

Networking Cables

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Introduction



Structured cabling is the lifeline of a communications system and a key determinant of network performance.

To help achieve optimum network performance, Belden has built reliability into each cable it produces. The result is a comprehensive, unflinching line of cables that fulfill the requirements of your specific application and/or the applicable TIA/EIA Category requirement.

A strict adherence to quality manufacturing processes and a dedication to innovative, performance-enhancing design have enabled Belden to stay at the forefront of this fast paced industry. No one makes a better performing or more reliable networking cable than Belden.

Breakthrough Bonded-Pair Design

Belden's breakthrough Bonded-Pair cables are the result of a patented design that bonds the individual insulated conductors together along their longitudinal axes. This unique physical characteristic results in uniform conductor-to-conductor spacing — a key aspect in consistent electrical performance. Even when a Bonded-Pair cable is subjected to everyday installation stresses such as bending, coiling and pulling, its conductor-to-conductor spacing remains stable.

Installable Performance™

A Category 5e cable that yields 5e performance on the reel but provides only Category 5 performance after installation is of little value.

Since Belden® Bonded-Pair cables are more resistant to the adverse effects of the installation/termination process, they are able to achieve Installable Performance — or achieving the same high level of performance *after* installation. (For more detailed information, please refer to Belden Technical Bulletin TB-66 *The Impact of Typical Installation Stresses on Cable Performance.*)

This superior quality/reliability attribute also offers installer-related dividends as Belden Bonded-Pair cable installations typically require less troubleshooting.

In fact, a recent contractor survey found that Belden Bonded-Pair cables offer significant time/cost savings when the complete installation is taken into consideration. This includes all installation, troubleshooting and correction procedures. (For more detailed information, please refer to Belden Technical Bulletin TB-67, *Contractor Field-Testing Survey Reveals Performance-Related Cost Savings Using Bonded-Pair Cables.*)

More Bonded-Pair Benefits

Signal Integrity

Bonded-Pair cables are designed to maintain signal integrity. Ideally, the centricity, or center-to-center distance, of the copper within the two conductors of the pair should remain fixed and stable along the length of the pair. This centricity varies widely in most unbonded twisted pair cables due to the tendency of gaps to form between the two conductors of a pair.

Fewer Reflected Signal Problems

When a gap forms between the two conductors of a pair, it creates an impedance mismatch. When the transmitted signal encounters this mismatch, portions of the signal are reflected back toward the receiver. This occurrence defines the cable's return loss (RL) characteristics. Belden Bonded-Pair design mitigates the incidence of impedance mismatch/RL since no gaps are formed between the two insulated conductors.

Immunity to Noise

Twisted pairs are designed to cancel out electrical noise from the environment such as EMI/RFI or crosstalk from other pairs. When twisted pairs separate they can act as an antenna, picking up noise from outside sources. Because gaps do not form between the conductors, Bonded-Pair cables are a poor antenna; they are far less likely to receive outside noise.

Belden Bonded-Pair cables exceed the full range of performance criteria, both electrical and physical, and they set a whole new precedent for cabling with confidence. An ever-increasing number of applications requiring optimum performance at high frequencies can now be cabled with the assurance that the users' needs can be accommodated easily, economically — and with the future in mind.

Available Literature

For more information, visit www.belden.com or call Belden for your copy of any available literature.

Brochures

*Belden Quality
Bonded-Pair Cables*

White Papers

*Design for Manufacturability
Sigma
Ensuring Quality*

Technical Bulletins

*TB-66: The Impact of Typical Installation Stresses on Cable Performance
TB-67: Contractor Field-Testing Survey Reveals Performance-Related Cost Savings Using Bonded-Pair Cables*

Product Bulletins

*NP 156: New DataTwist® 6 UTP Cable from Belden Supports Category 6 Standards
NP 171: New DataTwist 600e: Guaranteed Performance to 600 MHz
NP 175: New DataTwist 5e+: Enhanced 5e Performance Guaranteed to 350 MHz
NP 177: Cable Preparation Tool Speeds Installation of Bonded-Pair Cables
NP 178: Belden MediaTwist® Category 6 Bonded-Pair Networking Cables
NP 179: Belden DataTwist 350 Bonded-Pair Networking Cables
NP 180: Belden DataTwist 5e Twisted Pair Networking Cables
NP 189: Belden DataTwist 5e Shielded Networking Cables*



DataTwist® 600e UTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

23 AWG Bonded-Pairs Solid Bare Copper • Patented E-Spline Center Member • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Black, White or Dark Gray)

	7851A <small>new</small>	NEC: CMR CEC: CMP FT4	4	1000	304.8	40.0	18.2	.009	.23	.225	5.72	8.2	3.0	65.6	1	1.9	80.3	78.5	70.8	100±12	20.0
				A-1000	A-304.8	42.0	19.1			x	x				10	5.7	65.3	59.6	50.8	100±12	25.0
															31.25	10.2	57.9	47.7	40.9	100±15	25.0
															62.5	14.7	53.4	38.7	34.9	100±15	25.0
															100	18.9	50.3	31.4	30.8	100±15	25.0
															155	23.9	47.5	23.5	27.0	100±15	22.8
															200	27.5	45.8	18.3	24.8	100±15	21.7
															250	31.2	44.3	13.2	22.8	100±20	20.5
															350	37.7	40.2	4.5	19.9	100±22	19.8
															400	40.6	39.3	0.6	18.8	100±22	19.5
														500	46.2	37.8	>0*	16.8	100±22	18.4	
														550	48.8	37.2	—	16.0	100±22	18.0	
														600	51.4	36.6	—	15.2	100±22	17.6	

Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126; 5,789,711 and 6,297,454-B1
Third party verified to TIA/EIA-568-B.2-1, Category 6

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Black, White or Gray)

	7852A <small>new</small>	NEC: CMP CEC: CMP FT6	4	1000	304.8	37.0	16.8	.008	.20	.215	5.46	8.2	3.0	65.6	1	1.9	80.3	78.5	70.8	100±12	20.0
				A-1000	A-304.8	39.0	17.7			x	x				10	5.7	65.3	59.6	50.8	100±12	25.0
															31.25	10.2	57.9	47.7	40.9	100±15	25.0
															62.5	14.7	53.4	38.7	34.9	100±15	25.0
															100	18.9	50.3	31.4	30.8	100±15	25.0
															155	23.9	47.5	23.5	27.0	100±15	22.8
															200	27.5	45.8	18.3	24.8	100±15	21.7
															250	31.2	44.3	13.2	22.8	100±20	20.5
															350	37.7	40.2	4.5	19.9	100±22	19.8
															400	40.6	39.3	0.6	18.8	100±22	19.5
														500	46.2	37.8	>0*	16.8	100±22	18.4	
														550	48.8	37.2	—	16.0	100±22	18.0	
														600	51.4	36.6	—	15.2	100±22	17.6	

Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126; 5,789,711 and 6,297,454-B1
Third party verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)
*PSUM ACR >0 is guaranteed to 460 MHz

Color Codes: DataTwist 600e

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

Teflon is a DuPont trademark.

DataTwist 600e: Beyond Category 6

Belden® DataTwist 600e data cable is a revolutionary UTP cable engineered specifically to perform well beyond Category 6 standards. While Category 6 cable is specified only to 250 MHz, DataTwist 600e is the only UTP cable in the industry fully characterized with guaranteed performance to 600 MHz. So users have far more headroom to compensate for unforeseen factors that can inhibit the performance of a cabling system today...and protection of their technology investment for the future.

Handy Cable Preparation Tool **new**
Speeds Installation of Bonded-Pair Cables

You know the high performance benefits of using data cables featuring Belden's unique Bonded-Pair technology. The Belden Cable Preparation Tool (1797B) now makes it faster and easier than ever to prepare cables for connector termination providing special features that help separate twisted pairs. The Cable Preparation Tool is packed with every spool of DataTwist 600e. See page 11.24 for more information.



