

METRIC MEASUREMENT VERSION

## 89758 Multi-Conductor - Multi-Pair Snake Cable

For more Information  
please call

1-800-Belden1



### General Description:

24 AWG stranded (7x32) TC conductor, plenum, foam FEP insulation, twisted pairs, individually shielded w/Beldfoil (100% coverage), 24 AWG stranded TC drain wire, overall fluorocopolymer jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
18	24	7x32	TC - Tinned Copper	0.6096

Total Number of Conductors: 36

#### Insulation

Insulation Material:

Insulation Material	Dia. (mm)
FFEP - Foam Fluorinated Ethylene Propylene	1.5748

#### Inner Shield

Inner Shield Material:

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

Inner Shield Drain Wire AWG:

AWG
24

Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Inner Shield Color Code Chart:

Number	AWG	Color
1	24	Red
2	24	Green
3	24	Blue
4	24	Blue
5	24	Blue
6	24	Blue
7	24	Blue
8	24	Blue
9	24	Blue
10	24	Blue
11	24	Blue
12	24	Blue
13	24	Blue
14	24	Blue
15	24	Blue
16	24	Blue
17	24	Blue
18	24	Blue

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVDF - Fluorocopolymer

#### Overall Cable

Overall Nominal Diameter: 15.646 mm

#### 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
10	Red/Gray & Gray/Red
11	Black/Blue & Blue/Black
12	Black/Orange & Orange/Black
13	Black/Green & Green/Black
14	Black/Brown & Brown/Black
15	Black/Gray & Gray/Black
16	Yellow/Blue & Blue/Yellow
17	Yellow/Orange & Orange/Yellow
18	Yellow/Green & Green/Yellow

### Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +150°C
Bulk Cable Weight:	308.950 Kg/Km
Max. Recommended Pulling Tension:	1321.120 N
Min. Bend Radius/Minor Axis:	158.750 mm

### 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
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
C(UL) 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/m)

0.78744

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

44.2935

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

Capacitance (pF/m)

73.8225

#### Nominal Velocity of Propagation:

VP (%)

76

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### Nominal Delay:

**Delay (ns/m)**

4.2653

### Nom. Conductor DC Resistance:

**DCR @ 20°C (Ohm/km)**

78.744

**Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:** 47.246 Ohm/km

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
.384	0.242794
.7056	2.85447
.768	2.92009
1.024	3.11695
1.4112	3.37943
1.536	3.47786
2.048	3.83877
2.8224	4.49497
3.072	4.72464
4.096	5.47927
5.6448	6.20109
6.144	6.43076
8.192	7.41506
11.2896	8.49779
12.288	8.89151
24.576	12.2381

### Max. Operating Voltage - UL:

**Voltage**

300 V RMS

### Max. Recommended Current:

**Current**

2.0 Amps per conductor @ 25°C

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
89758 0081000	1,000 FT	204.000 LB	GRAY	C	18 FS PR #24 FFEP SLF

### Notes:

C = CRATE REEL PUT-UP.

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