Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



1803F Multi-Conductor - Multi-Pair Snake Cable





Description:

24 AWG stranded (7x32) TC conductor, Datalene® insulation, pairs individually shielded with bonded Beldfoil® with a drain wire and have numbered and color-coded PVC jackets, overall Beldfoil® shield/drain wire + overall PVC jacket w/nylon rip cord.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
4	24	7x32	TC - Tinned Copper	.024

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Datalene®	FHDPE - Foam High Density Polyethylene	.068

Inner Shield

Inner Shield Material:

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

Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
PVC - Polyvinyl Chloride	.167

Inner Jacket Color Code Chart:

Number	Color
1	Brown and Numbered 1
2	Red and Numbered 2
3	Orange and Numbered 3
4	Yellow and Numbered 4

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
16	Stranded	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material

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PVC - Polyvinyl Chloride

Outer Jacket Ripcord: Yes

Overall Cabling

Overall Nominal Diameter: 0.488 in.

Pair

Pair Color Code Chart:

Number	Color
1	Red & Black
2	Red & Black
3	Red & Black
4	Red & Black

echanical Characteristics (Overall)	
Operating Temperature Range:	-30°C To +60°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	86.200 lbs/1000 ft.
Max. Recommended Pulling Tension:	82.500 lbs.
Min. Bend Radius (Install)/Minor Axis:	5 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG
CEC/C(UL) Specification:	CMG
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):	01/01/2004
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
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UL Flame Test:	UL1685 FT4 Loading
C(UL) Flame Test:	FT4

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Inductance:

Inductance (µH/ft)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft) 12

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Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
26

Nominal Velocity of Propagation:

VP (%) 76

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 23.7

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
.384	.69
.7056	.93
.768	.96
1.024	1.07
1.4112	1.19
1.536	1.21
2.048	1.31
2.8224	1.41
3.0720	1.45
4.096	1.57
5.6448	1.76
6.144	1.83
8.192	2.01
11.2896	2.24
12.288	2.30
24.576	3.08

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 2.75 Amps per conductor @ 25°C

Notes (Overall)

Notes: Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1803F Z4B1000	1,000 FT	107.000 LB	VIO Z4B	С	4 #24 FHDPE FS PR PVC FS PVC
1803F Z4B500	500 FT	57.500 LB	VIO Z4B	С	4 #24 FHDPE FS PR PVC FS PVC

Notes:

C = CRATE REEL PUT-UP.

AES/EBU Digital Audio Cable

Multi-Pair Snake Cables Individually Shielded and Jacketed Pairs



Individually Shielded and Jacketed Pairs

NEC: CMG (CEC: CMG FT4)

Product Description

26 AWG or 24 AWG stranded tinned copper conductor. Datalene® insulation. Pairs individually shielded with bonded Beldfoil® with a drain wire and have numbered and color-coded PVC jackets (see Chart 7 in Technical Information Section for colors). Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Overall Beldfoil shield/drain wire plus overall Purple PVC jacket and nylon rip cord.

Datalene insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

Color Code: Black, Red.

Specifications

.019" (.48mm)
.024" (.60mm)
.054" (1.37mm)
.070" (1.78mm)
.136" (3.45mm)
.167" (4.24mm)
CMG
CMG FT4
37.3Ω/M' (122.3Ω/km)
25.5Ω/M' (83.6Ω/km)
23.7Ω/M' (77.7Ω/km)
18.9Ω/M′ (62.0Ω/km)
110Ω ±10Ω
76%
12.5 pF/Ft. (41 pF/m)
25 pF/Ft. (82 pF/m)
12 pF/Ft. (39 pF/m)
26 pF/Ft. (86 pF/m)

DCR = DC Resistance

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



Part No.	No. of		dard gths		dard Veight	Nominal OD	
	Pairs	Ft.	m	Lbs.	kg	Inch	mm

Individually	Shielded	&	Jacketed	NEC: CMG	(CEC: CMG FT4)
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26 AWG	(7x34)						
7891A	2	500 1000	152.4 304.8	28.0 56.0	12.7 25.5	.343	8.71
7890A	4	100 250 500 1000	30.5 76.2 152.4 304.8	8.2 18.0 31.0 61.0	3.7 8.2 14.1 27.7	.399	10.13
7880A [†] Fits metal she	8 II 25-pin	250 500 1000 D-sub conn	76.2 152.4 304.8 ectors.	28.0 57.0 142.0	12.7 25.9 64.4	.541	13.74
7892A	12	500 1000	152.4 304.8	85.5 174.0	37.9 79.1	.679	17.25
7893A	16	500 1000	152.4 304.8	109.5 240.0	49.8 109.1	.770	19.56

Individually Shielded & Jacketed NEC: CMG (CEC: CMG FT4)

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24 AWG (7x32) • Flexible										
1803F	4	500 1000	152.4 304.8	57.5 107.0	26.1 48.6	.488	12.39			
1805F	8	500 1000	152.4 304.8	106.5 211.0	48.3 95.7	.661	16.79			
1806F	12	500 1000	152.4 304.8	160.0 330.0	72.6 149.7	.829	21.06			
1850F	16	500 1000	152.4 304.8	208.0 407.0	94.4 184.6	.944	23.98			
1852F	24	500 1000	152.4 304.8	321.0 644.0	145.6 292.1	1.205	30.61			
1854F	32	1000	304.8	841.0	381.5	1.346	34.19			

 † 7880A is designed to fit in 25-pin D-sub connectors used in digital console board equipment.

