

8770 Multi-Conductor - Audio, Control and Instrumentation Cable

For more Information
please call

1-800-Belden1



General Description:

18 AWG stranded (16x30) tinned copper conductors, conductors cabled, polyethylene insulation, overall Beldfoil® shield (100% coverage), 20 AWG stranded tinned copper drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 3 | 18 | 16x30 | TC - Tinned Copper |

Total Number of Conductors: 3

Insulation

Insulation Material:

| Insulation Material | Wall Thickness (in.) |
|---------------------|----------------------|
| PE - Polyethylene | .018 |

Outer Shield

Outer Shield Material:

| Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|------------------------------|------|--|--------------|
| Beldfoil® (w/ shorting fold) | Tape | Aluminum Foil-Polyester Tape w/Shorting Fold | 100.000 |

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 20 | Stranded | TC - Tinned Copper |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | .033 |

Overall Cable

Overall Cabling Lay Length & Direction:

| Length (in.) | Direction | Twists (twist/ft) |
|--------------|-----------|-------------------|
| 2.700 | Left Hand | 4.400 |

Overall Cabling Color Code Chart:

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

Overall Nominal Diameter: 0.246 in.

Mechanical Characteristics (Overall)

| | |
|-----------------------------------|--------------------------|
| Operating Temperature Range: | -20°C To +60°C |
| UL Temperature Rating: | 60°C (UL AWM Style 2093) |
| Bulk Cable Weight: | 36 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 74 lbs. |
| Min. Bend Radius/Minor Axis: | 2.500 in. |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|----------------------------|
| NEC/(UL) Specification: | CM |
| NEC Articles: | 800 |
| CEC/C(UL) Specification: | CM |
| AWM Specification: | UL Style 2093 (300 V 60°C) |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| 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 |
| CSA Flame Test: | FT1 |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Plenum/Non-Plenum

| | |
|----------------|-------|
| Plenum (Y/N): | No |
| Plenum Number: | 88770 |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

69

Nom. Inductance:

Inductance (µH/ft)

0.180

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

24

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

48

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.6

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

8.5

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Recommended Current:

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| Description | Current |
|----------------------|---------------------------------------|
| 10C temperature rise | 5.3 Amps per conductor @ 25°C ambient |

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|-----------|-------------|--------|-------|-------------------|
| 8770 060U1000 | 1,000 FT | 37.000 LB | CHROME | | 3 #18 LDPE FS PVC |
| 8770 060U500 | 500 FT | 19.000 LB | CHROME | | 3 #18 LDPE FS PVC |
| 8770 0601000 | 1,000 FT | 39.000 LB | CHROME | C | 3 #18 LDPE FS PVC |
| 8770 06010000 | 10,000 FT | 420.000 LB | CHROME | C Y | 3 #18 LDPE FS PVC |
| 8770 06010001 | 10,000 FT | 420.000 LB | CHROME | C Z | 3 #18 LDPE SH PVC |
| 8770 06012000 | 12,000 FT | 492.000 LB | CHROME | C Y | 3 #18 LDPE SH PVC |
| 8770 060500 | 500 FT | 20.000 LB | CHROME | C | 3 #18 LDPE FS PVC |
| 8770 0605000 | 5,000 FT | 190.000 LB | CHROME | | 3 #18 LDPE FS PVC |

Notes:

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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