

COAX SOLUTIONS



Copper
Reference



GigaSPEED
X10D



GigaSPEED
Xpress



GigaSPEED
XL



PowerSUM



InstaPATCH
Cu



VisiPatch



Additional Copper
Connectivity



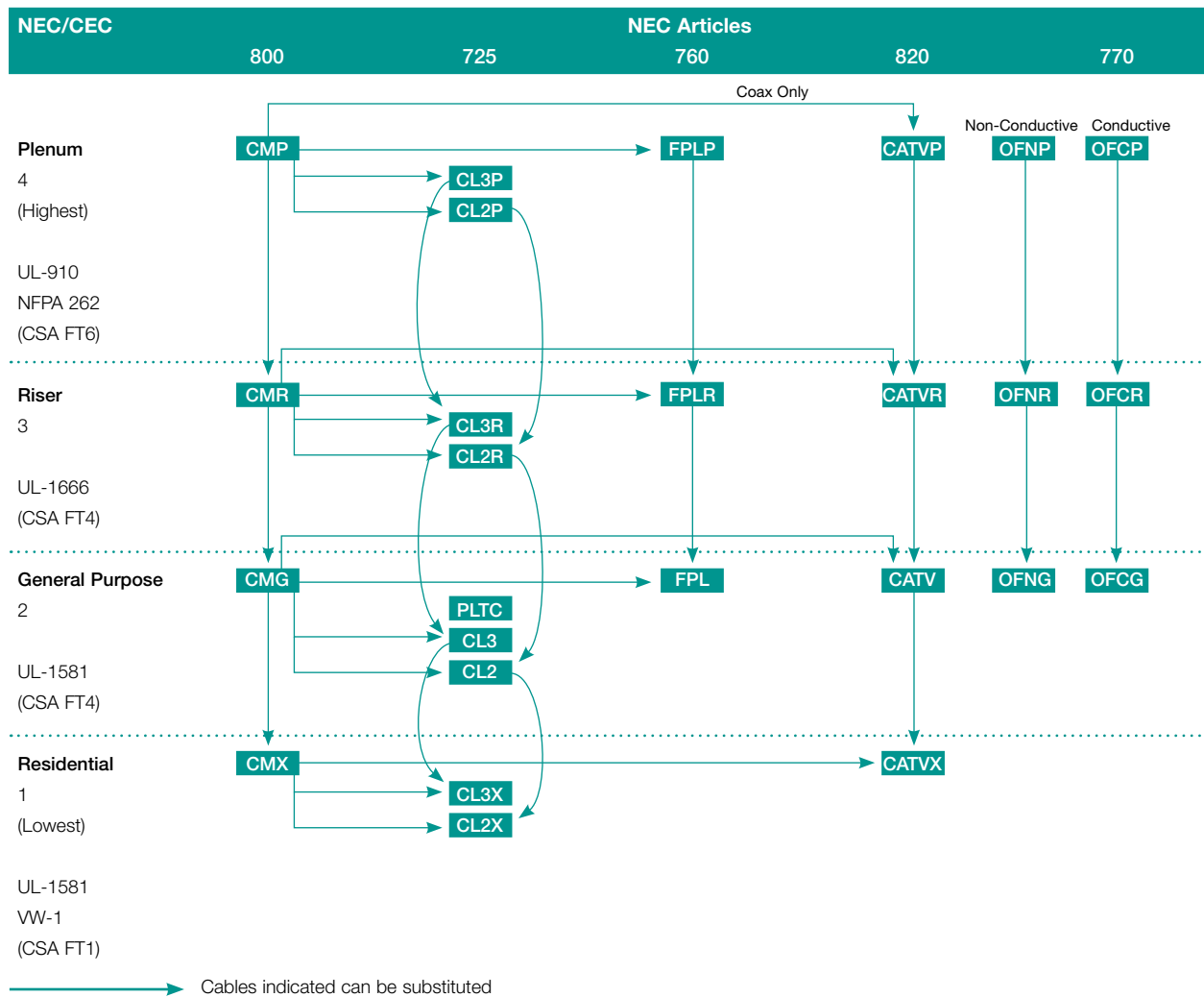
Coaxial
Cable

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Cable Fire Ratings Matrix

As well as being manufactured to strict quality and performance standards, CommScope cables are designed to meet or exceed safety standards as set forth in the National Electric Code (NEC) and Canadian Electrical Code (CEC) for their intended applications. Use of special materials, such as our own formulation of CommFlex jacketing materials, helps maintain superior performance and handling characteristics with no loss of safety.

- Types:** CMP, CMR, CMG, CM, CMX = Communication Cables
- Types:** CL3P, CL3R, CL3, CL3X, CL2P, CL2R, CL2, CL2X = Class 2 and Class 3 Remote Control, Signaling, and Power Limited Cables
- Types:** FPLP, FPLR, FPL = Power Limited Fire Alarm Cables
- Types:** CATVP, CATVR, CATV, CATVX = CATV and Radio Distribution Cables
- Types:** OFNP, OFNR, OFNG, OFN = Nonconductive Fiber Optic Cables
- Types:** OFCP, OFCR, OFCG, OFC = Conductive Fiber Optic Cables
- Types:** PLTC = Power Limited Tray Cables



Cable Construction

- Copper Reference
- GigaSPEED X10D
- GigaSPEED Xpress
- GigaSPEED XL
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- InstaPATCH Cu
- VisiPatch
- Additional Copper Connectivity
- Coaxial Cable

Center Conductor

Conductors in coaxial cable are either solid or stranded wire. Solid conductors are described by their diameter and material (i.e. 18 AWG Solid TC) while stranded conductors include their stranding (i.e. 20 AWG (19x32 AWG) Strand TC).

