VideoTwist® 6 U/UTP Cables for RGB Video

TIA/EIA-568-B.2-1, Category 6,
Bonded-Pair Cables

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Freq. MHz	Max. Atten. dB/100m	Min. PSUM NEXT dB	Min. PSUM ACR dB/100m	Min. PSUM ELFEXT dB/100m	Input Imp. (Ω)	Min. RL dB
NanoSkew™ • Category 6 • 23 AWG Bonded-Pairs • Solid 0.6 mm Bare Copper • **Skew 10.0 ns/100 m** Nominal • Rip Cord																			
Polyolefin Insulation • Blue PVC Jacket																			
300V RMS	**7989R**	NEC	1000	305	32.0	14.5	0.57 mm	0.042	1.06	Bonded-Pair	0.365	9.27	1	2.0	72.3	70.3	64.8	100 ± 15	20.0
		CMR	1640	500	52.5	23.8	23 AWG			Unshielded	x	x	4	3.8	63.3	59.5	52.7	100 ± 15	23.0
		CEC					Solid BC			U/UTP	0.165	4.19	8	5.3	58.8	53.4	46.7	100 ± 15	24.5
		CMR FT4											10	6.0	57.3	51.3	44.8	100 ± 15	25.0
													16	7.6	54.3	46.7	40.7	100 ± 15	25.0
													20	8.5	52.8	44.3	38.7	100 ± 15	25.0
													25	9.5	51.4	41.8	36.8	100 ± 15	24.3
													31.25	10.7	49.9	39.2	34.9	100 ± 15	23.6
													62.5	15.4	45.4	30.0	28.8	100 ± 15	21.5
													100	19.8	42.3	22.5	24.8	100 ± 15	20.1
													155	25.2	39.5	14.3	20.9	100 ± 22	18.8
													200	29.0	37.8	8.8	18.7	100 ± 22	18.0
													250	32.8	36.3	3.5	16.8	100 ± 32	17.3
Rip Cord																			
4-Pair MediaTwist™ Construction																			
			Color Code: see chart below																
Plenum • Polyolefin Insulation • Blue PVC Jacket																			
300V RMS	**7989P**	NEC	1000	305	32.0	14.5	0.57 mm	0.039	1.00	Bonded-Pair	0.365	9.27							see above
		CMR	1640	500	52.5	23.8	23 AWG			Unshielded	x	x							
		CEC					Solid BC			U/UTP	0.165	4.19							
		CMR FT4																	
Rip Cord																			
4-Pair MediaTwist™ Construction																			
			Color Code: see chart below																

BC = Bare Copper • ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • DCR = DC resistance

Color Code

Pair No.	Color
1	White/Blue Stripe, Blue
2	White/Orange Stripe, Orange
3	White/Green Stripe, Green
4	White/Brown Stripe, Brown

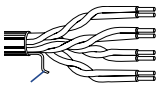
Get the Bonded-Pairs Cable Preparation Tool

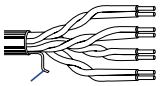
See page 15.37 for details.
(Part No. 1797B)

VideoTwist® 5e U/UTP Cables for RGB Video

TIA/EIA-568-B.2, Category 5e,
Bonded-Pair Cables

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Freq. MHz	Max. Atten. dB/100m	Min. PSUM NEXT dB	Min. PSUM ACR dB/100m	Min. PSUM ELFEXT dB/100m	Input Imp. (Ω)	Min. RL dB
Cat 5e • 24 AWG • Bonded-Pair • Solid 0.5 mm Bare Copper • Twisted Pair • Skew 9.0 ns/100 nom. • Rip Cord																			
Polypropylene Insulation • Green PVC Jacket																			
	7988R	NEC:	1000	305	22.0	10.0	0.51 mm	0.038	0.97	**Bonded-Pair**	0.204	5.18	1	2.0	65.3	60.3	60.8	100 ± 15	20.0
		CMR	1640	500	36.2	16.4	24 AWG			Unshielded			4	4.1	53.3	49.3	48.7	100 ± 15	23.0
		CEC:					Solid BC			U/UTP			10	6.5	47.3	40.8	40.8	100 ± 15	25.0
		CMG											16	8.2	44.3	36.0	36.7	100 ± 15	25.0
													31.25	11.7	39.9	28.2	30.9	100 ± 15	23.6
													62.5	17.0	35.4	18.4	24.8	100 ± 15	21.5
													100	22.0	32.3	10.3	20.8	100 ± 15	20.1
													200	32.4	27.8	1.0	14.7	100 ± 15	15.0
4-Pair		Color Code: see chart below								Third party verified to TIA/EIA-568-B.2, Category 5e Jacket sequentially marked at 0.6 m intervals.										
Plenum • FEP Insulation • Green Flamarrest® Jacket																			
	7988P	NEC:	1000	305	22.9	10.4	0.51 mm	0.036	0.91	**Bonded-Pair**	0.193	4.90							see above
		CMP	1640	500	37.7	17.1	24 AWG			Unshielded									
		CEC:					Solid BC			U/UTP									
		CMP																	
4-Pair		Color Code: see chart below								Third party verified to TIA/EIA-568-B.2, Category 5e Jacket sequentially marked at 0.6 m intervals.										





