



Description:

100 Ohm twinaxial cable, 20AWG stranded (7x28) one tinned, one bare copper conductor, FEP insulation, overall FEP dielectric, Duofoil® + tinned copper braid shield 85%, FEP jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	7x28	TC - Tinned Copper	.037
			BC - Bare Copper	

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)
Teflon®	FEP - Fluorinated Ethylene Propylene	.074

Inner Jacket

Inner Jacket Material:

Inner Jacket Trade Name	Inner Jacket Material	Nom. Dia. (in.)
Teflon®	FEP - Fluorinated Ethylene Propylene	.201

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	85

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Teflon®	FEP - Fluorinated Ethylene Propylene

Overall Cabling

Overall Nominal Diameter: 0.259 in.

Pair

Pair Color Code Chart:

Number	Color
1	Natural & Natural

Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

Bulk Cable Weight: 52 lbs/1000 ft.

Max. Recommended Pulling Tension: 88 lbs.

Min. Bend Radius (Install)/Minor Axis: 5.400 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

Flame Test

UL Flame Test: NFPA 262

C(UL) Flame Test: FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	9207

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
100

Nom. Inductance:

Inductance (µH/ft)
0.155

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
14.0

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
23.0

Nominal Velocity of Propagation:

VP (%)
69.5

Nominal Delay:

Delay (ns/ft)
1.41

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
9.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
2.5

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.3
10	1.2
50	2.8
100	4.1
200	6.4
300	8.4
400	10.2

Max. Operating Voltage - UL:

Voltage
300 V RMS

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
89207 010100	100 FT	6.700 LB	BLACK	C	2#20 FEP FEP SH FEP
89207 0101000	1,000 FT	55.000 LB	BLACK	C	2#20 FEP FEP SH FEP
89207 010500	500 FT	26.000 LB	BLACK	C	2#20 FEP FEP SH FEP

Notes:

C = CRATE REEL PUT-UP.

Computer and Instrumentation Cable

100 Ohm, 124 Ohm and 150 Ohm Twinax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

100 Ohm • 20 AWG Stranded (7x28) .037" One TC/One BC Conductor • Duofoil® (100% Coverage) + TC Braid Shield (86% Coverage)

Polyethylene Insulation • Polyethylene Inner Jacket • Black PVC Outer Jacket																					
75°C	9207	NEC:	100	30.5	7.1	3.2	20 AWG	.236	5.99	Duofoil	.330	8.38	100	66%	14.5	47.6	1	.3	1.0		
		CM CL2	U-500	U-152.4	33.0	15.0	(7x28)			+86%								10	1.2	3.9	
		CEC:	500	152.4	34.5	15.7	.037"			TC Braid									50	2.8	9.2
		CMG FT4	1000	304.8	68.0	30.9	(1) TC,			1.7Ω/M'									100	4.1	13.5
			1640	500.0	111.5	50.7	(1) BC			5.7Ω/km									200	6.4	21.0
			2000	609.6	136.0	61.8	9.5Ω/M'												400	10.2	33.5
			3280	1000.0	219.8	99.9	31.0Ω/km														
IBM P/N 7362211		5000	1524.0	350.0	159.1																

100 Ohm • 20 AWG Stranded (7x28) .037" One TC/One BC Conductor • Duofoil (100% Coverage) + TC Braid Shield (85% Coverage)

Plenum • FEP Insulation • Black FEP Jacket																					
200°C	89207	NEC:	100	30.5	6.7	3.0	20 AWG	.201	5.11	Duofoil	.259	6.58	100	69.5%	14.0	46.0	1	.3	1.0		
		CMP	500	152.4	26.0	11.8	(7x28)			+85%									10	1.2	3.9
		CEC:	1000	304.8	55.0	25.0	.037"			TC Braid									50	2.8	9.2
		CMP FT6					(1) TC, (1) BC			2.5Ω/M'									100	4.1	13.5
							9.5Ω/M'			8.2Ω/km									200	6.4	21.0
						31.2Ω/km												300	8.4	27.6	
																		400	10.2	33.5	

124 Ohm • 25 AWG Stranded (7x33) .021" Tinned Copper Conductors • Beldfoil® Shield (100% Coverage) • Stranded TC Drain Wire

Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)																					
UL AWM Style 2092 (300V 60°C)	9271	NEC:	100	30.5	3.2	1.5	25 AWG	.170	4.32	Beldfoil	.240	6.10	124	66%	12.2	40.0	1	.6	2.0		
		CM	500	152.4	12.5	5.7	(7x33)			12.0Ω/M'									10	1.7	5.6
		CEC:	U-1000	U-304.8	27.0	12.3	.021"			39.4Ω/km									50	3.6	11.8
		CM	1000	304.8	28.0	12.7	TC												100	5.0	16.4
							31.8Ω/M'												200	6.9	22.6
						104.3Ω/km												400	9.6	31.5	

124 Ohm • 16 AWG Solid .051" Bare Copper Conductors • Duofoil (100% Coverage) + Tinned Copper Braid Shield (90% Coverage)

Foam Polyethylene Insulation • Black PVC Jacket (Color Code: Clear, Blue)																					
UL AWM Style 2448 (30V 60°C) VW-1	9860	NEC:	500	152.4	52.0	23.6	16 AWG	.322	8.18	Duofoil	.440	11.18	124	78%	10.9	35.8	1	.2	.6		
		CMX	1000	304.8	103.0	46.8	(solid)			+ 90%									10	.7	2.3
		CEC:	2000	609.6	202.0	91.8	.051"			TC Braid									50	1.8	5.9
		CMX					BC			1.3Ω/M'									100	2.9	9.5
							4.2Ω/M'			4.3Ω/km									200	4.1	13.5
						13.8Ω/km												400	6.2	20.3	

150 Ohm • 22 AWG Stranded (19x34) .031" Tinned Copper Conductors • Duofoil Shield (100% Coverage) • Stranded TC Drain Wire

Datalene® Insulation • Black PVC Jacket (Color Code: Black, Yellow)																					
UL AWM Style 2668 (30V 60°C) VW-1	9182	NEC:	U-500	U-152.4	21.5	9.8	22 AWG	.275	6.98	Duofoil	.345	8.76	150	78%	8.8	28.9	1	.4	1.3		
		CMX	500	152.4	23.0	10.4	(19x34)			6.3Ω/M'									10	1.2	3.9
		CL2X	1000	304.8	44.0	20.0	.031"			20.7Ω/km									50	2.7	8.7
		CEC:					TC												100	4.3	14.1
		CMX					14.0Ω/M'												200	6.2	20.3
						45.9Ω/km												400	8.8	28.9	

Plenum • Foam FEP Teflon Insulation • Black FEP Teflon Jacket (Color Code: Black, Yellow)																					
	89182	NEC:	100	30.5	6.4	2.9	22 AWG	.278	7.06	Duofoil	.307	7.80	150	78%	8.8	28.9	1	.4	1.3		
		CMP	500	152.4	28.0	12.7	(19x34)			6.3Ω/M'									10	1.2	3.9
		CL2P	1000	304.8	53.0	24.1	.031"			20.7Ω/km									50	2.7	8.7
		CEC:					TC												100	4.3	14.1
		CMP FT6					14.0Ω/M'												200	6.2	20.3
						45.9Ω/km												400	8.8	28.9	

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

Teflon is a DuPont trademark.