- BC** - Bare Copper
- TC** - Tinned Copper
- CCA** - Copper Clad Aluminum
- CCS** - Copper Covered Steel

Shields

Coaxial shields (also called the outer conductor) come in several varieties. Two types of coverage are: Foil, where aluminum is bonded to both sides of a polypropylene or polyester tape to provide 100% coverage and Braid where flexible wire is woven around the dielectric. Braid coverage designation is given as a percentage followed by a two letter code representing the material of the braid (i.e. 96% TC braid would be 96% coverage of a Tin Copper braid).

- AIS** - Aluminum sheath
- AI** - Aluminum braid
- BC** - Bare Copper braid
- TC** - Tin Copper braid



Dielectric

Most CommScope coaxial cables have foamed (or cellular) dielectrics for better velocity of propagation characteristics. Different materials are used to meet electrical and fire-safety performance.

- Foam PE** - Foamed Polyethylene
- Solid PE** - Solid Polyethylene
- Foam FEP** - Foamed Fluorinated Ethylene Propylene (generic or Teflon® brand)
- Solid FEP** - Solid Fluorinated Ethylene Propylene
- AD/PE** - Air Dielectric created with a Polyethylene filament
- FRPE** - Flame-Retardant Polyethylene

Jackets

Jacket material may vary depending on application. Plenum-rated cables provide superior fire safety, while flame-retardant PVC are used in riser, general purpose and residential situations. Outdoor cables (especially those meant for burial) are usually sheathed in polyethylene.

- K** - Kynar™ Polyvinylidene Fluoride (PVDF - used in plenum cables)
- V** - CommFlex, our proprietary jacketing compound (used in plenum cables)
- PE** - Polyethylene (Outdoor Applications)
- PVC** - Polyvinylchloride