MediaTwist® UTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

23 AWG Bonded-Pairs Solid Bare Copper • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Blue, Red, Yellow, Orange, Green, Gold, Violet, White, Black or Dark Gray)

Part No.	UL NEC/ CMR CEC: CMR FT4	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm											
1872A	NEC:	4	1000	304.8	37.0	16.8	.009	.23	.365	9.27	9.0	3.0	49.2	1	1.9	72.3	70	64.8	100±12	20.0	
	CMR		A-1000*	A-304.8	38.0	17.3			x	x				4	3.7	63.3	59	52.7	100±12	23.0	
	CEC:													8	5.3	58.8	53	46.7	100±12	24.5	
	CMR FT4													10	5.9	57.3	51	44.8	100±12	25.0	
															16	7.5	54.3	46	40.7	100±12	25.0
															25	9.5	51.4	42	36.8	100±15	24.3
															31.25	10.6	49.9	39	34.9	100±15	23.6
															62.5	15.4	45.4	30	28.8	100±15	21.5
															100	19.8	42.3	25	24.8	100±15	21.0
															155	25.1	39.5	14	20.9	100±15	21.0
															200	29.0	37.8	10	18.7	100±15	21.0
															250	32.8	36.3	3	16.8	100±20	18.0
															300	35.2	35.2	>0	15.2	100±20	18.0
													350	39.8	34.2	—	13.9	100±22	17.0		
													400	43.0	—	—	—	100±32	14.0		
													500	49.0	—	—	—	100±32	14.0		

*A-1000 ft. put-up not available in Black.
Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126; 5,821,467
Third party verified to TIA/EIA-568-B.2-1, Category 6

Plenum • FEP Teflon® Insulation • Flammarrest® Jacket (Blue, Natural, Dark Gray, Red, Yellow, Orange, Green, Gold, Violet, White or Black)

Part No.	UL NEC/ CMP CEC: CMP FT6	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm											
1874A	NEC:	4	1000	304.8	40.0	18.2	.009	.23	.365	9.27	9.0	3.0	49.2	1	1.9	72.3	70	64.8	100±12	20.0	
	CMP		A-1000**	A-304.8	41.0	18.6			x	x				4	3.7	63.3	59	52.7	100±12	23.0	
	CEC:													8	5.3	58.8	53	46.7	100±12	24.5	
	CMP FT6													10	5.9	57.3	51	44.8	100±12	25.0	
															16	7.5	54.3	46	40.7	100±12	25.0
															25	9.5	51.4	42	36.8	100±15	24.3
															31.25	10.6	49.9	39	34.9	100±15	23.6
															62.5	15.4	45.4	30	28.8	100±15	21.5
															100	19.8	42.3	25	24.8	100±15	21.0
															155	25.1	39.5	14	20.9	100±15	21.0
															200	29.0	37.8	10	18.7	100±15	21.0
															250	32.8	36.3	3	16.8	100±20	18.0
															300	35.2	35.2	>0	15.2	100±20	18.0
													350	39.8	34.2	—	13.9	100±22	17.0		
													400	43.0	—	—	—	100±32	14.0		
													500	49.0	—	—	—	100±32	14.0		

**A-1000 ft. put-up not available in Black.
Jacket sequentially marked at 2 ft. intervals.
U.S. Patents 5,606,151; 5,734,126; 5,821,467
Third party verified to TIA/EIA-568-B.2-1, Category 6

Patch Cables • 24 AWG Bonded-Pairs Stranded (7x32) Tinned Copper • RJ-45 Compatible • See Color Code Chart (below)*

Non-Plenum • Polyolefin Insulation • PVC Jacket (Red, Orange, Yellow, Green, Blue, Violet, Light Gray, Dark Gray, White or Black)

Part No.	UL NEC/ CMR CEC: CMR FT4	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)	
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm											
1875GA	NEC:	4	1000	304.8	31.0	14.1	.009	.23	.365	9.27	9.0	3.0	49.2	1	2.0	72.3	70	64.8	100±12	20.0	
	CMR		A-1000†	A-304.8	32.0	14.5			x	x				4	4.1	63.3	59	52.7	100±12	23.0	
	CEC:													8	5.8	58.8	53	46.7	100±12	24.5	
	CMR FT4													10	6.5	57.3	51	44.8	100±12	25.0	
															16	8.2	54.3	46	40.7	100±12	25.0
															20	9.3	52.8	44	38.7	100±12	25.0
															25	10.4	51.4	41	36.8	100±15	24.3
															31.25	11.7	49.9	38	34.9	100±15	23.6
															62.5	17.0	45.4	28	28.8	100±15	21.5
															100	22.0	42.3	20	24.8	100±15	21.0
															155	30.2	39.5	9	20.9	100±15	21.0
															200	34.8	37.8	3	18.7	100±15	21.0
															250	39.4	36.3	—	16.8	100±20	18.0
													310	47.6	34.9	—	14.9	100±20	18.0		
													350	51.1	34.2	—	13.9	100±22	17.0		

†A-1000 ft. put-up not available in Red, Orange, Blue or Black.
††A-1000 ft. put-up not available in Red, Orange, Dark Gray or Black. 1000 ft. put-up not available in Red, Orange or Dark Gray.
U.S. Patents 5,606,151; 5,734,126; 5,763,823 and 5,821,467

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)
*Values provided for information only.

Color Codes: MediaTwist

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

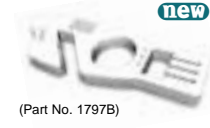
Color Codes: MediaTwist Patch

Pair No.	1875GA Color Combination	1875GB Color Combination
1	White/Brown Stripe & Brown	White/Brown Stripe & Brown
2	White/Blue Stripe & Blue	White/Blue Stripe & Blue
3	White/Orange Stripe & Orange	White/Green Stripe & Green
4	White/Green Stripe & Green	White/Orange Stripe & Orange

*Color rotation available for T568-A or T568-B wiring schemes.

Handy Cable Preparation Tool for Bonded-Pairs

See page 11.24 for details.



Teflon is a DuPont trademark.



DataTwist® 6 UTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

23 AWG Solid Bare Copper • Twisted Pairs • Central Rod Filler • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, White or Black)

<p>7881A new Rip Cord</p>	NEC:	4	1000	304.8	32.0	14.5	.009	.23	.235	5.97	9.38	5.0	330	1	2.0	72.3	70.3	64.8	100±15	20.0
	CMR		A-1000	A-304.8	34.0	15.4								10	6.0	57.3	51.3	44.8	100±15	25.0
	CEC:													20	8.5	52.8	44.3	38.7	100±15	25.0
	CMR FT4													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
														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	

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray, Natural or Black)

<p>7882A new Rip Cord</p>	NEC:	4	1000	304.8	33.0	15.0	.008	.20	.224	5.69	9.38	5.0	330	1	2.0	72.3	70.3	64.8	100±15	20.0
	CMP		A-1000	A-304.8	35.0	15.9								10	6.0	57.3	51.3	44.8	100±15	25.0
	CEC:													20	8.5	52.8	44.3	38.7	100±15	25.0
	CMP FT6													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
														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	

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

Patch Cables • 24 AWG Solid Bare Copper • Twisted Pairs • Central Slit-Film Filler • RJ-45 Compatible* • See Color Code Chart (below)*

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Violet, Light Gray, White or Black)

<p>7883A new Rip Cord</p>	NEC:	4	1000	304.8	24.0	10.9	.008	.20	.205	5.21	9.38	5.0	330	1	2.4	72.3	69.9	64.8	100±15	20.0
	CM													10	7.1	57.3	50.2	44.8	100±15	25.0
	CEC:													20	10.2	52.8	42.6	38.7	100±15	25.0
	CM FT1													31.25	12.9	49.9	37.0	34.9	100±15	23.6
														62.5	18.5	45.4	26.9	28.8	100±15	21.5
														100	23.8	42.3	18.5	24.8	100±15	20.1
														200	34.8	37.8	3.0	18.7	100±22	18.0
													250	39.4	36.3	—	16.8	100±32	17.3	

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2-1, Category 6

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

*For either T568-A or T568-B configurations.

Color Codes: DataTwist 6

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

Color Codes: DataTwist 6 Patch

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

*Color rotation available for T568-A or T568-B wiring schemes.

Teflon is a DuPont trademark.



DataTwist® 350 UTP Patch Cable

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

Enhanced Category 5e Bonded-Pair Cables



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

24 AWG Bonded-Pairs Stranded (7x32) Tinned Copper • RJ-45 Compatible • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Black, Yellow, Green, Orange, Blue, Violet or Light Gray)

1752A	NEC: CM	CEC: CM	4	U-1000	U-304.8	23.0	10.5	.008	.20	.220	5.59	9.0	3.0	66.0	1	2.4	65.3	62.9	60.8	100±12	20.0
				1000	304.8	23.0	10.5								4	4.8	56.3	51.5	48.7	100±12	23.0
															8	6.8	51.8	45.0	42.7	100±12	24.5
															10	7.7	50.3	42.6	40.8	100±12	25.0
															16	9.7	47.3	37.5	36.7	100±12	25.0
															25	12.4	44.3	31.9	32.8	100±15	24.3
															31.25	13.9	42.9	29.0	30.9	100±15	23.6
															62.5	20.2	38.4	18.3	24.8	100±15	21.5
															100	26.0	35.3	9.2	20.8	100±15	20.1
															155	33.2	32.5	—	16.9	100±18	19.0
															200	38.4	30.8	—	14.7	100±20	19.0
															250	43.7	29.3	—	12.8	100±20	18.0
															350	53.2	27.2	—	9.9	100±22	17.0

Jacket sequentially marked at 2 ft. intervals.
 U.S. Patents 5,606,151; 5,734,126 and 5,763,823
 Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 350

Pair No.	Color Combination
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 11.24 for details.
(Part No. 1797B)



