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please call

1-800-Belden1



### General Description:

22 AWG stranded (7x30) TC conductors, polypropylene insulation, twisted pair, overall Beldfoil shield (100% coverage), 22 AWG stranded TC drain wire, PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 1       | 22  | 7x30      | TC - Tinned Copper |

Total Number of Conductors: 2

#### Insulation

Insulation Material:

| Insulation Material | Wall Thickness (mm) |
|---------------------|---------------------|
| PP - Polypropylene  | 0.2032              |

#### Outer Shield

Outer Shield Material:

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

Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 22  | 7x30      | TC - Tinned Copper            |

#### Outer Jacket

Outer Jacket Material:

| Outer Jacket Material    | Nom. Wall Thickness (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 0.508                    |

#### Overall Cable

Overall Nominal Diameter: 3.429 mm

#### Pair

Pair Color Code Chart:

| Number | Color       |
|--------|-------------|
| 1      | Black & Red |

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 60°C

Bulk Cable Weight: 20.835 Kg/Km

Max. Recommended Pulling Tension: 120.101 N

Min. Bend Radius/Minor Axis: 38.100 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

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): 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:  | UL1666 Vertical Shaft |
| CSA Flame Test: | FT4                   |

**Plenum/Non-Plenum**

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

**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

|                        |
|------------------------|
| <b>Impedance (Ohm)</b> |
| 45                     |

**Nom. Inductance:**

|                          |
|--------------------------|
| <b>Inductance (µH/m)</b> |
| 0.55777                  |

**Nom. Capacitance Conductor to Conductor:**

|                           |
|---------------------------|
| <b>Capacitance (pF/m)</b> |
| 114.835                   |

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

|                           |
|---------------------------|
| <b>Capacitance (pF/m)</b> |
| 219.827                   |

**Nominal Velocity of Propagation:**

|               |
|---------------|
| <b>VP (%)</b> |
| 66            |

**Nominal Delay:**

|                     |
|---------------------|
| <b>Delay (ns/m)</b> |
| 4.9215              |

**Nom. Conductor DC Resistance:**

|                            |
|----------------------------|
| <b>DCR @ 20°C (Ohm/km)</b> |
| 46.2621                    |

**Nominal Outer Shield DC Resistance:**

|                            |
|----------------------------|
| <b>DCR @ 20°C (Ohm/km)</b> |
| 46.9183                    |

**Max. Operating Voltage - UL:**

|                |
|----------------|
| <b>Voltage</b> |
| 300 V RMS      |

**Max. Recommended Current:**

|                               |
|-------------------------------|
| <b>Current</b>                |
| 2.9 Amps per conductor @ 25°C |

**Notes (Overall)**

**Notes:** The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield. For cross-connect use with 1814R (et. al.) Snake Cables.

**Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color       | Notes | Item Desc          |
|---------------|----------|-------------|-------------|-------|--------------------|
| 9451 N3UU1000 | 1,000 FT | 16.000 LB   | GREEN, MIL  |       | 2 #22 PP FS PVC FR |
| 9451 N3U5000  | 5,000 FT | 70.000 LB   | GREEN, MIL  | C N   | 2 #22 PP FS PVC FR |
| 9451 001U1000 | 1,000 FT | 16.000 LB   | BROWN       |       | 2 #22 PP FS PVC FR |
| 9451 0015000  | 5,000 FT | 70.000 LB   | BROWN       | C N   | 2 #22 PP FS PVC FR |
| 9451 002N1000 | 1,000 FT | 18.000 LB   | RED         |       | 2 #22 PP FS PVC FR |
| 9451 002U1000 | 1,000 FT | 16.000 LB   | RED         |       | 2 #22 PP FS PVC FR |
| 9451 0025000  | 5,000 FT | 75.000 LB   | RED         | C N   | 2 #22 PP FS PVC FR |
| 9451 003U1000 | 1,000 FT | 16.000 LB   | ORANGE      |       | 2 #22 PP FS PVC FR |
| 9451 0035000  | 5,000 FT | 75.000 LB   | ORANGE      | C N   | 2 #22 PP FS PVC FR |
| 9451 004N1000 | 1,000 FT | 18.000 LB   | YELLOW      |       | 2 #22 PP FS PVC FR |
| 9451 004U1000 | 1,000 FT | 16.000 LB   | YELLOW      |       | 2 #22 PP FS PVC FR |
| 9451 0045000  | 5,000 FT | 75.000 LB   | YELLOW      | C N   | 2 #22 PO FS PVC FR |
| 9451 006U1000 | 1,000 FT | 16.000 LB   | BLUE, LIGHT |       | 2 #22 PP FS PVC FR |
| 9451 0065000  | 5,000 FT | 75.000 LB   | BLUE, LIGHT | C N   | 2 #22 PP FS PVC FR |

## METRIC MEASUREMENT VERSION

## 9451 Multi-Conductor - Single-Pair Cables

|               |          |           |        |     |                    |
|---------------|----------|-----------|--------|-----|--------------------|
| 9451 007U1000 | 1,000 FT | 16.000 LB | VIOLET |     | 2 #22 PP FS PVC FR |
| 9451 0075000  | 5,000 FT | 75.000 LB | VIOLET | C N | 2 #22 PP FS PVC FR |
| 9451 008N1000 | 1,000 FT | 18.000 LB | GRAY   |     | 2 #22 PP FS PVC FR |
| 9451 008T1000 | 1,000 FT | 16.000 LB | GRAY   |     | 2 #22 PP FS PVC FR |
| 9451 008U1000 | 1,000 FT | 16.000 LB | GRAY   |     | 2 #22 PP FS PVC FR |
| 9451 008U500  | 500 FT   | 8.500 LB  | GRAY   |     | 2 #22 PP FS PVC FR |
| 9451 0081000  | 1,000 FT | 16.000 LB | GRAY   |     | 2 #22 PP FS PVC FR |
| 9451 008500   | 500 FT   | 8.000 LB  | GRAY   |     | 2 #22 PP FS PVC FR |
| 9451 0085000  | 5,000 FT | 75.000 LB | GRAY   | C N | 2 #22 PP FS PVC FR |
| 9451 009U1000 | 1,000 FT | 16.000 LB | WHITE  |     | 2 #22 PP FS PVC FR |
| 9451 0095000  | 5,000 FT | 75.000 LB | WHITE  | C N | 2 #22 PP FS PVC FR |
| 9451 010N1000 | 1,000 FT | 18.000 LB | BLACK  |     | 2 #22 PP FS PVC FR |
| 9451 010U1000 | 1,000 FT | 16.000 LB | BLACK  |     | 2 #22 PP FS PVC FR |
| 9451 0101000  | 1,000 FT | 16.000 LB | BLACK  |     | 2 #22 PP FS PVC FR |
| 9451 0105000  | 5,000 FT | 75.000 LB | BLACK  | C N | 2 #22 PP FS PVC FR |

**Notes:**

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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