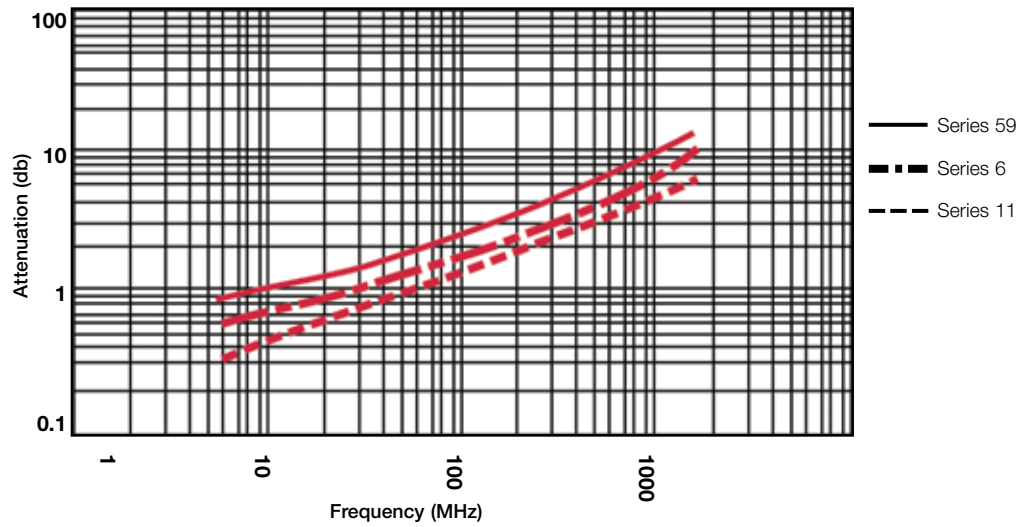
Teflon is a registered trademark of E.I. Dupont de Nemours and Co.

Electrical Characteristics

Attenuation

Attenuation is the loss of electrical power as a signal travels along a cable. There are two types of losses that affect the attenuation of a cable: loss due to conductivity of conductors (center conductor and shield) and dielectric loss. Both losses increase with frequency.

Relative Attenuation for Series 59, 6, 11 non-plenum cables



Electrical Characteristics

Capacitance

Capacitance is the measurement of energy absorbed by the cable. It is caused by the difference in electrical potential of the conductors and is measured in picofarads per foot (Pf/ft). Like impedance, it is related to the inner and outer conductor sizes and the core dielectric constant. In a given cable design, capacitance and impedance are inversely proportional.

Capacitance is determined by the formula where E_r is the dielectric constant of the cable core, D is the dielectric diameter, d is the conductor diameter and a is the conductor stranding factor.

$$\frac{7.354 E_r}{\log_{10} \frac{D}{ad}}$$

Impedance

Characteristic impedance is a measurement of resistance to the electrical current being carried in a cable. It is measured in units called ohms (Z_0) and is directly related to the ratio between inner conductor dimension and the outer conductor dimension, and inversely related to the dielectric constant of the cable core. Unlike conductor resistance, impedance does not vary with cable length.

For a system to work at maximum efficiency, the nominal impedance of the transmitter, receiver and cable must precisely match. An incorrect match will produce reflection loss.

Nominal impedance is determined by the formula

The factors are the same as they are for capacitance above.