DataTwist® 5e+ UTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/ 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, White, Blue or Dark Gray)																					
<p>Rip Cord</p>	1500A <small>new</small>	NEC:	4	1000	304.8	24.0	10.9	.008	.20	.200	5.08	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		CM		A-1000	A-304.8	27.0	12.3	4	4.0	56.3	52.3	48.7	100±12	23.0							
		CEC:		8	5.7	51.8	46.1	42.7	100±12	24.5											
		CM FT1		10	6.4	50.3	43.9	40.8	100±12	25.0											
		16		8.1	47.3	39.1	36.7	100±12	25.0												
		25		10.3	44.3	34.1	32.8	100±15	24.3												
		31.25		11.6	42.9	31.3	30.9	100±15	23.6												
		62.5		16.8	38.4	21.6	24.8	100±15	21.5												
		100		21.7	35.3	17.1	20.8	100±15	20.1												
		155		27.7	32.5	4.7	16.9	100±18	19.0												
200	32.0	30.8	3.0	14.7	100±20	19.0															
250	36.4	29.3	—	12.8	100±20	18.0															
350	44.3	27.2	—	9.9	100±22	17.0															
<p>Rip Cord</p>	1500R <small>new</small>	NEC:	4	1000	304.8	25.0	11.4	.008	.20	.204	5.18										
		CMR		A-1000	A-304.8	28.0	12.7	155	27.7	32.5	4.7	16.9	100±18	19.0							
		CEC:		200	32.0	30.8	3.0	14.7	100±20	19.0											
		CMR FT4		250	36.4	29.3	—	12.8	100±20	18.0											
		350		44.3	27.2	—	9.9	100±22	17.0												

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Gray, Blue or Natural)																					
<p>Rip Cord</p>	1501A <small>new</small>	NEC:	4	1000	304.8	26.0	11.8	.007	.18	.200	5.08	9.0	3.0	66.0	1	2.0	65.3	63.3	60.8	100±12	20.0
		CMP		A-1000	A-304.8	27.0	12.3	4	4.0	56.3	52.3	48.7	100±12	23.0							
		CEC:		8	5.7	51.8	46.1	42.7	100±12	24.5											
		CMP FT6		10	6.4	50.3	43.9	40.8	100±12	25.0											
		16		8.1	47.3	39.1	36.7	100±12	25.0												
		25		10.3	44.3	34.1	32.8	100±15	24.3												
		31.25		11.6	42.9	31.3	30.9	100±15	23.6												
		62.5		16.8	38.4	21.6	24.8	100±15	21.5												
		100		21.7	35.3	17.1	20.8	100±15	20.1												
		155		27.7	32.5	4.7	16.9	100±18	19.0												
200	32.0	30.8	3.0	14.7	100±20	19.0															
250	36.4	29.3	—	12.8	100±20	18.0															
350	44.3	27.2	—	9.9	100±22	17.0															

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 5e+

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

Teflon is a DuPont trademark.



DataTwist® 5e UTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Dark Gray or Blue)

	1588A	NEC:	2	U-1000	U-304.8	14.0	6.4	.008	.20	.183	4.65	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0	
		CM		1000	304.8	15.0	6.8									10	6.5	47.3	41	40.8	100±15	25.0
		CEC:		1640†	500.0	24.6	11.2									16	8.2	44.3	36	36.7	100±15	25.0
		CM														31.25	11.7	39.9	28	30.9	100±15	23.6
																62.5	17.0	35.5	19	24.8	100±15	21.5
														100	22.0	32.3	11	20.8	100±15	20.1		

	1588R	NEC:	2	U-1000††	U-304.8	14.0	6.4															
		CMR		1000††	304.8	15.0	6.8															
		CEC:																				
		CMR FT4																				

†1640 ft. put-up available in Dark Gray only.
 ††U-1000 ft. and 1000 ft. put-ups available in Blue only
 Jacket sequentially marked at 2 ft. intervals.
 Third party verified to TIA/EIA-568-B.2, Category 5e

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in White, Black, Dark Gray, Blue, Red, Orange, Yellow, Green or Pink)

	1583A	NEC:	4	U-1000	U-304.8	21.0	9.5	.008	.20	.214	5.44	9.38	5.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0	
		CM		1000	304.8	21.0	9.5									4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:		1640†	500.0	34.4	15.7									10	6.5	47.3	41.0	40.8	100±15	25.0
		CM		3000†	914.4	63.0	28.6									16	8.2	44.3	36.0	36.7	100±15	25.0
																31.25	11.7	39.9	28.0	30.9	100±15	23.6
														62.5	17.0	35.4	19.0	24.8	100±15	21.5		
														100	22.0	32.3	11.0	20.8	100±15	20.1		
														200	32.0	27.8	1.0	14.7	100±25	15.0		

	1583R	NEC:	4	U-1000††	U-304.8	22.0	10.0															
		CMR		1000††	304.8	22.0	10.0															
		CEC:		3000††	914.4	66.0	30.0															
		CMR FT4																				

†1640 ft. put-up available in Dark Gray or Blue only. 3000 ft. put-up available in Dark Gray, White or Blue only.
 ††U-1000 ft. and 1000 ft. put-ups not available in Black. 3000 ft. put-ups available in Dark Gray, White or Blue only.
 Jacket sequentially marked at 2 ft. intervals.
 Third party verified to TIA/EIA-568-B.2, Category 5e

Non-Plenum • Polyolefin Insulation • Fluorescent Pink PVC Jacket

	DataBrite® 1583B	NEC:	4	U-1000	U-304.8	21.0	9.5	.008	.20	.214	5.44	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0	
		CMR		1000	304.8	21.0	9.5									4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:														10	6.5	47.3	41.0	40.8	100±15	25.0
		CMR FT4														16	8.2	44.3	36.0	36.7	100±15	25.0
																31.25	11.7	39.9	28.0	30.9	100±15	23.6
														62.5	17.0	35.4	19.0	24.8	100±15	21.5		
														100	22.0	32.3	11.0	20.8	100±15	20.1		
														200	32.0	27.8	1.0	14.7	100±25	15.0		

Third party verified to TIA/EIA-568-B.2, Category 5e

Non-Plenum • Polyolefin Insulation • UV Resistant PVC Jacket (Available in Gray, White or Ivory)

	Indoor/Outdoor 1594A new	NEC:	4	U-1000	U-304.8	23.0	10.5	.008	.20	.215	5.46	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0	
		CMR/CMX														4	4.1	53.3	49.0	48.7	100±15	23.0
		CEC:														10	6.5	47.3	41.0	40.8	100±15	25.0
		CMR/CMX FT4														16	8.2	44.3	36.0	36.7	100±15	25.0
																31.25	11.7	39.9	28.0	30.9	100±15	23.6
														62.5	17.0	35.4	19.0	24.8	100±15	21.5		
														100	22.0	32.3	11.0	20.8	100±15	20.1		
														200	32.0	27.8	1.0	14.7	100±25	15.0		

Jacket sequentially marked at 2 ft. intervals.
 Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 5e

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



DataTwist® 5e UTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Natural, Blue, Red, Orange, Yellow, Green, Gray, Black or Pink)

<p>1590A</p> <p>NEC: CMP CEC: CMP FT6</p>	2	1000*	304.8	16.0	7.3	.007	.18	.175	4.44	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0		
		3000*	914.6	45.0	20.5									10	6.5	47.3	41	40.8	100±15	25.0	
															16	8.2	44.3	36	36.7	100±15	25.0
															31.25	11.7	39.9	28	30.9	100±15	23.6
															62.5	17.0	35.5	19	24.8	100±15	21.5
															100	22.0	32.3	11	20.8	100±15	20.1

Rip Cord

*1000 ft. put-up available in Natural or Blue only. 3000 ft. put-up available in Natural only.

<p>1585A</p> <p>NEC: CMP CEC: CMP FT6</p>	4	U-1000	U-304.8	23.0	10.5	.007	.18	.200	5.08	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0		
		1000	304.8	23.0	10.5									4	4.1	53.3	49.0	48.7	100±15	23.0	
		3000†	914.6	69.0	31.4									10	6.5	47.3	41.0	40.8	100±15	25.0	
															16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5

Rip Cord

†3000 ft. put-up available in Natural or Blue only.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

Plenum • FEP Teflon Insulation • Fluorescent Pink Flamarrest Jacket

<p>DataBrite® 1585B</p> <p>NEC: CMP CEC: CMP FT6</p>	4	1000	304.8	24.0	10.9	.007	.18	.200	5.08	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0		
														4	4.1	53.3	49.0	48.7	100±15	23.0	
															10	6.5	47.3	41.0	40.8	100±15	25.0
															16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5

Rip Cord

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

Plenum • FEP Teflon Insulation • FEP Jacket (Available in Blue or White)

<p>1585LC** new</p> <p>NEC: Limited Combustible FHC 25/50 CMP CEC: CMP FT6</p>	4	U-1000	U-304.8	23.0	10.5	.007	.18	.184	4.67	9.38	3.0	330	1	2.0	62.3	60.0	60.8	100±15	20.0		
		1000	304.8	23.0	10.5									4	4.1	53.3	49.0	48.7	100±15	23.0	
															10	6.5	47.3	41.0	40.8	100±15	25.0
															16	8.2	44.3	36.0	36.7	100±15	25.0
															31.25	11.7	39.9	28.0	30.9	100±15	23.6
															62.5	17.0	35.4	19.0	24.8	100±15	21.5

**1585LC does not have a rip cord.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 5e

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

Teflon is a DuPont trademark.



