## **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



### 8778 Multi-Conductor - CM Rated Cable

For more Information please call

1-800-Belden1



## **General Description:**

22 AWG stranded (7x30) tinned copper conductor, polypropylene insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall PVC jacket and 22 AWG stranded tinned copper drain wire.

## **Physical Characteristics (Overall)**

### Conductor

#### AWG:

| # Pairs | AWG | •    | <b>Conductor Material</b> | , ,   |
|---------|-----|------|---------------------------|-------|
| 6       | 22  | 7x30 | TC - Tinned Copper        | 0.762 |

Total Number of Conductors: 12

### Insulation

### **Insulation Material:**

| Insulation Material | Wall Thickness (mm) |
|---------------------|---------------------|
| PP - Polypropylene  | 0.279               |

## **Inner Shield**

#### Inner Shield Material:

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

#### Inner Shield Drain Wire AWG:

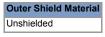


Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

#### **Outer Shield**

### **Outer Shield Material:**



### **Outer Jacket**

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

| Outer Jacket Material    | Nom. Wall Thickness (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 0.864                    |

## **Overall Cable**

Overall Nominal Diameter: 8.941 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  |

Page 1 of 3 04-30-2013

# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



## 8778 Multi-Conductor - CM Rated Cable

| Mechanical Characteristics (Overall)         |                           |  |  |  |  |
|--|---------------------------|--|--|--|--|
| Operating Temperature Range:                 | -20°C To +80°C            |  |  |  |  |
| UL Temperature Rating:                       | 80°C (UL AWM Style 2919)  |  |  |  |  |
| Bulk Cable Weight:                           | 104.174 Kg/Km             |  |  |  |  |
| Max. Recommended Pulling Tension:            | 698.367 N                 |  |  |  |  |
| Min. Bend Radius/Minor Axis:                 | 95.250 mm                 |  |  |  |  |
| Applicable Specifications and Agency Com     | pliance (Overall)         |  |  |  |  |
| Applicable Standards & Environmental Program | ns                        |  |  |  |  |
| NEC/(UL) Specification:                      | СМ                        |  |  |  |  |
| 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                       |  |  |  |  |

Yes

Yes

**Flame Test** 

UL Flame Test: UL1685 UL Loading

Plenum/Non-Plenum

Plenum (Y/N): No

Non-Plenum Number: 88778, 87778, 82778

## **Electrical Characteristics (Overall)**

CA Prop 65 (CJ for Wire & Cable):

MII Order #39 (China RoHS):

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 49.215

Page 2 of 3 04-30-2013

## **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



#### 8778 Multi-Conductor - CM Rated Cable

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

34.779 Ohm/km

Max. Operating Voltage - UL:

| Voltage   | Description    |  |  |
|-----------|----------------|--|--|
| 30 V RMS  | AWM Style 2919 |  |  |
| 300 V RMS | СМ             |  |  |

Max. Recommended Current:

| Current                     |
|-----------------------------|
| 2 Amps per conductor @ 25°C |

### **Put Ups and Colors:**

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc          |
|--------------|----------|-------------|--------|-------|--------------------|
| 8778 060100  | 30 MT    | 3.583 KG    | CHROME |       | 6 FS PR #22 PP PVC |
| 8778 0601000 | 305 MT   | 35.380 KG   | CHROME | С     | 6 FS PR #22 PP PVC |
| 8778 060250  | 76 MT    | 8.845 KG    | CHROME | С     | 6 FS PR #22 PP PVC |
| 8778 060500  | 152 MT   | 18.144 KG   | CHROME | С     | 6 FS PR #22 PP PVC |
| 8778 0605000 | 1,524 MT | 188.242 KG  | CHROME |       | 6 FS PR #22 PP PVC |

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3 Revision Date: 08-16-2012

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