$$Z_0 (\Omega) = \frac{138.2}{\sqrt{E_r}} \log_{10} \frac{D}{ad}$$



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Coaxial
Cable

Electrical Characteristics

Shield performance

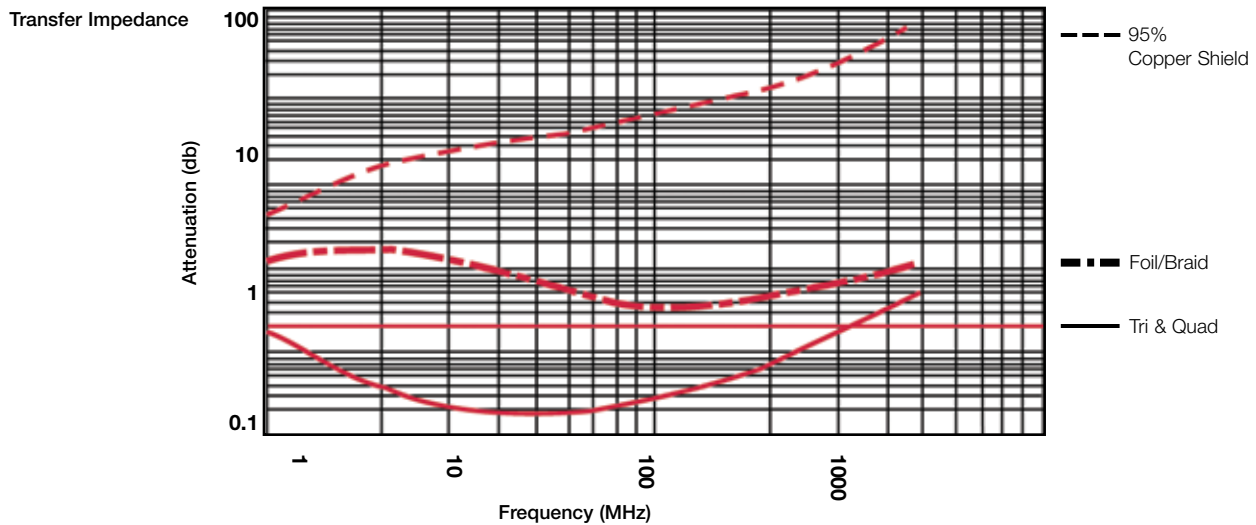
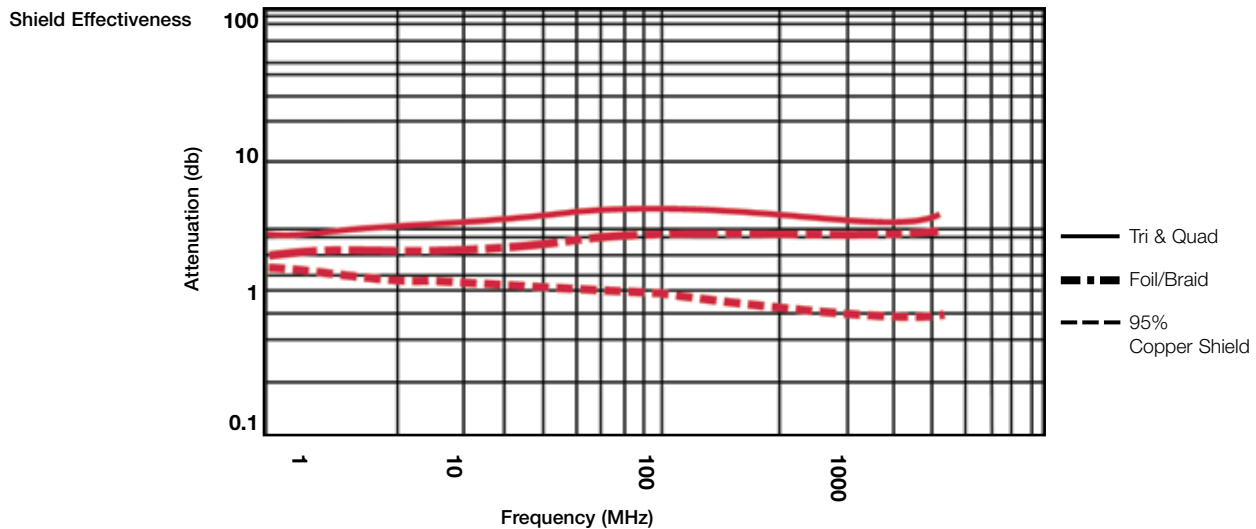
Braid shields are composed of thin strands of tinned or bare copper wires interwoven around the conductors within a cable. In addition to providing excellent shielding properties, braid shields are very flexible and add to the structural integrity of the cable.

Braid shields differ widely in their construction; braid angle, strand diameter, wire type, numbers of ends per carrier and the number of carriers contribute to the effectiveness of the shield. Shield coverage varies between 40% and 95% for single braids and up to 98% for double braids.