DataTwist® 5e UTP Patch Cable

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



Description	Part No.	UL NEC/C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω/100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/100m)	Freq. (MHz)	Max. Atten. (dB/100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/100m)	Min. PSUM ELFEXT (dB/100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

24 AWG Stranded (7x32) Bare Copper • Twisted Pairs • RJ-45 Compatible* • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Violet, Light Gray, White or Black)																					
	1592A	NEC:	4	U-1000	U-304.8	23.0	10.5	.008	.20	.210	5.33	9.38	3.0	330	1	2.5	62.3	—	60.8	100±15	20.0
	new	CM		1000	304.8	23.0	10.5								4	4.9	53.3	—	48.7	100±15	23.0
		CEC:													10	7.8	47.3	—	40.8	100±15	25.0
		CM FT1													16	9.9	44.3	—	36.7	100±15	25.0
															31.25	14.1	39.9	—	30.9	100±15	23.6
															62.5	20.4	35.4	—	24.8	100±15	21.5
														100	26.4	32.3	—	20.8	100±15	20.1	
														200	38.9	27.8	—	15.0	100±25	15.0	

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • UTP = Unshielded Twisted Pair(s)

*RJ-45 compatible for either T568-A or T568-B configurations.

Color Codes: DataTwist 5e

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



DataTwist® 5 UTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Fitted Input Imped. (Ω)	Min. SRL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								

24 AWG Solid Bare Copper • Twisted Pairs • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Light Gray or Blue)

<p>Rip Cord</p>	1864A	NEC: CMR CEC: CMR FT4	25	1000	304.8	141.0	64.1	.009	.23	.556	14.12	9.38	5.0	330	1	2.0	62.3	100±15	23.0
															10	6.5	47.3	100±15	23.0
															16	8.2	44.3	100±15	23.0
															31.25	11.7	39.9	100±15	21.1
															62.5	17.0	35.4	100±15	18.0
															100	22.0	32.3	100±15	16.0

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5

Plenum • FEP Teflon® Insulation • FEP Jacket (Available in Blue Tint or White Tint)

<p>Rip Cord</p>	1871A <small>new</small>	NEC: CMP	25	1000	304.8	132.0	60.0	.008	.20	.435	11.05	9.38	5.0	330	1	2.0	62.3	100±15	23.0
															10	6.5	47.3	100±15	23.0
															16	8.2	44.3	100±15	23.0
															31.25	11.7	39.9	100±15	21.1
															62.5	17.0	35.4	100±15	18.0
															100	22.0	32.3	100±15	16.0

Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5

DCR = DC Resistance • NEXT = Near-end Crosstalk • PSUM = Power Sum • SRL = Structural Return Loss • UTP = Unshielded Twisted Pair(s)

Color Codes: DataTwist 5

Pair No.	Color Combination	Pair No.	Color Combination
1	White & Blue	14	Black & Brown
2	White & Orange	15	Black & Gray
3	White & Green	16	Yellow & Blue
4	White & Brown	17	Yellow & Orange
5	White & Gray	18	Yellow & Green
6	Red & Blue	19	Yellow & Brown
7	Red & Orange	20	Yellow & Gray
8	Red & Green	21	Purple & Blue
9	Red & Brown	22	Purple & Orange
10	Red & Gray	23	Purple & Green
11	Black & Blue	24	Purple & Brown
12	Black & Orange	25	Purple & Gray
13	Black & Green		

Teflon is a DuPont trademark.



DataTwist® 3 UTP Cable

TIA/EIA-568-B.2, Category 3 Unbonded-Pair Cables



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD		Nominal DCR (Cond.)	Nom. Imped. (Ω)	Nominal Capacitance		Freq. (MHz)	Min. NEXT (dB)	Maximum Attenuation	
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm			pF/Ft.	pF/m			(dB/ 1000')	(dB/ 100m)

24 AWG Solid Bare Copper • Twisted Pairs • See Color Code Chart (below)

Non-Plenum • Semi-rigid PVC Insulation • Gray PVC Jacket

	1227A1	NEC: CMR	2	U-1000	U-304.8	14.0	6.4	.007	.18	.170	4.32	28.0Ω/M' 91.8Ω/km	100	19.0	62.3	1	41.0	7.8	2.56
																4	32.0	17.0	5.58
																10	26.0	30.0	9.71
																16	23.0	40.0	13.10
	1229A1	NEC: CMR	4	U-1000	U-304.8	22.0	10.0	.006	.15	.200	5.08								
	1232A1	NEC: CMR	25†	1000	304.8	102.0	46.4	.006	.15	.390	9.91								

NEC Article 800
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 3

Plenum • Low-Smoke PVC Insulation • White Low-Smoke PVC Jacket

	1243A2	NEC: CMP	2	U-1000	U-304.8	12.0	5.5	.007	.18	.160	4.06	28.0Ω/M' 91.8Ω/km	100	19.0	62.3	1	41.0	7.8	2.56
																4	32.0	17.0	5.58
																10	26.0	30.0	9.71
																16	23.0	40.0	13.10
	1245A2	NEC: CMP	4	U-1000	U-304.8	22.0	10.0	.007	.18	.190	4.83								

NEC Article 800
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 3

DCR = DC Resistance • NEXT = Near-end Crosstalk • UTP = Unshielded Twisted Pair(s)
*Capacitance between conductors
† 25-pair NEXT is Power Sum tested.

Color Codes: DataTwist 3

Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe
5	White/Gray Stripe & Gray/White Stripe
6	Red/Blue Stripe & Blue/Red Stripe
7	Red/Orange Stripe & Orange/Red Stripe
8	Red/Green Stripe & Green/Red Stripe
9	Red/Brown Stripe & Brown/Red Stripe
10	Red/Gray Stripe & Gray/Red Stripe
11	Black/Blue Stripe & Blue/Black Stripe
12	Black/Orange Stripe & Orange/Black Stripe
13	Black/Green Stripe & Green/Black Stripe

Pair No.	Color Combination
14	Black/Brown Stripe & Brown/Black Stripe
15	Black/Gray Stripe & Gray/Black Stripe
16	Yellow/Blue Stripe & Blue/Yellow Stripe
17	Yellow/Orange Stripe & Orange/Yellow Stripe
18	Yellow/Green Stripe & Green/Yellow Stripe
19	Yellow/Brown Stripe & Brown/Yellow Stripe
20	Yellow/Gray Stripe & Gray/Yellow Stripe
21	Purple/Blue Stripe & Blue/Purple Stripe
22	Purple/Orange Stripe & Orange/Purple Stripe
23	Purple/Green Stripe & Green/Purple Stripe
24	Purple/Brown Stripe & Brown/Purple Stripe
25	Purple/Gray Stripe & Gray/Purple Stripe



DataTwist® 5e ScTP Cable

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



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Min. PSUM ACR (dB/ 100m)	Min. PSUM ELFEXT (dB/ 100m)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm										

24 AWG Solid Bare Copper • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • RJ-45 Compatible • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue or Light Gray)																							
	1533R new NEC: CMR CEC: CMR FT4	4 A-1000 1640†	1000	304.8	34.0	15.5	.010	.25	.260	6.60	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0			
			A-1000	A-304.8	35.0	15.9										4	4.1	53.3	49	48.7	100±15	23.0	
			1640†	500.0	49.2	22.4										8	5.8	48.8	43	42.7	100±15	24.5	
																	10	6.5	47.3	41	40.8	100±15	25.0
																	16	8.2	44.3	36	36.7	100±15	25.0
																	20	9.3	42.8	34	34.7	100±15	25.0
																	25	10.4	41.3	31	32.8	100±15	24.3
																	31.25	11.7	39.9	28	30.9	100±15	23.6
																	65.5	17.0	35.4	19	24.8	100±15	21.5
																	100	22.0	32.3	11	20.8	100±15	20.1

†1640 ft. put-up available in Light Gray only.
 Shield is bonded to jacket inner wall for electrical stability.
 Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5e

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Gray or Natural)																							
	1533P new NEC: CMP CEC: CMP FT6	4 A-1000 A-304.8	1000	304.8	34.0	15.5	.010	.25	.242	6.15	9.38	5.0	330	1	2.0	62.3	60	60.8	100±15	20.0			
			A-1000	A-304.8	36.0	16.4										4	4.1	53.3	49	48.7	100±15	23.0	
																	8	5.8	48.8	43	42.7	100±15	24.5
																	10	6.5	47.3	41	40.8	100±15	25.0
																	16	8.2	44.3	36	36.7	100±15	25.0
																	20	9.3	42.8	34	34.7	100±15	25.0
																	25	10.4	41.3	31	32.8	100±15	24.3
																	31.25	11.7	39.9	28	30.9	100±15	23.6
																	65.5	17.0	35.4	19	24.8	100±15	21.5
																	100	22.0	32.3	11	20.8	100±15	20.1

Shield is bonded to jacket inner wall for electrical stability.
 Jacket sequentially marked at 2 ft. intervals.
 Third party verified to TIA/EIA-568-B.2, Category 5e

ACR = Attenuation Crosstalk Ratio • DCR = DC Resistance • ELFEXT = Equal Level Far-end Crosstalk • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss
 ScTP = Screened (Overall Foil) Twisted Pair(s)

*Drain wire is 24 AWG stranded tinned copper.

Color Codes: DataTwist 5e

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

Teflon is a DuPont trademark.



