

## 88109 Multi-Conductor - Low Cap. Computer Cable for EIA RS-232/422/485 Applications



For more Information  
please call

1-800-Belden1



### General Description:

24 AWG stranded (7x32) tinned copper conductors, plenum, foam FEP insulation, twisted pairs, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain wire, fluorocopolymer jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
9	24	7x32	TC - Tinned Copper

Total Number of Conductors: 18

#### Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
FFEP - Foam Fluorinated Ethylene Propylene	0.015

#### Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	7x32	TC - Tinned Copper

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVDF - Fluorocopolymer	0.014

#### Overall Cable

Overall Nominal Diameter: 0.352 in.

#### Pair

Pair Color Code Chart:

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White
3	White/Green & Green/White
4	White/Brown & Brown/White
5	White/Gray & Gray/White
6	Red/Blue & Blue/Red
7	Red/Orange & Orange/Red
8	Red/Green & Green/Red
9	Red/Brown & Brown/Red

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +150°C

Bulk Cable Weight: 65 lbs/1000 ft.

Max. Recommended Pulling Tension: 104 lbs.

Min. Bend Radius/Minor Axis: 3.750 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

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

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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):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MIL Order #39 (China RoHS):	Yes

### Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

### Plenum/Non-Plenum

Plenum (Y/N):	Yes
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

**Impedance (Ohm)**  
100

#### Nom. Inductance:

**Inductance (µH/ft)**  
0.21

#### Nom. Capacitance Conductor to Conductor:

**Capacitance (pF/ft)**  
12.95

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

**Capacitance (pF/ft)**  
23.3

#### Nominal Velocity of Propagation:

**VP (%)**  
78

#### Nominal Delay:

**Delay (ns/ft)**  
1.3

#### Nom. Conductor DC Resistance:

**DCR @ 20°C (Ohm/1000 ft)**  
24

#### Nominal Outer Shield DC Resistance:

**DCR @ 20°C (Ohm/1000 ft)**  
13

#### Max. Operating Voltage - UL:

**Voltage**  
300 V RMS

#### Max. Recommended Current:

**Current**  
1.1 Amps per conductor @ 25°C

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
88109 0081000	1,000 FT	74.000 LB	GRAY	C	9#24 PR FS SOLEF
88109 008500	500 FT	36.500 LB	GRAY	C	9#24 PR FS SOLEF

#### Notes:

C = CRATE REEL PUT-UP.

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