# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION





9774 Multi-Conductor - Audio, Control and Instrumentation Cable

For more Information please call

1-800-Belden1



## **General Description:**

18 AWG stranded (19x30) TC conductors, polypropylene insulation, twisted pairs, individually shielded w/Beldfoil® (100% coverage), 20 AWG stranded TC drain wire, PVC jacket.

## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

| # Pairs | AWG | Stranding | <b>Conductor Material</b> |
|---------|-----|-----------|---------------------------|
| 6       | 18  | 19x30     | TC - Tinned Copper        |

Total Number of Conductors: 12

#### Insulation

#### **Insulation Material:**

# Insulation Material Wall Thickness (mm) PP - Polypropylene | 0.483

#### **Inner Shield**

#### Inner Shield Material:

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

#### Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

#### **Outer Jacket**

#### **Outer Jacket Material:**

| Outer Jacket Material    | Nom. Wall Thickness (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 1.321                    |

#### **Overall Cable**

Overall Nominal Diameter: 14.224 mm

#### Pair

#### Pair Color Code Chart:

| Number | Color          |
|--------|----------------|
| 1      | Black & Red    |
| 2      | Black & White  |
| 3      | Black & Green  |
| 4      | Black & Blue   |
| 5      | Black & Yellow |
| 6      | Black & Brown  |

#### Pair Lay Length & Direction:

| Lay Length (mm) | Twists (twist/m) | Direction |
|-----------------|------------------|-----------|
| 44.450          | 22.639           | Left Hand |

## **Mechanical Characteristics (Overall)**

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| Operating Temperature Range:      | -20°C To +80°C           |
|-----------------------------------|--------------------------|
| UL Temperature Rating:            | 80°C (UL AWM Style 2919) |
| Bulk Cable Weight:                | 235.136 Kg/Km            |
| Max. Recommended Pulling Tension: | 1574.663 N               |
| Min. Bend Radius/Minor Axis:      | 146.050 mm               |

## **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 2919 (30 V 80°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                        |

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

| Impedance | (Ohm) |
|-----------|-------|
| 50        |       |

Nom. Inductance:



Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/m) |
|--------------------|
| 98.43              |

Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:

| DCR @ 20°C (Oh | m/km) |
|----------------|-------|
| 20.9984        |       |

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Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:

27.232 Ohm/km

### Max. Operating Voltage - UL:

| Voltage  | Description |  |
|----------|-------------|--|
| 300V RMS | UL type CM  |  |
| 30V RMS  | UL AWM 2919 |  |

#### Max. Recommended Current:

| Description          | Current                               |
|----------------------|---------------------------------------|
| 10C Temperature Rise | 3.6 Amps per conductor @ 25°C ambient |

## **Put Ups and Colors:**

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc          |
|--------------|----------|-------------|--------|-------|--------------------|
| 9774 060100  | 100 FT   | 17.800 LB   | CHROME | С     | 6 FS PR #18 PP PVC |
| 9774 0601000 | 1,000 FT | 173.000 LB  | CHROME | С     | 6 FS PR #18 PP PVC |
| 9774 060500  | 500 FT   | 88.000 LB   | CHROME | С     | 6 FS PR #18 PP PVC |
| 9774 0605000 | 5,000 FT | 875.000 LB  | CHROME |       | 6 FS PR #18 PP PVC |

#### Notes:

C = CRATE REEL PUT-UP.

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