DataTwist® 5 ScTP Cable

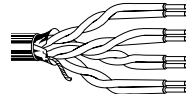
TIA/EIA-568-B.2, Category 5 Unbonded-Pair Cables



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Input Imped. (Ω)	Min. SRL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								

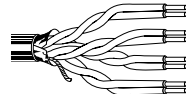
24 AWG Solid Bare Copper • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • RJ-45 Compatible • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Red, Orange, Yellow, Green, Blue, Purple or Light Gray)

Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Input Imped. (Ω)	Min. SRL (dB)
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								
1624R 	NEC:	4	1000	304.8	34.0	15.5	.011	.27	.250	6.35	9.38	5.0	330	1	2.0	62.0	100±15	23.0
	CMR		A-1000	A-304.8	35.0	15.9								4	4.1	53.0	100±15	23.0
	CEC:		1640†	500.0	54.1	24.7								8	5.8	48.0	100±15	23.0
	CMR FT4													10	6.5	47.0	100±15	23.0
														16	8.2	44.0	100±15	23.0
														20	9.3	42.0	100±15	23.0
														25	10.4	41.0	100±15	22.0
													31.25	11.7	40.0	100±15	21.0	
													65.5	17.0	35.0	100±15	18.0	
													100	22.0	32.0	100±15	16.0	

†1640 ft. put-up available in Light Gray only.
Shield is bonded to jacket inner wall for electrical stability.
Jacket sequentially marked at 2 ft. intervals. • Third party verified to TIA/EIA-568-B.2, Category 5

Plenum • FEP Teflon® Insulation • Flamarrest® Jacket (Available in Red, Orange, Yellow, Green, Blue, Violet, Gray or Natural)

Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. PSUM NEXT (dB)	Input Imped. (Ω)	Min. SRL (dB)
			Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								
1624P 	NEC:	4	1000	304.8	34.0	15.5	.011	.27	.235	5.97	9.38	5.0	330	1	2.0	62.0	100±15	23.0
	CMP		A-1000	A-304.8	36.0	16.4								4	4.1	53.0	100±15	23.0
	CEC:													8	5.8	48.0	100±15	23.0
	CMP FT6													10	6.5	47.0	100±15	23.0
														16	8.2	44.0	100±15	23.0
														20	9.3	42.0	100±15	23.0
														25	10.4	41.0	100±15	22.0
													31.25	11.7	40.0	100±15	21.0	
													65.5	17.0	35.0	100±15	18.0	
													100	22.0	32.0	100±15	16.0	

Shield is bonded to jacket inner wall for electrical stability.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-B.2, Category 5

DCR = DC Resistance • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • ScTP = Screened (Overall Foil) Twisted Pair(s)

*Drain wire is 24 AWG stranded tinned copper.

Color Codes: DataTwist 5

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

Teflon is a DuPont trademark.



DataTwist® 5 ScTP Cable

TIA/EIA-568-TSB 36, Category 5 Unbonded-Pair Cables

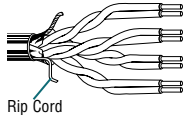


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Insulation Thickness		Nominal OD		Max. DCR (Ω / 100m)	Max. DCR Unbal. (%)	Max. Cap. Unbal. (pF/ 100m)	Freq. (MHz)	Max. Atten. (dB/ 100m)	Min. NEXT (dB)	Input Imped. (Ω)	Min. RL (dB)
				Ft.	m	Lbs.	kg	Inch	mm	Inch	mm								

24 AWG Solid Bare Copper • Twisted Pairs • Overall Beldfoil® Shield • Drain Wire* • Rip Cord • See Color Code Chart (below)

Non-Plenum • Polyolefin Insulation • PVC Jacket (Available in Light Gray or Blue)

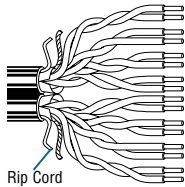
Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths	Standard Unit Wt.	Insulation Thickness	Nominal OD	Max. DCR	Max. DCR Unbal.	Max. Cap. Unbal.	Freq.	Max. Atten.	Min. NEXT	Input Imped.	Min. RL				
1633A	NEC:	4	U-1000	U-304.8	31.0	14.1	.012	.31	.260	6.60	9.38	5.0	330	4	4.1	53.0	100±15	N/A
	CM		1000	304.8	32.0	14.5								10	6.5	47.0	100±15	N/A
	CEC:		1640	500.0	49.2	22.4								16	8.2	44.0	100±15	N/A
	CM		3280†	1000.0	101.7	46.2								31.25	11.7	40.0	100±15	N/A
														62.5	17.0	35.0	100±15	N/A
													100	22.0	32.0	100±15	N/A	



†3280 ft. put-up available in Light Gray only.
Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-TSB 36, Category 5

Non-Plenum • Dual • Polyolefin Insulation • Gray PVC Jacket with Polarity Rib

Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths	Standard Unit Wt.	Insulation Thickness	Nominal OD	Max. DCR	Max. DCR Unbal.	Max. Cap. Unbal.	Freq.	Max. Atten.	Min. NEXT	Input Imped.	Min. RL				
1668A	NEC:	2x4	1000	304.8	70.0	31.8	.012	.31	.518	13.16	9.38	5.0	330	4	4.1	53.0	100±15	N/A
	CM		1640	500.0	109.9	49.9			x	x				10	6.5	47.0	100±15	N/A
	CEC:								.254	6.45				16	8.2	44.0	100±15	N/A
	CM													31.25	11.7	40.0	100±15	N/A
														62.5	17.0	35.0	100±15	N/A
													100	22.0	32.0	100±15	N/A	



Jacket sequentially marked at 2 ft. intervals.
Third party verified to TIA/EIA-568-TSB 36, Category 5 (Leg 1 & 2)

DCR = DC Resistance • NEXT = Near-end Crosstalk • PSUM = Power Sum • RL = Return Loss • ScTP = Screened (Overall Foil) Twisted Pair(s)

*Drain wire is 24 AWG stranded tinned copper.

Color Codes: DataTwist 5

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



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

Trunk Cables — Thinnet and Thicknet



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.

Thinnet 10Base2 • 20 AWG Stranded (19x32) .037" Tinned Copper Conductor • Duobond® II + 93% Tinned Copper Braid Shield

Non-Plenum • Ethernet • Foam Polyethylene Insulation • Gray PVC Jacket																				
UL AWM Style 1354 (30V 80°C)	9907	NEC:	500	152.4	12.5	5.7	20 AWG (19x32)	.102	2.59	Duobond II + 93% Tinned Copper Braid	.185	4.70	50	80%	25.4	83.3	1	.43	1.4	
		CL2, CM	U-1000	U-304.8	25.0	11.4												10	1.30	4.3
		CEC:	1000	304.8	25.0	11.4	.037"											50	2.90	9.5
		CM	1640	500.0	39.4	17.9	Tinned Copper											100	4.20	13.8
			U-2500	U-762.0	60.0	27.3	Copper Braid											200	6.10	20.0
			2500	762.0	62.5	28.4	8.8Ω/M'											400	8.90	29.2
		3280	1000.0	82.0	37.3	28.9Ω/km'				5.8Ω/M'							700	12.10	39.7	
										19.0Ω/km							900	13.90	45.6	
																	1000	14.80	48.6	

For Plenum versions of 9907, see 89907 or 82907.

DEC Part No. 17-01248-00

Plenum Ethernet • Foam FEP Insulation • Natural Flamarrest® Jacket																				
150V 75°C	82907	NEC:	500†	152.4	12.5	5.7	20 AWG (19x32)	.095	2.41	Duobond II + 93% Tinned Copper Braid	.160	4.06	50	80%	25.4	83.3	1	.43	1.4	
		CL2P, CMP	U-1000	U-304.8	23.0	10.5												10	1.30	4.3
		CEC:	1000†	304.8	24.0	10.9	.037"											50	2.90	9.5
		CMP FT6	2500†	762.0	57.5	26.1	Tinned Copper Braid											100	4.20	13.8
							Copper Braid											200	6.10	20.0
							8.8Ω/M'											400	9.20	30.2
						28.9Ω/km'				5.8Ω/M'							700	12.90	42.3	
										19.0Ω/km							900	15.00	49.2	
																	1000	16.00	52.5	

Plenum Ethernet • Foam FEP Insulation • Gray Fluorocopolymer Jacket																				
150V 150°C	89907†	NEC:	500†	152.4	13.0	5.9	20 AWG (19x32)	.095	2.41	Duobond II + 93% Tinned Copper Braid	.160	4.06	50	80%	25.4	83.3	1	.43	1.4	
		CL2P, CMP	1000†	304.8	24.0	10.9												10	1.30	4.3
		CEC:	2500†	762.0	60.0	27.3	.037"											50	2.90	9.5
		CMP FT6					Tinned Copper Braid											100	4.20	13.8
							Copper Braid											200	6.10	20.0
							8.8Ω/M'											400	9.20	30.2
						28.9Ω/km				5.8Ω/M'							700	12.90	42.3	
										19.0Ω/km							900	15.00	49.2	
																	1000	16.00	52.5	

DEC Part No. 17-01246-00
Suitable for Outdoor and Direct Burial applications.

