Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

9184 Multi-Conductor - Audio, Control and Instrumentation Cable

Description:

22 AWG solid tinned copper conductors, Datalene® insulation, twisted pairs, Duofoil shield (100% coverage), 22 AWG stranded tinned copper drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
2	22	Solid	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material
Datalene®	FPE - Foam Polyethylene

Outer Shield

Outer Shield Material:

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

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
22	7x30	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter:	0.385 in.

Pair

Pair Color Code Chart:

Number	Color
1	Black & Yellow
2	Red & Blue

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	60°C (UL AWM Style 2668)
Bulk Cable Weight:	49.300 lbs/1000 ft.
Max. Recommended Pulling Tension:	40 lbs.
Min. Bend Radius (Install)/Minor Axis:	4 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM

CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2668 (300 V 60°C)
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):	10/13/2005
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

Flame Test

UL Flame Test:	UL1685 UL Loading

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
150

Nom. Inductance:

Inductance (µH/ft)
0.27

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
14.1

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
8.7

Nominal Velocity of Propagation:

VP (%)
78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
16.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
8

Max. Operating Voltage - UL:

Voltage
300 V RMS (UL AWM Style 2668)

Max. Recommended Current:

Current
2.6 Amps per conductor @ 25°C

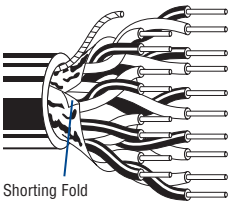
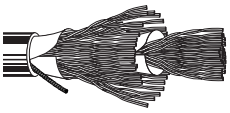
Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9184 0101000	1,000 FT	59.000 LB	BLACK	C	4 #22 FRFPE SHLD PVC
9184 010500	500 FT	29.000 LB	BLACK	C	4 #22 FRFPE SHLD PVC

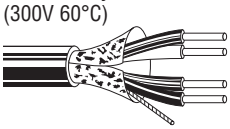
Notes:
C = CRATE REEL PUT-UP.

Overall Beldfoil® Shield

Audio, Control and Instrumentation Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Insulation Thickness Inch	Insulation Thickness mm	Jacket Thickness Inch	Jacket Thickness mm	Nominal OD Inch	Nominal OD mm	Nominal Capacitance * pF/ Ft.	Nominal Capacitance * pF/ m	Nominal Capacitance ** pF/ Ft.	Nominal Capacitance ** pF/ m
22 AWG Solid Tinned Copper Conductors • Twisted Pairs • Overall Beldfoil Shield (100% Coverage) • 22 AWG Stranded TC Drain Wire																		
PVC Insulation • Chrome PVC Jacket																		
UL AWM Style 2464 (300V 80ºC)  Shorting Fold	**9302**	NEC: CMG CEC: CMG FT4	2	See Chart 3 (Tech Info Section)	U-500 500 U-1000 1000	U-152.4 152.4 U-304.8 304.8	15.5 15.0 29.0 31.0	7.0 6.8 13.2 14.1	.013	.33	.032	.81	.244	6.20	35	115	50	164
	9305	NEC: CMG CEC: CMG FT4	4	See Chart 3 (Tech Info Section)	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	4.9 22.0 22.5 43.0 45.0	2.2 10.0 10.2 19.5 20.4	.013	.33	.032	.81	.265	6.73	35	115	50	164
	9306	NEC: CMG CEC: CMG FT4	6	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	31.5 62.0	14.3 28.2	.013	.33	.032	.81	.315	8.00	35	115	50	164
	9309	NEC: CMG CEC: CMG FT4	9	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	44.5 86.0	20.2 39.1	.013	.33	.033	.84	.363	9.22	35	115	50	164
	9315	NEC: CMG CEC: CMG FT4	15	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	67.0 133.0	30.5 60.5	.013	.33	.037	.94	.449	11.41	35	115	50	164
	9319	NEC: CMG CEC: CMG FT4	19	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	85.0 165.0	38.6 75.0	.013	.33	.040	1.02	.495	12.57	35	115	50	164
	9327	NEC: CMG CEC: CMG FT4	27	See Chart 3 (Tech Info Section)	500 1000	152.4 304.8	116.0 230.0	52.7 104.5	.013	.33	.045	1.14	.615	15.62	35	115	50	164
300V RMS, 60ºC 	**8751**	NEC: CMG CEC: CMG FT4	51	Request Technical Bulletin T/8-4	1000†	304.8	384.0	174.5	.010	.25	.050	1.27	.710	18.03	30	98	42.8	140

For 38-pair polypropylene version of 8751, see 8752.

Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths Ft.	Standard Lengths m	Standard Unit Weight Lbs.	Standard Unit Weight kg	Nom. DCR Cond.	Nom. DCR Shield	Nominal OD Inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nom. Capacitance * pF/ Ft.	Nom. Capacitance * pF/ m	Nom. Capacitance ** pF/ Ft.	Nom. Capacitance ** pF/ m
22 AWG Solid Tinned Copper Conductors • Twisted Pairs • Duofoil® Shield (100% Coverage) • 22 AWG Stranded Tinned Copper Drain Wire																		
Datalene® Insulation • Black PVC Jacket																		
UL AWM Style 2668 (300V 60°C) 	**9184**	NEC: CM CEC: CM	2	Black & Yellow, Red & Blue	500 1000	152.4 304.8	29.0 59.0	13.2 26.8	16.5Ω/M′ 54.13Ω/km	8.0Ω/M′ 26.2Ω/km	.385	9.78	150	78%	8.7	28.5	14.1	46.3

DCR = DC Resistance • TC = Tinned Copper

*Capacitance between conductors.
**Capacitance between one conductor and other conductors connected to shield.
† Spools are one piece, but length may vary -0 to +20% from length shown.

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.