



**Product:** [9963](#)

Electronic, 3 C #20 Str TC, PVC-NYL Ins, OA TC Brd, PVC Jkt

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## Product Description

Electronic, 3 Conductor 20AWG (19x32) Tinned Copper, PVC-NYL Insulation, Overall Tinned Copper Braid(90%) Shield, PVC Outer Jacket

## Technical Specifications

### Product Overview

Suitable Applications:	MIL-W-16878 (Type B) Spec; up to 600V analog signals ; up to 600V voltage control
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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	No. of Conductors
20	19x32	TC - Tinned Copper	3

Conductor Count:	3
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#### Insulation

Layer	Material	Nominal Wall Thickness
1	PVC - Polyvinyl Chloride	0.011 in
2	Nylon	0.003 in

#### Color Chart

Number	Color
1	White
2	Black
3	Red

#### Outer Shield Material

Type	Material	Coverage [%]
Braid	TC - Tinned Copper	90 %

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.21 in	0.025 in

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
9.1 Ohm/1000ft	5.8 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
49 pF/ft	84 pF/ft

#### Inductance

Nominal Inductance
0.145 $\mu$ H/ft

## Current

### Max. Recommended Current [A]

3.8 Amps per conductor @ 25°C A

## Voltage

### Non-UL Voltage Rating

600 V RMS

Electrical Characteristics Notes: Insulation Resistance: 500 megohms/1000 ft. @ 500 VDC

## Temperature Range

UL Temp Rating: 105°C  
Operating Temp Range: -20°C To +105°C

## Mechanical Characteristics

Bulk Cable Weight: 29 lbs/1000ft  
Max Recommended Pulling Tension: 45 lbs  
Min Bend Radius/Minor Axis: 2.25 in

## Standards

CPR Euroclass: Eca  
Military Specification: MIL-W-16878E/17 (insulated conductor)  
Other Specification: NEMA HP3

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV): Yes  
EU Directive 2003/96/EC (BFR): Yes  
EU Directive 2011/65/EU (ROHS II): Yes  
EU Directive 2012/19/EU (WEEE): Yes  
EU Directive Compliance: EU Directive 2003/11/EC (BFR)  
EU CE Mark: Yes  
EU RoHS Compliance Date (yyyy-mm-dd): 2005-10-01  
MII Order #39 (China RoHS): Yes

## Flammability, LSOH, Toxicity Testing

ISO/IEC Flammability: IEC 60332-1-2

## Plenum/Non-Plenum

Plenum (Y/N): No

## Part Number

### Variants

Item #	Color	UPC
9963 009100	White	612825265245
9963 0091000	White	612825265252
9963 009500	White	612825265269

Footnote: C - CRATE REEL PUT-UP.

## History

Update and Revision: Revision Number: 0.294 Revision Date: 04-28-2020

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