Thicknet 10Base5 • 12 AWG Solid .086" Bare Copper Conductor • Duobond IV* Quad Shield

Non-Plenum • Ethernet • Foam Polyethylene Insulation • Yellow PVC Jacket																				
UL AWM Style 1478 (30V 60°C)	9880	NEC:	500	152.4	66.0	30.0	12 AWG (solid)	.243	6.17	Duobond IV (Duobond II + 94% TC Braid + Duofoil® + 90% TC Braid)	.405	10.29	50	78%	26.0	85.0	1	.19	.62	
		CL2, CM	1000	304.8	131.0	59.5												5	.37	1.21
		CEC:	1640	500.0	219.8	99.9	.086"											10	.52	1.71
		CM					Bare Copper											50	1.20	3.94
							1.42Ω/M'											100	1.70	5.58
							4.66Ω/km											200	2.55	8.37
																	400	3.90	12.80	
																	700	5.50	18.10	
																	900	6.50	21.30	
																	1000	6.90	22.60	

For Plenum version of 9880, see 89880.

DEC Part No. 17-00451-00
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:	500†	152.4	67.0	30.5	12 AWG (solid)	.245	6.22	Duobond IV (Duobond II + 90% TC Braid + Duofoil® + 90% TC Braid)	.375	9.53	50	78%	26.0	85.0	1	.18	.59	
		CL2P, CMP	1000†	304.8	134.0	60.9												5	.37	1.21
		CEC:	1640†	500.0	224.7	102.1	.086"											10	.52	1.71
		CMP FT6					Bare Copper											50	1.15	3.77
							1.42Ω/M'											100	1.65	5.41
							4.66Ω/km											200	2.45	8.04
																	400	3.80	12.50	
																	700	5.60	18.40	
																	900	6.80	22.30	
																	1000	7.20	23.60	

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.

DCR = DC Resistance • TC = Tinned Copper

* Duobond IV = Duobond II + 94% tinned copper braid + Duofoil® + 90% tinned copper braid.
(Plenum version is Duobond II + 90% tinned copper braid + Duofoil® + 90% tinned copper braid.)

† Spools are one piece, but length may vary ±10% from length shown.



IEEE 802.3 • ISO/IEC 8802.3 10Base5

Transceiver Cables

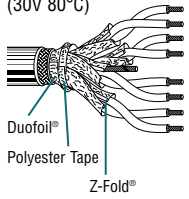


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Color Code	Standard Lengths		Standard Unit Wt.		Conductor (stranding) Nom. DCR	Shielding Materials Nom. DCR	Nominal OD		Drain Wire	Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			
					Ft.	m	Lbs.	kg			Inch	mm				* pF/Ft.	* pF/m	** pF/Ft.	** pF/m

28 and 24 AWG Stranded Tinned Copper • Twisted Pairs • Overall Polyester Isolation Tape + Duofoil® + TC Braid Shield • Drain Wire

Non-Plenum • Polypropylene Insulation • Light Gray PVC Jacket

UL AWM Style 2919 (30V 80°C)	9903	NEC: CL2, CMG CEC: CMG FT4	4	Gray/White, Yellow/Orange, Green/Blue, Black/Red	500 1000	152.4 304.8	21.5 43.0	9.8 19.5	3 Pair: 28 AWG (7x36) TC 65.0Ω/M' 213.0Ω/km 1 Pair: 24 AWG (7x32) TC 24.0Ω/M' 78.7Ω/km Each Pair Individually Beldfoil® Shielded	Polyester Isolation Tape + Duofoil + 92% Tinned Copper Braid 2.9Ω/M' 9.5Ω/km	.250 6.35	24 AWG Stranded Tinned Copper	78*	66%	19.7	64.6	34.8	114.2
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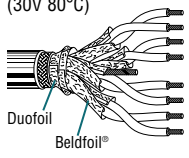


* 3 Pairs

20 AWG Stranded (7x28) Tinned Copper • Twisted Pairs • Overall Polyester Isolation Tape + Duofoil + TC Braid Shield • Drain Wire

Non-Plenum • Datalene® Insulation • Light Gray PVC Jacket

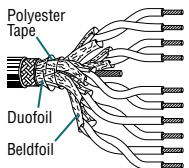
UL AWM Style 2919 (30V 80°C)	9901	NEC: CL2, CM CEC: CM	4	Gray/White, Yellow/Orange, Blue/Green, Red/Black	500 1000	152.4 304.8	53.5 106.0	24.3 48.2	20 AWG (7x28) Tinned Copper Each Pair Individually Beldfoil Shielded 10.5Ω/M' 34.4Ω/km	Polyester Isolation Tape + Duofoil + 95% Tinned Copper Braid 2.0Ω/M' 6.6Ω/km	.415 10.54	22 AWG Stranded Tinned Copper	78	78%	16.7	54.8	29.5	96.8
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For Plenum version of 9901, see 89901.

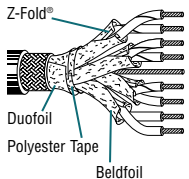
DEC Part No. 17-01320-00

UL AWM Style 2919 (30V 80°C)	9902	NEC: CL2, CM CEC: CM	5	Gray/White, Yellow/Orange, Blue/Green, Red/Brown, Red/Black	500 1000	152.4 304.8	76.5 145.0	34.8 65.9	20 AWG (7x28) Tinned Copper Each Pair Individually Beldfoil Shielded 10.5Ω/M' 34.4Ω/km	Polyester Isolation Tape + Duofoil + 95% Tinned Copper Braid 1.65Ω/M' 5.4Ω/km	.500 12.70	20 AWG Stranded Tinned Copper	78	78%	16.7	54.8	29.5	96.8
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Plenum • FEP Teflon® Insulation† • Light Gray Fluorocopolymer (PVDF) Jacket

150°C	89901	NEC: CMP CEC: CMP FT6	4	Gray/White, Yellow/Orange, Blue/Green, Red/Black	500† 1000†	152.4 304.8	51.5 104.0	23.4 47.3	20 AWG (7x28) Tinned Copper Each Pair Individually Beldfoil Shielded 10.5Ω/M' 34.4Ω/km	Polyester Isolation Tape + Duofoil + 95% Tinned Copper Braid 1.5Ω/M' 4.9Ω/km	.370 9.40	22 AWG Stranded Tinned Copper	78	78%	16.7	54.8	29.5	96.8
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†Foam FEP (data pairs) and solid FEP (power pair).

DEC Part No. 17-01319-00

Suitable for Outdoor and Direct Burial applications.

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 ±10% from length shown.

Teflon is a DuPont trademark.



IEEE 802.4 MAP & Mini-MAP • IEEE 802.7

Broadband Coaxial Cables



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

RG-6/U Type • 18 AWG Solid Bare Copper-covered Steel • Duobond® IV* Quad Shield

Non-Plenum • Foam Polyethylene Insulation • Gray PVC Jacket																			
	3131A	NEC: CL2R, CMR CEC: CMR FT4	1000†	304.8	41.0	18.6	18 AWG (solid) .040" Bare Copper Covered Steel 28.0Ω/M' 91.8Ω/km	.180	4.57	Duobond IV Quad Shield 3.6Ω/M' 11.8Ω/km	.298	7.57	75	82%	16.2	53.1	1	.35	1.2
			2500	762.2	97.5	44.3											2	.38	1.3
																	5	.45	1.5
																	10	.59	1.9
																	20	.86	2.8
																	50	1.37	4.5
																	100	1.97	6.5
																	200	2.82	9.3
																	300	3.48	11.4
																	400	4.04	13.3

Tap marks every 2.6 meters to aid users in installation.

Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
	3132A	NEC: CMP CEC: CMP FT6	1000†	304.8	36.0	16.4	18 AWG (solid) .040" Bare Copper Covered Steel 28.0Ω/M' 91.8Ω/km	.170	4.32	Duobond IV Quad Shield 3.6Ω/M' 11.8Ω/km	.274	6.96	75	82%	16.3	53.5	1	.36	1.2
																	2	.38	1.3
																	5	.50	1.6
																	10	.65	2.1
																	20	.95	3.1
																	50	1.50	4.9
																	100	2.12	7.0
																	200	2.99	9.8
																	300	3.66	12.0
																	400	4.23	13.9

Tap marks every 2.6 meters to aid users in installation.
Suitable for Outdoor and Direct Burial applications.

RG-11/U Type • 14 AWG Solid Bare Copper-covered Steel • Duobond® IV* Quad Shield

Non-Plenum • Foam Polyethylene Insulation • Gray PVC Jacket																			
	3094A	NEC: CL2R, CMR CEC: CMR FT4	500†	152.4	31.0	14.1	14 AWG (solid) .064" Bare Copper Covered Steel 11.0Ω/M' 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M' 5.9Ω/km	.407	10.34	75	82%	16.2	53.1	1	.30	1.0
			1000†	304.8	62.0	28.2											2	.32	1.0
			2000	609.6	120.0	54.5											5	.40	1.3
																	10	.60	2.0
																	20	.71	2.3
																	50	.90	3.0
																	100	1.20	3.9
																	200	1.70	5.9
																	300	2.08	6.8
																	400	2.40	7.9

Tap marks every 2.6 meters to aid users in installation.

Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
	3095A	NEC: CMP, PLTC CEC: CMP FT6	1000†	304.8	76.0	34.5	14 AWG (solid) .064" Bare Copper Covered Steel 11.0Ω/M' 36.1Ω/km	.280	7.11	Duobond IV Quad Shield 1.8Ω/M' 5.9Ω/km	.387	9.83	75	82%	16.5	54.1	1	.20	.7
																	2	.22	.7
																	5	.28	.9
																	10	.39	1.3
																	20	.60	2.0
																	50	1.20	3.9
																	100	1.70	5.6
																	200	2.50	8.2
																	300	3.04	10.0
																	400	3.50	11.5

Tap marks every 2.6 meters to aid users in installation.
Suitable for Outdoor and Direct Burial applications.

