Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

7893A Multi-Conductor - Multi-Pair Cable

Description:

26 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, overall Beldfoil® shield/drain wire + overall PVC jacket with nylon rip cord

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
16	26	7x34	TC - Tinned Copper	.019

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Datalene®	FHDPE - Foam High Density Polyethylene	.054

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:

AWG
26

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	.136

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
5	Green and Numbered 5
6	Blue and Numbered 6
7	Purple and Numbered 7
8	Gray and Numbered 8
9	White and Numbered 9
10	Black and Numbered 10
11	Tan and Numbered 11
12	Pink and Numbered 12
13	Gray/Brown Stripe and Numbered 13
14	Gray/Red Stripe and Numbered 14
15	Gray/Orange Stripe and Numbered 15
16	Gray/Yellow Stripe and Numbered 16

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
26	Stranded	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Ripcord:	Yes

Overall Cabling

Overall Nominal Diameter:	0.770 in.

Pair

Pair Color Code Chart:

Number	Color
1	Red & Black
2	Red & Black
3	Red & Black
4	Red & Black
5	Red & Black
6	Red & Black
7	Red & Black
8	Red & Black
9	Red & Black
10	Red & Black
11	Red & Black
12	Red & Black
13	Red & Black
14	Red & Black
15	Red & Black
16	Red & Black

Pair Lay Length & Direction:

Lay Length (in.)
1.0

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +80°C
Bulk Cable Weight:	198 lbs/1000 ft.
Max. Recommended Pulling Tension:	171 lbs.
Min. Bend Radius (Install)/Minor Axis:	7.750 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
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

Flame Test

UL Flame Test:	UL1685 UL Loading
C(UL) Flame Test:	FT4

Plenum/Non-Plenum

Plenum (Y/N):	No

Surface Printing (Overall)

Surface Printing:	...SHIELDED (UL) CMG C(UL)

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
110

Nom. Inductance:

Inductance (µH/ft)
.25

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
12.5

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
25.0

Nominal Velocity of Propagation:

VP (%)
76

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
37.3

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	25.500 Ohm/1000 ft

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
.384	.84
.7056	1.14
.768	1.18
1.024	1.34
1.4112	1.50
1.536	1.54
2.048	1.69
2.8224	1.86
3.0720	1.92
4.096	2.14
5.6448	2.40
6.144	2.47
8.192	2.75
11.2896	3.09
12.288	3.18
24.576	4.20

7893A Multi-Conductor - Multi-Pair Cable

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
7893A Z4B1000	1,000 FT	240.000 LB	VIO Z4B	C	16 #26 FHDPE FSPR PVC FS PVC

Notes:
C = CRATE REEL PUT-UP.

AES/EBU Digital Audio Cable

Multi-Pair Snake Cables
Individually Shielded and Jacketed Pairs

BRILLIANCE®

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.

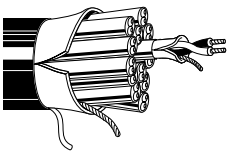
Color Code: Black, Red.

Specifications

Nominal OD — Conductor	
26 AWG	.019″ (.48mm)
24 AWG	.024″ (.60mm)
Nominal OD — Insulation	
26 AWG	.054″ (1.37mm)
24 AWG	.070″ (1.78mm)
Inner Pair Jacket OD	
26 AWG	.136″ (3.45mm)
24 AWG	.167″ (4.24mm)
Approvals	
NEC	CMG
CEC	CMG FT4
Nominal DCR (26 AWG)	
Conductor	37.3Ω/M′ (122.3Ω/km)
Shield	25.5Ω/M′ (83.6Ω/km)
Nominal DCR (24 AWG)	
Conductor	23.7Ω/M′ (77.7Ω/km)
Shield	18.9Ω/M′ (62.0Ω/km)
Nominal Impedance	110Ω ±10Ω
Nominal Velocity of Propagation	76%
Nominal Capacitance (26 AWG)	
Between Conductors	12.5 pF/Ft. (41 pF/m)
Between Conductor/Shield*	25 pF/Ft. (82 pF/m)
Nominal Capacitance (24 AWG)	
Between Conductors	12 pF/Ft. (39 pF/m)
Between Conductor/Shield*	26 pF/Ft. (86 pF/m)

DCR = DC Resistance

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



Part No.	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD	
		Ft.	m	Lbs.	kg	Inch	mm
Individually Shielded & Jacketed NEC: CMG (CEC: CMG FT4)							
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†	8	250 500 1000	76.2 152.4 304.8	28.0 57.0 142.0	12.7 25.9 64.4	.541	13.74
Fits metal shell 25-pin D-sub connectors.							
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)							
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.