BC = Bare Copper • ACR = Attenuation Crosstalk Ratio • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • DCR = DC resistance

Color Code

Pair No.	Color
1	White/Blue Stripe, Blue
2	White/Orange Stripe, Orange
3	White/Green Stripe, Green
4	White/Brown Stripe, Brown

Get the Bonded-Pairs Cable Preparation Tool

See page 15.37 for details.
(Part No. 1797B)

IEEE 802.3, ISO/IEC 8802.3 10Base2 and 10Base5

Trunk Cables – Thinnet and Thicknet

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Core OD (Dielectric) inch	Nominal Core OD (Dielectric) mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/ 100 ft.	Nominal Attenuation dB/ 100 m
Thinnet 10Base2 • 20 AWG • Stranded (19x32) 0.9 mm Tinned Copper • **Duobond® II** • 93% Tinned Copper Braid																			
Ethernet • Foam HDPE Insulation • Grey PVC Jacket																			
30V 60°C UL AWM Style 1354	**9907**	NEC: CL2, CM CEC: CM	500 U-1000 1000 1640 2500 3280	152 U-305 305 500 762 1000	12.6 25.1 25.1 41.0 62.6 82.2	5.7 11.4 11.4 18.6 28.4 37.3	0.94 mm 20 AWG (19x32) TC 47.9 Ω/km* 28.9 Ω/km**	0.102	2.59	Duobond® II + 93% TC 19.0 Ω/km***	0.185	4.70	50	80%	25.4	83.3	1 10 50 100 200 400 700 900 1000	0.4 1.3 2.9 4.2 6.1 8.9 12.1 13.9 14.8	1.4 4.3 9.5 13.8 20.0 29.2 39.7 45.6 48.6
DEC Part No. 17-01248-00 For Plenum version of 9907, see 89907 or 82907.																			
Plenum • Ethernet • Foam FEP Insulation • Natural Flamarrest® Jacket																			
300V 75°C	**82907**	NEC: CL2P CMP CEC: CMP	† 500 U-1000 † 1000 † 2500	152 U-305 305 762	12.6 23.1 24.0 57.5	5.7 10.5 10.9 26.1	0.94 mm 20 AWG (19x32) TC 47.9 Ω/km* 28.9 Ω/km**	0.095	2.41	Duobond® II + 93% TC 19.0 Ω/km***	0.160	4.06	50	80%	25.4	83.3	1 10 50 100 200 400 700 900 1000	0.4 1.3 2.9 4.2 6.1 9.2 12.9 15.0 16.0	1.4 4.3 9.5 13.8 20.0 30.2 42.3 49.2 52.5
Plenum • Ethernet • Foam FEP Insulation • Grey Fluorocopolymer Jacket																			
300V 150°C	**89907**	NEC: CL2, CM CEC: CM	† 500 † 1000 † 2500	152 305 762	12.6 24.0 60.2	5.7 10.9 27.3	0.94 mm 20 AWG (19x32) TC 47.9 Ω/km* 28.9 Ω/km**	0.095	2.41	Duobond® II + 93% TC 19.0 Ω/km***	0.160	4.06	50	80%	25.4	83.3			see above
DEC Part No. 17-01246-00 Suitable for outdoor and direct burial applications.																			
Thinnet 10Base2 • 12 AWG • Solid 2.05 mm Bare Copper • **Duobond® IV** Quad Shield																			
Ethernet • Foam Polyethylene Insulation • Yellow PVC Jacket																			
30V 60°C UL AWM Style 1478	**9880**	NEC: CL2, CM CEC: CM	500 1000 1640	152 305 500	66.1 131.2 220.2	30.0 59.5 99.9	2.05 mm 12 AWG Solid BC 9.66 Ω/km* 4.66 Ω/km**	0.243	6.17	Duobond® IV Quad Shield 5.0 Ω/km***	0.405	10.29	50	78%	25.9	85.0	1 5 10 50 100 200 400 700 900 1000	0.2 0.4 0.5 1.2 1.7 2.6 3.9 5.5 6.5 6.9	0.6 1.2 1.7 3.9 5.6 8.4 12.8 18.1 21.3 22.6
DEC Part No. 17-00451-00 5.0 Ω/km For Plenum version of 9880, see 89880. Ring-band stripes marked every 2.5 meters to aid users in tap placement.																			
Plenum • Ethernet • Foam FEP Insulation • Orange Fluorocopolymer Jacket																			
150°C	**89880**	NEC: CL2P CMP CEC: CMP	† 1000 † 1640	305 500	134.3 225.1	60.9 102.1	2.05 mm 12 AWG Solid BC 9.66 Ω/km* 4.66 Ω/km**	0.245	6.22	Duobond® IV* Quad Shield 5.0 Ω/km***	0.375	9.53	50	78%	25.9	85.0	1 5 10 50 100 200 400 700 900 1000	0.2 0.4 0.5 1.1 1.6 2.5 3.8 5.6 6.8 7.2	0.6 1.2 1.7 3.8 5.4 8.0 12.5 18.4 22.3 23.6
DEC Part No. 17-00324-00 Suitable for outdoor and direct burial applications. Ring-band stripes marked every 2.5 meters to aid users in tap placement.																			