DCR = DC Resistance

*Duobond IV Quad Shield = Duobond + 60% aluminum braid + Duofoil® + 40% aluminum braid.

†Spools are one piece, but length may vary ±10% from length shown.



IEEE 802.5; ISO/IEC 8802.5

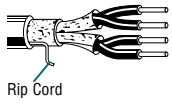
IBM Cabling System
Types 1A and 1



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Nominal OD		AWG (stranding) Diameter Nom. DCR	Shielding	Nom. Imped. (Ω)	Nominal Capacitance		Freq. (MHz)	Maximum Attenuation		Min. NEXT	
				Ft.	m	Lbs.	kg	Inch	mm				* pF/Ft.	* pF/m		(dB/ 1000')	(dB/ 100m)	(dB/ 1000')	(dB/ 100m)

IBM Type 1A • 22 AWG Solid Bare Copper • Each Pair Individually Beldfoil® Shielded + Overall 65% TC Braid Shield • Rip Cord

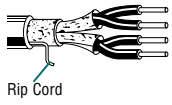
Non-Plenum • Flame-retardant Foam Polyethylene Insulation • Black PVC Jacket																			
IBM Part No.	9688	NEC:	2	500	152.4	26.5	12.0	.296	7.52	22	100%	150	8.5	27.9	4	6.7	2.2	58.0	58.0
4716748		MPG,		1000	304.8	50.0	22.7	x	x	(solid)	Beldfoil				16	13.4	4.4	50.4	50.4
33G2772		CMG		2000	609.8	102.0	46.3	.431	10.95	BC	Each Pair				100	37.5	12.3	38.5	38.5
		CEC:		3600	1097.6	190.8	86.5			.026"	+ 65%				300	65.2	21.4	31.3	31.3
		MPG,								16.7Ω/M'	TC Braid				100 ^{††}	40.8	13.4	—	—
		CMG FT4								54.7Ω/km	Overall				300 ^{††}	71.0	23.3	—	—
															600 ^{††}	100.3	32.9	—	—



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.

Plenum • Foam FEP Teflon® Insulation • Black Flamarrest® Jacket

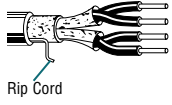
IBM Part No.	82688	NEC:	2	500 [†]	152.4	25.0	11.4	.248	6.30	22	100%	150	8.5	27.9	4	6.7	2.2	58.0	58.0
4716749		MPP,		1000 [†]	304.8	47.0	21.4	x	x	(solid)	Beldfoil				16	13.4	4.4	50.4	50.4
33G8220		CMP						.348	8.84	BC	Each Pair				100	37.5	12.3	38.5	38.5
		CEC:								.026"	+ 65%				300	65.2	21.4	31.3	31.3
		MPP,								16.7Ω/M'	TC Braid				100 ^{††}	40.8	13.4	—	—
		CMP FT6								54.7Ω/km	Overall				300 ^{††}	71.0	23.3	—	—
															600 ^{††}	100.3	32.9	—	—



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.

IBM Type 1 • 22 AWG Solid Bare Copper • Each Pair Individually Beldfoil Shielded + Overall 65% TC Braid Shield • Rip Cord

Non-Plenum • Flame-retardant Foam Polyethylene Insulation • Black PVC Jacket																			
IBM Part No.	1634A	NEC:	2	1000	304.8	50.0	22.7	.296	7.52	22	100%	150	8.5	27.9	4	6.7	2.2	58.0	58.0
4716748		MPG,		2000	609.8	102.0	46.4	x	x	(solid)	Beldfoil				16	13.4	4.4	40.0	40.0
		CMG		3600	1097.6	190.8	86.7	.431	10.95	BC	Each Pair								
		CEC:								.026"	+ 65%								
		MPG,								16.7Ω/M'	TC Braid								
		CMG FT4								54.7Ω/km	Overall								



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 1 Media cable for use in IBM Cabling Systems. For Suffix A counterpart see 9688 above.

DCR = DC Resistance • BC = Bare Copper • NEXT = Near-end Crosstalk • TC = Tinned Copper

* Capacitance between conductors
[†] Spools are one piece, but length may vary ±10% from length shown.
^{††} Common mode

Teflon is a DuPont trademark.



IEEE 802.5; ISO/IEC 8802.5

IBM Cabling System
Types 2A and 6A

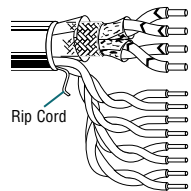


Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Wt.		Nominal OD		AWG (stranding) Diameter Nom. DCR	Shielding	Nom. Imped. (Ω)	Nominal Capacitance		Freq. (MHz)	Maximum Attenuation		Min. NEXT	
				Ft.	m	Lbs.	kg	Inch	mm				* pF/Ft.	* pF/m		(dB/ 1000')	(dB/ 100m)	(dB/ 1000')	(dB/ 305m)

IBM Type 2A • 22 AWG Solid Bare Copper • (2) Data Pairs Individually Beldfoil® Shielded + Overall 65% TC Braid + Mylar® Shield • Rip Cord

Non-Plenum • Flame-retardant Foam Polyethylene Insulation • Black PVC Jacket

IBM Part No. 9689	NEC: 6 [▲]	500	152.4	43.0	19.5	.324	8.26	22	100%	150	8.5	27.9	1k ^{**}	.390	.128	—	—
4716739	MPG,	1000	304.8	80.0	36.4	x	x	(solid)	Beldfoil	@ 1MHz	(data)	(data)	4	6.7	2.2	58.0	58.0
33G2773	CMG	3600	1097.6	298.8	135.8	.466	11.84	BC	Each Pair	(data)			16	13.4	4.4	50.4	50.4
	CEC: MPG, CMG FT4							.026"	+ 65%	600			100	37.5	12.3	38.5	38.5
								16.7Ω/M'	TC Braid	@ 1kHz			300	65.2	21.4	31.3	31.3
								54.7Ω/km	Overall	(voice)			100 ^{††}	40.8	13.4	—	—
													300 ^{††}	71.0	23.3	—	—
													600 ^{††}	100.3	32.9	—	—

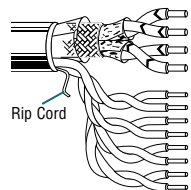


For Plenum version of 9689, see 82689.

IBM qualified Type 2A Media cable for use in IBM Cabling Systems.

Plenum • Foam FEP Teflon® Insulation • Black Flamarrest® Jacket

IBM Part No. 82689	NEC: 6 [▲]	1000 [†]	304.8	79.0	35.9	.324	8.26	22	100%	150	8.5	27.9	1k ^{**}	.390	.128	—	—
4716738	MPP,					x	x	(solid)	Beldfoil	@ 1MHz	(data)	(data)	4	6.7	2.2	58.0	58.0
33G8221	CMP					.466	11.84	BC	Each Pair	(data)			16	13.4	4.4	50.4	50.4
	CEC: MPP, CMP FT6							.026"	+ 65%	600			100	37.5	12.3	38.5	38.5
								16.7Ω/M'	TC Braid	@ 1kHz			300	65.2	21.4	31.3	31.3
								54.7Ω/km	Overall	(voice)			100 ^{††}	40.8	13.4	—	—
													300 ^{††}	71.0	23.3	—	—
													600 ^{††}	100.3	32.9	—	—



IBM qualified Type 2A Media cable for use in IBM Cabling Systems.

IBM Type 6A • 26 AWG Stranded (7x34) Bare Copper Twisted Pairs • Beldfoil Shielded Pairs + Overall 65% Tinned Copper Braid Shield

Non-Plenum • Datalene® Insulation • Striated Black PVC Jacket

IBM Part No. 1215A	NEC: 2	1000 [†]	304.8	46.0	20.9	.325	8.26	26	100%	150	8.5	27.9	4	10	3.3	52.0	52.0
4716743	CL2, CM							(7x34)	Beldfoil				16	20	6.6	44.0	44.0
33G2775	CEC: CM							BC	Each Pair				100	57	18.7	33.0	33.0
								.019"	+ 65%	300			300	100	32.8	25.0	25.0
								38.7Ω/M'	TC Braid								
								127.0Ω/km	Overall								



IBM qualified Type 6A Office cable for use in IBM Cabling Systems.

BC = Bare Copper • DCR = DC Resistance • NEXT = Near-end Crosstalk • TC = Tinned Copper

* Capacitance between conductors

**Voice pairs (1 kHz); Data pairs (4–600 MHz)

† Spools are one piece, but length may vary ±10% from length shown.

†† Common mode

▲ (2) shielded Data-grade pairs; (4) unshielded Voice-grade media pairs

Mylar and Teflon are DuPont trademarks.



