



Description:

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

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	24	7x32	TC - Tinned Copper	.024

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	.066

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
Flamarrrest®	LS PVC - Low Smoke Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.165 in.

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: 13 lbs/1000 ft.

Max. Recommended Pulling Tension: 16.500 lbs.

Min. Bend Radius (Install)/Minor Axis: 1.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

1801B Multi-Conductor - Single-Pair Cable

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
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

C(UL) 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/ft)

.18

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

12

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

26

Nominal Velocity of Propagation:

VP (%)

78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

23.7

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

.384	.82
.7056	1.01
.768	1.02
1.024	1.08
1.4112	1.15
1.536	1.16
2.048	1.23
2.8224	1.34
3.072	1.38
4.096	1.58
5.6448	1.79
6.144	1.85
8.192	2.05
11.2896	2.34
12.288	2.43
24.576	3.33

1801B Multi-Conductor - Single-Pair Cable

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	12.000 LB	VIO Z4B	C	2 #24 NFFEP FS FLMRST
1801B Z4B500	500 FT	6.000 LB	VIO Z4B		2 #24 NFFEP FS FLMRST
1801B 877U1000	1,000 FT	14.000 LB	VIO Z4B		2 #24 NFFEP FS FLMRST
1801B 8771000	1,000 FT	12.000 LB	NATURAL	C	2 #24 NFFEP FS FLMRST
1801B 877500	500 FT	6.000 LB	NATURAL	C	2 #24 NFFEP FS FLMRST

Notes:

C = CRATE REEL PUT-UP.

AES/EBU Digital Audio Cable

Single- and Double-Pair Cables



19 • Brilliance® Broadcast

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Weight		Nom. DCR		Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance			
					Ft.	m	Lbs.	kg	Cond.	Shield	Inch	mm			* pF/ Ft.	* pF/ m	** pF/ Ft.	** pF/ m

110 Ohm • 26 AWG Stranded (7x34) .018" TC Conductors • Twisted Pair • Beldfoil® Shield (100% Coverage) • 26 AWG Stranded TC Drain Wire
Datalene® Insulation • Chrome or Purple PVC Jacket

2-Conductor Digital Video Time Code Cable 75°C	9180	NEC: CMR CEC: CMG FT4	1	Black, White	1000	304.8	10.0	4.5	37.3Ω/M'	23.1Ω/M'	.144	3.66	110	76%	13	43	26	85
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Shorting Fold

For cross-connect use with 7891A (et al.) Digital Audio Snake Cables, see page 19.28.

24 AWG Stranded (7x32) Tinned Copper Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG Drain Wire
Datalene Insulation • Gray or Purple PVC Jacket

60°C	1800B	NEC: CMR CEC: CMG FT4	1	Black, Red	500*	152.4	8.0	3.6	23.7Ω/M'	18.9Ω/M'	.177	4.57	110	76%	12	39	26	85
					U-1000	U-304.8	17.0	7.7	77.7Ω/km	62.0Ω/km								
					1000	304.8	16.0	7.3										
					5000*	1524.0	90.0	40.8										



*500 ft. put-up available in Gray only. 5000 ft. put-up available in Purple only. The jacket and shield are bonded so both can be removed with automatic stripping equipment.

For cross-connect use with 1803F (et al.) Digital Audio Snake Cables, see page 19.28. For Plenum version of 1800B, see 1801B.

24 AWG Stranded (42x40) HC BC Conductors • Conductors Cabled with Fillers • TC "French Braid" Shield (95% Coverage) • BC Drain Wire
Datalene Insulation • Matte PVC Jacket (Available in Red, Yellow, Green, Blue, Gray or Black)

Digital Mic Cable High-Flex 60°C	1800F	NEC: CL2R	1	Black, Red	500▲	152.4	12.0	5.5	23.7Ω/M'	5.0Ω/M'	.211	5.36	110	76%	12	39	26	85
					U-1000	U-304.8	26.0	11.8	77.7Ω/km	16.4Ω/km								
					1000▲	304.8	24.0	10.9										



French Braid

*500 ft. and 1000 ft. put-ups available in Black only.

24 AWG Stranded (7x32) TC Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG TC Drain Wire
Plenum • Foam FEP Teflon® Insulation • Flam arrest® Jacket (Available in Natural White or Purple)

75°C, Non-conduit	1801B	NEC: CMP CEC: CMP FT6	1	Black, Red	500	152.4	6.0	2.7	23.7Ω/M'	18.9Ω/M'	.165	4.19	110	78%	12	39	26	85
					U-1000	U-304.8	14.0	6.4	77.7Ω/km	62.0Ω/km								
					1000	304.8	12.0	5.5										



24 AWG Stranded (7x32) TC Conductors • Dual Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 24 AWG TC Drain Wire
Datalene Insulation • Purple PVC Jacket in Zip-Cord Construction

60°C	1802B	NEC: CMR CEC: CMG FT4	2	Black, Red	500	152.4	16.5	7.5	23.7Ω/M'	18.9Ω/M'	.180	4.57	110	76%	12	39	26	85
					U-1000	U-304.8	35.0	15.9	77.7Ω/km	62.0Ω/km	x	x						
					1000	304.8	37.0	16.8			.360	9.14						



The jacket and shield are bonded so both can be removed with automatic stripping equipment.

22 AWG Stranded (7x30) TC Conductors • Twisted Pair with Fillers • Overall Beldfoil + TC Braid Shield (90% Coverage) • 24 AWG Drain Wire
Datalene Insulation • Black High-Flex Matte PVC Jacket

DMX512 Type High-Flex 60°C	1696A	—	1	Blue, White	250	76.2	8.0	3.6	17.8Ω/M'	4.6Ω/M'	.234	5.94	110	76%	13	43	26	85
					500	152.4	14.5	6.6	48.5Ω/km	15.2Ω/km								
					U-1000	U-304.8	30.0	13.6										
					1000	304.8	32.0	14.5										



Z-Fold®

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HC = High-conductivity • TC = Tinned Copper

*Capacitance between conductors.

**Capacitance between one conductor and other conductors connected to shield.

Teflon is a DuPont trademark.