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance
† Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Duobond® II and Duobond® IV see technical information page 23.13.

Not RoHS compliant at time of printing.

IEEE 802.3, ISO/IEC 8802.3 10Base5

Transceiver Cables

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD inch	Nominal Insulation OD mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Color Code
28 and 24 AWG • Stranded (7x36) 0.4 mm and (7x32) 0.6 mm Tinned Copper • **Beldfoil®** • Twisted Pair • **Overall Polyester Isolation Tape + Duofoil® + 92% Tinned Copper Braid** • 24 AWG Tinned Copper Drain Wire																		
Polypropylene Insulation • Light Grey PVC Jacket																		
30V 80°C UL AWM Style 2919	**9903**	NEC: CMG CEC: CMG	500 1000	152 305	21.6 43.0	9.8 19.5	3-Pair: 0.38 mm 28 AWG (7x36) TC	0.033	0.84	Individual Beldfoil® + Drain Wire (24 AWG TC) + Overall Duofoil® + 92% TC Braid	0.250	6.35	78*	66%	CDR/CDR	19.7 34.8	64.6 114.2	Grey/White, Yellow/Orange
							1-Pair: 0.61 mm 24 AWG (7x32) TC	0.044	1.12									Blue/Green, Black/Red
4-Pair * 3-Pair																		
20 AWG • Stranded (7x28) 1.0 mm Tinned Copper • **Beldfoil®** • Twisted Pair • **Overall Polyester Isolation Tape + Duofoil® + 95% Tinned Copper Braid** • 22 AWG Tinned Copper Drain Wire																		
Datalene® Insulation • Light Grey PVC Jacket																		
30V 80°C UL AWM Style 2919	**9901**	NEC: CL2, CM CEC: CM	500 1000	152 305	53.6 106.3	24.3 48.2	1.0 mm 20 AWG (7x28) TC	0.077	1.96	Individual Beldfoil® + Drain Wire (22 AWG TC) + Overall Duofoil® + 95% TC Braid	0.415	10.54	78	78%	CDR/CDR	16.7 29.5	54.8 96.8	Grey/White Yellow/Orange, Blue/Green, Black/Red
4-Pair			DEC Part No. 17-01320-00															
Plenum • FEP Teflon® Insulation ** **• Light Grey Fluorocopolymer (PVDF) Jacket**																		
150°C	**89901**	NEC: CMP CEC: CMP	** 500 ** 1000	152 305	51.6 104.3	23.4 47.3	1.0 mm 20 AWG (7x28) TC	0.060	1.52	Individual Beldfoil® + Drain Wire (22 AWG TC) + Overall Duofoil® + 95% TC Braid	0.370	9.40	78	78%	CDR/CDR	16.7 29.5	54.8 96.8	Grey/White Yellow/Orange, Blue/Green, Black/Red
4-Pair			DEC Part No. 17-01319-00 Suitable for outdoor and direct burial applications.															
20 and 22 AWG • Stranded (7x30) 0.8 mm and (7x28) 1.0 mm Tinned Copper • **Beldfoil®** • Twisted Pair • **Overall Duofoil® + 95%Tinned Copper Braid** • 22 AWG Tinned Copper Drain Wire																		
Ethernet • Foam HDPE (22 AWG) and PVC (20 AWG) Insulation • Light Blue PVC Jacket																		
30V 80°C UL AWM Style 2919	**9891**	NEC: CM CEC: CM	100 500 1000	30 152 305	8.2 35.9 70.1	3.7 16.3 31.8	3-Pair: 0.76 mm 22 AWG (7x30) TC	0.063	1.59	Individual Beldfoil® + Drain Wire (22 AWG TC) + Overall Duofoil® + 95% TC Braid	0.315	8.00	78*	78%	CDR/CDR	16.7 29.5	54.8 96.8	Black/White Yellow/Orange, Blue/Green, Black/Red
							1-Pair: 0.96 mm 20 AWG (7x28) TC	0.062	1.57									Blue/Green, Grey/Violet
4-Pair * 3-Pair																		

