pF/ft) |
| 32 |

Nom. Capacitance Cond. to Other Conductor & Shield:

| |
|---------------------|
| Capacitance (pF/ft) |
| 60 |

Nom. Conductor DC Resistance:

| |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 16 |

Max. Operating Voltage - UL:

| |
|-----------|
| Voltage |
| 300 V RMS |

Max. Recommended Current:

| |
|-----------------------------|
| Current |
| 3 Amps per conductor @ 25°C |

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|-------------------|
| 9770 001U1000 | 1,000 FT | 18.000 LB | BROWN | | 3 #22 PP SHLD PVC |
| 9770 001U500 | 500 FT | 9.500 LB | BROWN | | 3 #22 PP SHLD PVC |
| 9770 0011000 | 1,000 FT | 18.000 LB | BROWN | C | 3 #22 PP SHLD PVC |
| 9770 001500 | 500 FT | 9.000 LB | BROWN | | 3 #22 PP SHLD PVC |

Notes:

C = CRATE REEL PUT-UP.

Overall Beldfoil® Shield

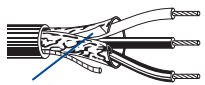
Audio, Control and Instrumentation Cables

Non-Plenum

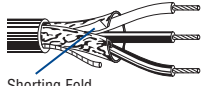
| Description | Part No. | UL NEC/ C(UL) CEC Type | No. of Cond. | Color Code | Standard Lengths | | Standard Unit Weight | | Insulation Thickness | | Jacket Thickness | | Nominal OD | | Nominal Capacitance | | | |
|-------------|----------|------------------------|--------------|------------|------------------|---|----------------------|----|----------------------|----|------------------|----|------------|----|---------------------|---------|------------|----------|
| | | | | | Ft. | m | Lbs. | kg | Inch | mm | Inch | mm | Inch | mm | * pF/ Ft. | * pF/ m | ** pF/ Ft. | ** pF/ m |

22 AWG Stranded (7x30) TC Conductors • Conductors Cabled • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire

Polypropylene Insulation • Brown PVC Jacket

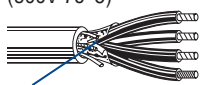
| | | | | | | | | | | | | | | | | | | | | |
|---|--------------------------------|--------|-------------------------|--------|---------|------|-----|------|-----|------|-----|------|------|----|-----|----|-----|--|--|--|
|  <p>Z-Fold®</p> | 300V RMS 9770 | NEC: 3 | Black, Red, White | U-500 | U-152.4 | 9.0 | 4.1 | .008 | .20 | .020 | .51 | .145 | 3.68 | 32 | 105 | 60 | 197 | | | |
| | | CM | | 500 | 152.4 | 9.0 | 4.1 | | | | | | | | | | | | | |
| | | CEC: | | U-1000 | U-304.8 | 18.0 | 8.2 | | | | | | | | | | | | | |
| | | CM | | 1000 | 304.8 | 17.0 | 7.7 | | | | | | | | | | | | | |

Polyethylene Insulation • Chrome PVC Jacket

| | | | | | | | | | | | | | | | | | | | | |
|---|---|--------|-------------------------|--------|---------|-------|-------|------|-----|------|-----|------|------|----|----|----|-----|--|--|--|
|  <p>Shorting Fold</p> | UL AWM Style 2093 (300V 60°C) 8771 | NEC: 3 | Black, Red, Clear | 250 | 76.2 | 6.3 | 2.8 | .016 | .41 | .033 | .84 | .199 | 5.05 | 23 | 75 | 41 | 134 | | | |
| | | CM | | U-500 | U-152.4 | 12.0 | 5.5 | | | | | | | | | | | | | |
| | | CEC: | | 500 | 152.4 | 12.0 | 5.5 | | | | | | | | | | | | | |
| | | CM | | U-1000 | U-304.8 | 23.0 | 10.4 | | | | | | | | | | | | | |
| | | | | 1000 | 304.8 | 24.0 | 10.9 | | | | | | | | | | | | | |
| | | | | 10000† | 3048.0 | 240.0 | 109.1 | | | | | | | | | | | | | |

22 AWG Stranded (19x34) TC Conductors • Conductors Cabled • Overall Beldfoil Shield (100% Coverage) • 23 and 25 AWG Drain Wires††

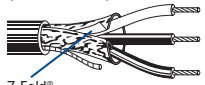
Polyethylene Insulation • White PVC Jacket

| | | | | | | | | | | | | | | | | | | | | |
|--|---|---------|-----------------------------------|--------|---------|------|------|------|-----|------|------|------|------|----|----|----|-----|--|--|--|
|  <p>Z-Fold®</p> | UL AWM Style 2094 (300V 75°C) 8729 | NEC: 4 | Black, Red, Green, Clear | U-500 | U-152.4 | 23.0 | 10.5 | .016 | .41 | .051 | 1.30 | .257 | 6.53 | 22 | 72 | 42 | 138 | | | |
| | | CM, CL3 | | 500 | 152.4 | 21.5 | 9.8 | | | | | | | | | | | | | |
| | | CEC: | | U-1000 | U-304.8 | 45.0 | 20.4 | | | | | | | | | | | | | |
| | | CM | | 1000 | 304.8 | 47.0 | 21.4 | | | | | | | | | | | | | |

†† 8729 has three 23 AWG solid and one 25 AWG stranded tinned copper-coated steel drain wires.

20 AWG Stranded (7x28) TC Conductors • Conductors Cabled • Overall Beldfoil Shield (100% Coverage) • 20 AWG Stranded TC Drain Wire

Polyethylene Insulation • Chrome PVC Jacket

| | | | | | | | | | | | | | | | | | | | | |
|---|---|--------|-------------------------|--------|---------|------|------|------|-----|------|-----|------|------|----|----|----|-----|--|--|--|
|  <p>Z-Fold®</p> | UL AWM Style 2093 (300V 60°C) 8772 | NEC: 3 | Black, Red, Clear | U-500 | U-152.4 | 16.0 | 7.3 | .016 | .41 | .033 | .84 | .218 | 5.54 | 27 | 89 | 51 | 167 | | | |
| | | CM | | 500 | 152.4 | 16.0 | 7.3 | | | | | | | | | | | | | |
| | | CEC: | | U-1000 | U-304.8 | 31.0 | 14.1 | | | | | | | | | | | | | |
| | | CM | | 1000 | 304.8 | 32.0 | 14.5 | | | | | | | | | | | | | |

TC = Tinned Copper

*Capacitance between conductors.

**Nominal capacitance conductor to conductor and shield.

†Final put-up may vary -10% to +20%. May contain two pieces, minimum length of any one piece is 1500 ft.