



**Part Number: 83659**

Audio/Control/Instrumentation, (9) 18 AWG (19x30) TC, FEP/FEP, Foil+TC Braid Shld, CMP

[Request Sample](#)

## Product Description

Nine 18 AWG stranded (19x30) tinned copper conductors, plenum, Teflon® (FEP) insulation, overall Beldfoil® shield (100% coverage) plus tinned copper braid shield (85% coverage), Teflon® (FEP) jacket.

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material           | No. of Conductors |
|-----|-----------|--------------------|-------------------|
| 18  | 19x30     | TC - Tinned Copper | 9                 |

|                  |        |
|------------------|--------|
| Conductor Count: | 9      |
| Conductor Size:  | 18 AWG |

#### Insulation

| Material                             | Nominal Wall Thickness |
|--------------------------------------|------------------------|
| FEP - Fluorinated Ethylene Propylene | 0.0065 in              |

#### Color Chart

| Number | Color       |
|--------|-------------|
| 1      | Black       |
| 2      | White       |
| 3      | Red         |
| 4      | Green       |
| 5      | Orange      |
| 6      | Blue        |
| 7      | White/Black |
| 8      | Red/Black   |
| 9      | Green/Black |

#### Outer Shield Material

| Type  | Layer | Material           | Material Trade Name | Coverage [%] |
|-------|-------|--------------------|---------------------|--------------|
| Tape  | 1     | Aluminum/Polyester | Beldfoil®           | 100 %        |
| Braid | 2     | TC - Tinned Copper |                     | 85 %         |

#### Outer Jacket Material

| Material                             | Nominal Diameter | Nominal Wall Thickness |
|--------------------------------------|------------------|------------------------|
| FEP - Fluorinated Ethylene Propylene | 0.265 in         | 0.015 in               |

### Electrical Characteristics

#### Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 5.8 Ohm/1000ft        | 2.7 Ohm/1000ft           |

#### Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 33 pF/ft                                | 60 pF/ft  |

|            |                 |
|------------|-----------------|
| Shielding: | Foil + Braid(s) |
|------------|-----------------|

## Inductance

### Nominal Inductance

0.14 µH/ft

## Current

| Element              | Max. Recommended Current [A]          |
|----------------------|---------------------------------------|
| 10C Temperature Rise | 3.8 Amps per conductor @ 25°C ambient |

## Voltage

### UL Voltage Rating

300 V RMS

## Temperature Range

|                       |                 |
|-----------------------|-----------------|
| Operating Temp Range: | -70°C To +200°C |
|-----------------------|-----------------|

## Mechanical Characteristics

|                                  |               |
|----------------------------------|---------------|
| Bulk Cable Weight:               | 81 lbs/1000ft |
| Max Recommended Pulling Tension: | 216 lbs       |
| Min Bend Radius/Minor Axis:      | 2.75 in       |

## Standards

|                          |     |
|--------------------------|-----|
| NEC Articles:            | 800 |
| NEC/(UL) Specification:  | CMP |
| CEC/C(UL) Specification: | CMP |
| CPR Euroclass:           | Eca |

## 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 2015/863/EU:             | Yes                           |
| EU Directive Compliance:              | EU Directive 2003/11/EC (BFR) |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-04-01                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

## Suitability

|                        |     |
|------------------------|-----|
| Suitability - Indoor:  | Yes |
| Suitability - Outdoor: | Yes |

## Flammability, LSOH, Toxicity Testing

|                    |           |
|--------------------|-----------|
| UL Flammability:   | NFPA 262  |
| CSA Flammability:  | FT6       |
| UL voltage rating: | 300 V RMS |

## Plenum/Non-Plenum

|               |     |
|---------------|-----|
| Plenum (Y/N): | Yes |
|---------------|-----|

## Part Number

### Variants

| Item #        | Color | Footnote |
|---------------|-------|----------|
| 83659 002100  | Red   |          |
| 83659 0021000 | Red   | C        |
| 83659 002500  | Red   | C        |
| 83659 0025000 | Red   | C Z      |

|           |  |
|-----------|--|
| Footnote: | C - CRATE REEL PUT-UP.   |
| Footnote: | Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN. |

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