TC = Tinned Copper • DCR = DC resistance • ** Foam FEP (data pairs) and solid FEP (power pair).
Duofoil® see technical information page 23.13. Teflon® is a DuPont trademark.

Not RoHS compliant at time of printing

IEEE 802.4, MAP & Mini-MAP, IEEE 802.7

Broadband Coaxial Cables

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Core OD (Dielectric) inch	Nominal Core OD (Dielectric) mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
14 AWG • Solid 1.6 mm Copper-Covered Steel • **Duobond® IV** Quad Shield																			
Gas-Injected Foam Polyethylene Insulation • Grey PVC Jacket																			
	3094A	NEC:	500	152	31.1	14.1	1.63 mm	0.280	7.11	Duobond® IV	0.407	10.34	75	82%	16.2	53.1	1	0.2	0.5
		CL2R	1000	305	62.2	28.2	14 AWG			Quad Shield							2	0.2	0.6
		CMR	† 2000	610	121.9	55.3	Solid CCS			4.9 Ω/km***							5	0.3	0.9
		CEC:					20.0 Ω/km*			7.9 mm							10	0.4	1.2
		CMG					36.1 Ω/km**										20	0.5	1.8
																	50	0.8	2.7
																	100	1.2	3.8
																	200	1.6	5.3
RG-11/U Type			Tap marks every 2.6 meters to aid users in installation. 152 m and 305 m exact 1 pc.							Sweep tested 5 MHz to 400 MHz. CPE jacket optional.							300	2.0	6.6
																	400	2.3	7.6

