

## 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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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
MII Order #39 (China RoHS):	Yes
Military Specification:	MIL-W-16878E/17 (insulated conductor)
Other Specification:	NEMA HP3

### Plenum/Non-Plenum

Plenum (Y/N):	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	30 MT	1.633 KG	WHITE		3 #20 PVC/NY SHLD PVC
9963 0091000	305 MT	14.061 KG	WHITE	C	3 #20 PVC/NY SHLD PVC
9963 009500	152 MT	7.258 KG	WHITE	C	3 #20 PVC/NY SHLD PVC

#### Notes:

C = CRATE REEL PUT-UP.

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