

## 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 (mm)
1	PVC - Polyvinyl Chloride	0.279
2	Nylon	0.076

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 (mm)
PVC - Polyvinyl Chloride	0.635

#### Overall Cable

##### Overall Cabling Color Code Chart:

Number	Color
1	White
2	Black
3	Red

Overall Nominal Diameter: 5.334 mm

### Mechanical Characteristics (Overall)

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

UL Temperature Rating: 105°C

Bulk Cable Weight: 43.158 Kg/Km

Max. Recommended Pulling Tension: 200.169 N

Min. Bend Radius/Minor Axis: 57.150 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II): Yes

METRIC MEASUREMENT VERSION

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<b>EU CE Mark:</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	10/01/2005
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes
<b>Military Specification:</b>	MIL-W-16878E/17 (insulated conductor)
<b>Other Specification:</b>	NEMA HP3

### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
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### Electrical Characteristics (Overall)

#### Nom. Inductance:

**Inductance (µH/m)**

0.475745

#### Nom. Capacitance Conductor to Conductor:

**Capacitance (pF/m)**

160.769

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

**Capacitance (pF/m)**

275.604

#### Nom. Conductor DC Resistance:

**DCR @ 20°C (Ohm/km)**

29.8571

#### Nominal Outer Shield DC Resistance:

**DCR @ 20°C (Ohm/km)**

19.0298

#### 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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