IEEE 802.5, ISO/IEC 8802.5

IBM Cabling System
Types 1A and 1

Description	Part No.	UL NEC/C(UL)CEC Type IEC	Standard Lengths ft.	Standard Lengths m	Standard Unit Weight lbs.	Standard Unit Weight kg	Conductor (Stranding) Diameter Nom. DCR	Nominal Core OD (Dielectric) inch	Nominal Core OD (Dielectric) mm	Shielding Material Nom. DCR	Nominal OD inch	Nominal OD mm	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance pF/ft.	Nominal Capacitance pF/m	Nominal Attenuation MHz	Nominal Attenuation dB/100 ft.	Nominal Attenuation dB/100 m
IBM Type 1a • 22 AWG • Solid 0.6 mm Bare Copper • Each Pair Individually **Beldfoil®** Shielded • 65% Overall Tinned Copper Braid • Rip Cord																			
Flame-Retardant Foam Polyethylene Insulation • Black PVC Jacket																			
	IBM Part No. 9688	NEC:	† 500	152	26.5	12.0	0.64 mm	0.099	2.51	Individual	0.296	7.52	150	–	8.5	27.9	4	0.7	2.2
	4716748	CMG	† 1000	305	50.0	22.7	22 AWG			Beldfoil®	x	x					16	1.3	4.4
	33G2772	CEC:	† 2000	610	102.1	46.3	Solid BC			+ Overall	0.431	10.95					100	3.8	12.3
		CMG	† 3600	1098	190.7	86.5				65% TC Braid							300	6.5	21.4
																	100 ††	4.1	13.4
																	300 ††	7.1	23.3
																	600 ††	10.0	32.9
Rip Cord																			
2-Pair			Meets IEEE 802.5 and TIA/EIA-568-A specifications, ETL verified. For token ring (4/16 Mbps), FDDI over copper, and video applications. IBM qualified type 1A media cable for use in IBM cabling systems. For non-suffix "A" type IBM product, see 1634A below.																
BM Type 1 • 22 AWG • Solid 0.6 mm Bare Copper • Each Pair Individually **Beldfoil®** Shielded • 65% Overall Tinned Copper Braid • Rip Cord																			
Flame-retardant Foam Polyethylene Insulation • Black PVC Jacket																			
	IBM Part No. 1634A	NEC:	† 1000	305	50.0	22.7	0.64 mm	0.099	2.51	Individual	0.296	7.52	150	–	8.5	27.9	4	0.7	2.2
	4716748	CMG	† 2000	610	102.3	46.4	22 AWG			Beldfoil®	x	x					16	1.3	4.4
		CEC:	† 3600	1098	191.1	86.7	Solid BC			+ Overall	0.431	10.95							
		CMG								65% TC Braid									
Rip Cord																			
2-Pair			Meets IEEE 802.5 and TIA/EIA-568-A specifications, ETL verified. IBM qualified type 1A media cable for use in IBM cabling systems. For token ring (4/16 Mbps), FDDI over copper, and video applications.																

* DC loop resistance • ** DC resistance inner conductor • *** DC resistance outer conductor • CCS = Copper-Covered Steel • TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance
† Spools are one piece, but length may vary ±10% from length shown.
†† Common mode

Duobond® IV see technical information page 23.13.

Not RoHS compliant at time of printing

IEEE 802.5, ISO/IEC 8802.5

IBM Cabling System
Types 2A and 6A

Description	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Core OD (Dielectric)		Shielding Material 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/ 100 m
IBM Type 6a • 26 AWG • Stranded (7x34) 0.5 mm Bare Copper • Twisted Pair • Individual **Beldfoil®** • 65% Overall Tinned Copper Braid																			
Datalene® Insulation • Striated Black PVC Jacket																			
IBM Part No. 1215A 4716743 33G2775	NEC: CL2, CM CEC: CM	† 998	304	46.1	20.9	0.48 mm 26 AWG (7x34) BC	0.078	1.98	Individual Beldfoil® + 65% TC Braid	0.325	8.26	150	–	8.5	27.9	4 16 100 300	1.0 2.0 5.7 9.8	3.3 6.6 18.7 32.3
2-Pair		IBM qualified type 6A office cable for use in IBM cabling systems.																	
IBM Type 2a • 22 AWG • Solid 0.6 mm Bare Copper • Twisted Pair • Individual **Beldfoil®** • 65% Overall Tinned Copper Braid • Rip Cord																			
Flame-Retardant Foam Polyethylene Insulation • Black PVC Jacket																			
IBM Part No. 9689 4716739 33G2773	NEC: CMG CEC: CMG	† 1000 † 3600	305 1098	80.2 299.4	36.4 135.8	2-Pair* 0.64 mm 22 AWG Solid BC	0.099	2.51	Beldfoil® Each Pair + 65% TC Braid	0.324 x 0.466	8.32 x 11.84	150@ 1 MHz (data)	–	8.5 (data)	27.9 (data)	0.1k** 4 16 100 300	0.04 0.7 1.3 3.8 6.5	0.1 2.2 4.4 12.3 21.4
						4-Pair* 0.64 mm 22 AWG Solid BC	0.045	1.14				600@ 1 KHz (voice)				100 †† 300 †† 600 ††	4.1 7.1 10.0	13.4 23.3 32.9
		IBM qualified type 2A media cable for use in IBM cabling systems.																	

TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance
† Spools are one piece, but length may vary ±10% from length shown.
†† Common mode
* (2) shielded Data-grade pair; (4) unshielded voice-grade media pair.
** Voice pairs (1 kHz); Data pairs (4-600 MHz)

Not RoHS compliant at time of printing