

# Detailed Specifications & Technical Data



## METRIC MEASUREMENT VERSION

## 1801B Multi-Conductor - Single-Pair Cable



For more Information  
please call

1-800-Belden1



### General Description:

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

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
1	24	7x32	TC - Tinned Copper	0.6096

Total Number of Conductors: 2

#### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	1.6764

#### 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 Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

#### Overall Cable

Overall Nominal Diameter: 4.191 mm

#### Pair

Pair Color Code Chart:

Number	Color
1	Red & Black

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 17.858 Kg/Km

Max. Recommended Pulling Tension: 73.395 N

Min. Bend Radius/Minor Axis: 44.450 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): 10/01/2005

EU Directive 2002/96/EC (WEEE): Yes

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EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Other Specification:	AES/EBU

#### Flame Test

CSA Flame Test:	FT6
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#### Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	1800B

#### Electrical Characteristics (Overall)

##### Nom. Characteristic Impedance:

Impedance (Ohm)
110

##### Nom. Inductance:

Inductance (μH/m)
0.59058

##### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)
39.372

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

Capacitance (pF/m)
85.306

##### Nominal Velocity of Propagation:

VP (%)
78

##### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
77.7597

##### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
.384	2.69042
.7056	3.31381
.768	3.34662
1.024	3.54348
1.4112	3.77315
1.536	3.80596
2.048	4.03563
2.8224	4.39654
3.072	4.52778
4.096	5.18398
5.6448	5.87299
6.144	6.06985
8.192	6.72605
11.2896	7.67754
12.288	7.97283
24.576	10.9257

##### Max. Operating Voltage - UL:

Voltage
300 V RMS

##### Max. Recommended Current:

Current
2.75 Amps per conductor @ 25°C

#### Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1801B Z4BU1000	1,000 FT	14.000 LB	VIO Z4B		2 #24 NFFEP FS FLMRST
1801B Z4B1000	1,000 FT	14.000 LB	VIO Z4B	C	2 #24 NFFEP FS FLMRST

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1801B Z4B500	500 FT	8.000 LB	VIO Z4B		2 #24 NFFEP FS FLMRST
1801B 877U1000	1,000 FT	14.000 LB	NATURAL		2 #24 NFFEP FS FLMRST
1801B 8771000	1,000 FT	14.000 LB	NATURAL	C	2 #24 NFFEP FS FLMRST
1801B 877500	500 FT	8.000 LB	NATURAL	C	2 #24 NFFEP FS FLMRST

**Notes:**

C = CRATE REEL PUT-UP.

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