Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8770NH 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, NHFRPO 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 (mm) |
|----------------------------|---------------------|
| PE - Polyethylene | 0.4572 |

Outer Shield

Outer Shield Material:

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

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 (mm) |
|-------------------------------|--------------------------|
| LSZH - Low Smoke Zero Halogen | 0.838 |

Overall Cable

Overall Cabling Lay Length & Direction:

| Length (mm) | Twists (twist/m) |
|-------------|------------------|
| 38.09985 | 26.248 |

Overall Cabling Color Code Chart:

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

Overall Nominal Diameter: 6.248 mm

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -20°C To +60°C |
|-----------------------------------|----------------|
| UL Temperature Rating: | 60°C |
| Bulk Cable Weight: | 56.552 Kg/Km |
| Max. Recommended Pulling Tension: | 329.167 N |
| Min. Bend Radius/Minor Axis: | 63.500 mm |

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| pplicable Specifications and Agency Co | ompliance (Overall) |
|---|---------------------|
| Applicable Standards & Environmental Prog | rams |
| NEC/(UL) Specification: | CMG |
| CEC/C(UL) Specification: | CMG |
| 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): | 05/07/2012 |
| 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 |
| Other Specification: | UL AWM 21305 |
| Flame Test | |
| UL Flame Test: | UL1685 FT4 Loading |
| C(UL) Flame Test: | FT4 |
| Suitability | |
| Suitability - Indoor: | Yes |
| Non-halogenated: | Yes |
| Plenum/Non-Plenum | |
| Plenum (Y/N): | No |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
69

Nom. Inductance:

Inductance (µH/m) 0.605016

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 78.744

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 157.488

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 21.6546

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 27.8885

Max. Operating Voltage - UL:

Voltage 300 V RMS (UL AWM Style 2093)

Max. Recommended Current:

Current

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5.3 Amps per conductor @ 25°C

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|----------------|--------|-------------|--------|-------|----------------------|
| 8770NH 0601000 | 305 MT | 17.237 KG | CHROME | | 3 #18 LDPO FS NHFRPO |
| 8770NH 060500 | 152 MT | 9.752 KG | CHROME | С | 3 #18 LDPO FS NHFRPO |

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 0 Revision Date: 05-25-2012

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