IBM RISC System/6000



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs/ Cond.	Standard Lengths		Standard Unit Wt.		Nominal OD		AWG (stranding) Material Nom. DCR	Shielding Material Nom. DCR	Nom. Imped. (Ω)	Nominal Capacitance			
				Ft.	m	Lbs.	kg	Inch	mm				* pF/Ft.	* pF/m	** pF/Ft.	** pF/m

28 AWG Stranded (7x36) Bare Copper Twisted Pairs • Overall Beldfoil® Shielded + 65% Tinned Copper Braid • Tinned Copper Drain Wire

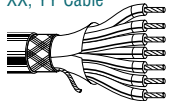
Non-Plenum • Patented Step Polyolefin Insulation • Gray PVC Jacket (See RISC Color Code Chart below)

IBM Part No. N Cable	1538A	NEC: CL2	3	U-1000 1000	U-304.8 304.8	24.0 25.0	10.9 11.4	.225	5.72	28 (7x36) Bare Copper 63.0Ω/M' 207.0Ω/km	Overall Beldfoil + 65% TC Braid 5.5Ω/M' 18.0Ω/km	120	12.0	39.4	21.5	70.5
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RJ-45 compatible

IBM Part No. XX, YY Cable	1540A	NEC: CL2	7/c	U-1000 1000	U-304.8 304.8	21.0 21.0	9.5 9.5	.190	4.83	28 (7x36) Bare Copper 63.0Ω/M' 207.0Ω/km	Overall Beldfoil + 65% TC Braid 7.2Ω/M' 23.6Ω/km	—	12.5	41.0	23.0	75.5
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RJ-45 compatible

24 AWG Solid Bare Copper Twisted Pairs • Overall Beldfoil Shielded + 65% Tinned Copper Braid • Tinned Copper Drain Wire

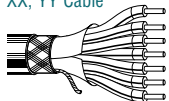
Non-Plenum • Patented Step Polyolefin Insulation • Gray PVC Jacket (See RISC Color Code Chart below)

IBM Part No. N Cable	1534A	NEC: CMG CEC: CMG FT4	3	1000	304.8	29.0	13.2	.249	6.32	24 (solid) Bare Copper 25.0Ω/M' 82.0Ω/km	Overall Beldfoil + 65% TC Braid 4.5Ω/M' 14.8Ω/km	100	15.0	49.2	26.0	85.3
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RJ-45 compatible

IBM Part No. XX, YY Cable	1536A	NEC: CMG CEC: CMG FT4	7/c	1000	304.8	35.0	15.9	.244	6.20	24 (solid) Bare Copper 25.0Ω/M' 82.0Ω/km	Overall Beldfoil + 65% TC Braid 5.3Ω/M' 17.4Ω/km	—	12.5	41.0	23.0	75.5
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RJ-45 compatible

DC = DC Resistance • TC = Tinned Copper

* Capacitance between conductors

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

Color Codes: IBM RISC System/6000

Cond.	Color	Pair No.	Color Combination
1st	White over Blue	1	White over Blue & Blue over White
2nd	White over Orange	2	White over Orange & Orange over White
3rd	White over Green		
4th	White over Brown	3	White over Green & Green over White
5th	White over Gray		
6th	White over Red		
7th	White over Yellow		



SCSI 2 Paired Cable

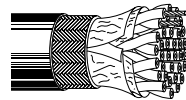
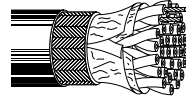
(Small Computer System Interface)



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Pairs	Standard Lengths		Standard Unit Weight		Nominal OD		AWG (stranding) Material Nom. DCR	Shielding Material Nom. DCR	Nom. Imped. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance			
				Ft.	m	Lbs.	kg	Inch	mm					* pF/Ft.	* pF/m	** pF/Ft.	** pF/m

SCSI • 28 AWG Stranded (7x36) TC Twisted Pairs • Overall Beldfoil® Shield + 85% TC Braid Shield • Color Code: Mod. Western Electric Standard

Non-Plenum • Flame-retardant Polyolefin Insulation • Polypropylene Buffer Layer • Light Gray PVC Jacket

	NEC: CL2, CMG CEC: CMG FT4	25	500 1000	152.4 304.8	51.5 101.0	23.4 45.9	.420	10.7	28 (7x36) TC 64.9Ω/M' 212.9Ω/km	Overall Beldfoil + 85% TC Braid 2.0Ω/M' 6.6Ω/km	120† 80††	66%	12.7	45.9	30.0	98.4
	NEC: CL2, CM CEC: CM	34	500 1000	152.4 304.8	71.5 139.0	32.5 63.2	.480	12.2	28 (7x36) TC 64.9/M' 212.2Ω/km	Overall Beldfoil + 85% TC Braid 1.5Ω/M' 4.9Ω/km	120† 80††	66%	12.7	45.9	30.0	98.4

DCR = DC Resistance • TC = Tinned Copper

* Capacitance between conductors.

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

† Differential mode impedance.

†† Single end mode termination impedance.

Color Codes: Modified Western Electric Standard

Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	White/Blue Stripe & Blue/White Stripe	9	Red/Brown Stripe & Brown/Red Stripe	17	Yellow/Orange Stripe & Orange/Yellow Stripe	25	Purple/Gray Stripe & Gray/Purple Stripe
2	White/Orange Stripe & Orange/White Stripe	10	Red/Gray Stripe & Gray/Red Stripe	18	Yellow/Green Stripe & Green/Yellow Stripe	26	White & Blue
3	White/Green Stripe & Green/White Stripe	11	Black/Blue Stripe & Blue/Black Stripe	19	Yellow/Brown Stripe & Brown/Yellow Stripe	27	White & Orange
4	White/Brown Stripe & Brown/White Stripe	12	Black/Orange Stripe & Orange/Black Stripe	20	Yellow/Gray Stripe & Gray/Yellow Stripe	28	White & Green
5	White/Gray Stripe & Gray/White Stripe	13	Black/Green Stripe & Green/Black Stripe	21	Purple/Blue Stripe & Blue/Purple Stripe	29	White & Brown
6	Red/Blue Stripe & Blue/Red Stripe	14	Black/Brown Stripe & Brown/Black Stripe	22	Purple/Orange Stripe & Orange/Purple Stripe	30	White & Gray
7	Red/Orange Stripe & Orange/Red Stripe	15	Black/Gray Stripe & Gray/Black Stripe	23	Purple/Green Stripe & Green/Purple Stripe	31	Red & Blue
8	Red/Green Stripe & Green/Red Stripe	16	Yellow/Blue Stripe & Blue/Yellow Stripe	24	Purple/Brown Stripe & Brown/Purple Stripe	32	Red & Orange
						33	Red & Green
						34	Red & Brown



Technical Information

Cable Preparation Tool



Cable Preparation Tool Speeds Installation of Bonded-Pair Cables

You know the high performance benefits of using data cables featuring Belden's unique Bonded-Pair technology. The Belden® Cable Preparation Tool (1797B) now makes it faster and easier than ever to prepare cables for connector termination. This tool is ideal for use with Belden's DataTwist® 350, MediaTwist®, and DataTwist 600e Bonded-Pair cables, providing special features that help separate twisted pairs. It can also be used to prepare any unbonded-pair cable for installation.



Instructions

The Belden Cable Preparation Tool now makes it faster and easier than ever to strip the outer jacket from cables without damaging the inner conductors and insulation.

Jacket Removal

DataTwist: Insert cable into the cutting area and rotate tool at least one complete turn. Remove the jacket end.

MediaTwist: Score the printed top and both sides of the cable with scissors or the Cable Preparation Tool. Then snap the cable from side to side to complete jacket separation.



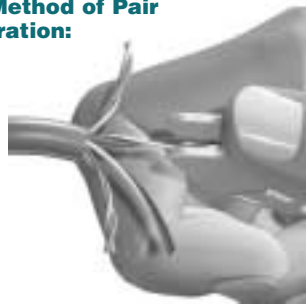
Pair Separation Techniques

Belden's Cable Preparation Tool allows you to choose from either the new "Pick" technique or the traditional "Blade Slot" technique to better facilitate pair untwisting. The Pick technique utilizes a steel awl that is incorporated into the tip of the tool that is surrounded on both sides with guards to assist in pair alignment during the pair

separation step. The Pick technique allows for a simple "pick-n-pull" motion to easily separate the conductors of a twisted pair cable. The Blade Slot technique provides the technician an alternate method for separating the conductors quickly and easily. See instructions below for either technique.

Choose Either the Pick Method or Blade Slot Method

Pick Method of Pair Preparation:



Lay each twisted pair into the tool channel with the pair ends facing toward the pick. Place your thumb on the thumb notch to stabilize and secure the pair. The tip of the pick should rest in the webbing between the two conductors. While holding the pair in place with your thumb, puncture the pair webbing with the pick.



Hold the cable in one hand and with the hand holding the tool, pull the tool away from you, allowing the pick to separate the conductors of the pair.

Blade Slot Method of Pair Preparation:

Refer to the Blade Slot Selection Table to determine which blade slot to use to separate the pairs.



Insert each twisted pair into the appropriate slot. Rotate the tool and/or the pair in the direction opposite of the twist to prevent stripping the conductor insulation. Continue insertion to match the desired length of untwisted section.

Blade Slot Selection Table

Part No.	Slot A	Slot B	Slot C
1700A	All pairs		
1700R	All pairs		
1701A		All pairs	
1872A	All pairs		
1874A	All pairs		
7851A			All pairs
7852A			All pairs

NOTE: TIA/EIA-568-B allows a maximum of 0.5 inch of untwisted section after termination.

