

# Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



## 9873 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information  
please call

1-800-Belden1



### Description:

20 AWG stranded (7x28) TC conductors, polypropylene insulation, twisted pairs, individually shielded w/Beldfoil® (100% coverage), 22 AWG stranded TC drain wire, overall PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 3       | 20  | 7x28      | TC - Tinned Copper |

Total Number of Conductors: 6

#### Insulation

##### Insulation Material:

| Insulation Material | Wall Thickness (mm) |
|---------------------|---------------------|
| PP - Polypropylene  | 0.381               |

#### 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:

| AWG |
|-----|
| 22  |

Inner Shield Drain Wire Stranding: 19x34

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

#### Outer Jacket

##### Outer Jacket Material:

| Outer Jacket Material    | Nom. Wall Thickness (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 0.889                    |

#### Overall Cable

Overall Nominal Diameter: 8.661 mm

#### Pair

##### Pair Color Code Chart:

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

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +80°C

UL Temperature Rating: 80°C (UL AWM Style 2919)

Bulk Cable Weight: 84.827 Kg/Km

Max. Recommended Pulling Tension: 471.509 N

Min. Bend Radius/Minor Axis: 88.900 mm

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### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

|                                       |                           |
|---------------------------------------|---------------------------|
| NEC/(UL) Specification:               | CM                        |
| CEC/C(UL) Specification:              | CM                        |
| AWM Specification:                    | UL Style 2919 (30 V 80°C) |
| 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. Characteristic Impedance:

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

#### Nom. Inductance:

|                   |
|-------------------|
| Inductance (μH/m) |
| 0.59058           |

#### Nom. Capacitance Conductor to Conductor:

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

#### Nom. Capacitance Cond. to Other Conductor & Shield:

|                    |
|--------------------|
| Capacitance (pF/m) |
| 180.455            |

#### Nominal Velocity of Propagation:

|        |
|--------|
| VP (%) |
| 66     |

#### Nom. Conductor DC Resistance:

|                     |
|---------------------|
| DCR @ 20°C (Ohm/km) |
| 34.4505             |

Ind. Pair Nominal Shield DC Resistance @ 20  
Deg. C: 45.934 Ohm/km

#### Max. Operating Voltage - UL:

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

#### Max. Recommended Current:

|                               |
|-------------------------------|
| Current                       |
| 2.7 Amps per conductor @ 25°C |

### Put Ups and Colors:

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## 9873 Multi-Conductor - Audio, Control and Instrumentation Cable

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc          |
|--------------|----------|-------------|--------|-------|--------------------|
| 9873 060100  | 30 MT    | 2.994 KG    | CHROME |       | 3 FS PR #20 PP PVC |
| 9873 0601000 | 305 MT   | 27.669 KG   | CHROME | C     | 3 FS PR #20 PP PVC |
| 9873 060250  | 76 MT    | 7.371 KG    | CHROME | C     | 3 FS PR #20 PP PVC |
| 9873 060500  | 152 MT   | 14.515 KG   | CHROME | C     | 3 FS PR #20 PP PVC |
| 9873 0605000 | 1,524 MT | 142.882 KG  | CHROME |       | 3 FS PR #20 PP PVC |

**Notes:**

C = CRATE REEL PUT-UP.

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