

## 9963 Multi-Conductor - Communication and Instrumentation Cable



For more Information  
please call

1-800-Belden1



### General Description:

20 AWG stranded (19x32) tinned copper conductors, conductors cabled, nylon skin over insulation, PVC insulation, tinned copper braid shield (90% coverage), PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 3            | 20  | 19x32     | TC - Tinned Copper |

Total Number of Conductors: 3

#### Insulation

Insulation Material:

| Layer # | Insulation Material      | Wall Thickness (in.) |
|---------|--------------------------|----------------------|
| 1       | PVC - Polyvinyl Chloride | 0.011                |
| 2       | Nylon                    | 0.003                |

Insulation Resistance: 500 megohms/1000 ft. @ 500 VDC

#### Outer Shield

Outer Shield Material:

| Type  | Outer Shield Material | Coverage (%) |
|-------|-----------------------|--------------|
| Braid | TC - Tinned Copper    | 90           |

#### Outer Jacket

Outer Jacket Material:

| Outer Jacket Material    | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | .025                      |

#### Overall Cable

Overall Cabling Color Code Chart:

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

Overall Nominal Diameter: 0.210 in.

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +105°C

UL Temperature Rating: 105°C

Bulk Cable Weight: 29 lbs/1000 ft.

Max. Recommended Pulling Tension: 45 lbs.

Min. Bend Radius/Minor Axis: 2.250 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

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): 10/01/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

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|                             |                                       |
|-----------------------------|---------------------------------------|
| MIL Order #39 (China RoHS): | Yes                                   |
| Military Specification:     | MIL-W-16878E/17 (insulated conductor) |
| Other Specification:        | NEMA HP3                              |
| <b>Plenum/Non-Plenum</b>    |                                       |
| Plenum (Y/N):               | No                                    |

### Electrical Characteristics (Overall)

**Nom. Inductance:**

Inductance (µH/ft)

.145

**Nom. Capacitance Conductor to Conductor:**

Capacitance (pF/ft)

49

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

Capacitance (pF/ft)

84

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

9.1

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)

5.8

**Max. Operating Voltage - Non-UL:**

Voltage

600 V RMS

**Max. Recommended Current:**

Current

3.8 Amps per conductor @ 25°C

### Put Ups and Colors:

| Item #       | Putup    | Ship Weight | Color | Notes | Item Desc             |
|--------------|----------|-------------|-------|-------|-----------------------|
| 9963 009100  | 100 FT   | 3.600 LB    | WHITE |       | 3 #20 PVC/NY SHLD PVC |
| 9963 0091000 | 1,000 FT | 31.000 LB   | WHITE | C     | 3 #20 PVC/NY SHLD PVC |
| 9963 009500  | 500 FT   | 16.000 LB   | WHITE | C     | 3 #20 PVC/NY SHLD PVC |

**Notes:**

C = CRATE REEL PUT-UP.

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