Foil/braid combination shields consist of a tinned copper or aluminum braid over an aluminum/polyester or aluminum/polypropylene foil tape. Braid coverage varies between 40% and 95%. However, aluminum foil coverage is 100%.

To gain greater shield effectiveness, an additional layer of foil is placed over the existing foil and braid which produces a Tri Shield cable. The highest grade shield effectiveness is found in Quad Shield cables. A Quad Shield coverage design consists of an aluminum foil with a 60% braid covered by an additional foil and 40% braid.

As shown in the graphs below, combination shields are more effective and offer better transfer impedance properties than single braid shields. Quad shielding also offers better long term performance because it is less effected by repeated flexing.



Electrical Characteristics

Structural Return Loss

Structural return loss is the measure of power loss on a cable or system and is caused by discontinuities in the cable conductor or dielectric. If these discontinuities are regularly spaced along a cable, they can cause severe transmission losses for frequencies whose wavelengths are twice that of the distance between these discontinuities.

Structural return loss is an unfavorable characteristic of poorly-made cable, although careless installation can cause it as well. CommScope manufacturing lines are constantly computer monitored to avoid irregularities in the manufacturing process that could cause these flaws. Additionally, every reel of CommScope coaxial cable is sweep-tested prior to shipping.

Tilt

Another problem caused by different characteristics of low and high frequency signals is tilt. Although they are faster, high-frequency signals tend to lose power more quickly over distance than lower frequency signals. This power loss, called attenuation, is expressed in decibels (see attenuation above for more details) and the difference between the attenuations of the high and low frequency signals for the entire length of an installed cable in a carrier band system cannot exceed a certain tilt factor expressed in decibels (dB).

Tilt determines the maximum length of a cable segment in a carrier band network and is determined by where N is the maximum allowable tilt permitted by the system, A_1 is the attenuation of the high frequency signal and A_2 is the attenuation of the low frequency signal.

$$\frac{N}{A_1 - A_2}$$

Velocity of Propagation









Nominal velocity of propagation is the speed of the signal in a given cable. In a vacuum, electromagnetic radiation (light, radio waves, etc.) travels at the speed of light. In a cable, it travels somewhat slower and in direct inverse proportion to the dielectric constant; the lower the dielectric constant, the closer to the speed of light the signal travels.

Velocity of propagation is given as a percent figure of the speed of light and is calculated by where E_r is the dielectric constant of the cable core.

$$\frac{1}{\sqrt{E_r}} \times 100$$



Video

75Ω Coax Cable, Non-Plenum Series 59 (RG 59 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
5572 8265103/10  NEC CM CEC CMH 	20 AWG Solid CCS 48.2Ω/158Ω	Foam PE .144/3.66	Al foil and 67% Al braid 10.5Ω/34.5Ω	Flame- retardant PVC .035/.89	Black .242/6.1	16.0	52.5	82%	75Ω	1	0.58	1.90
										10	0.89	2.92
5540 8208804/10  NEC CM CEC CMH 	20 AWG Solid CCS 48.2Ω/158Ω	Foam PE .144/3.66	Quad shield Al foil, 53% Al braid, Al foil and 35% braid 6.2Ω/20.3Ω	Flame- retardant PVC .035/.89	Black .265/6.7	16.0	52.5	84%	75Ω	1	0.58	1.90
										10	0.89	2.92
5565/5565H 8237703/10 H 4265303/00  NEC CMR CEC CMR 	20 AWG Solid BC 10.5Ω/34.4Ω	Foam PE .144/3.66	Al foil and 90% TC braid 2.8Ω/9.18Ω	Flame- retardant PVC .032/.81	Black .242/6.1	16.7	54.8	82%	75Ω	1	0.31	1.03
										3.6	0.56	1.85
5786/5786H 8225503/10 H 4266003/10  NEC CM CEC CMH/G 	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Al foil and 60% Al braid 9.7Ω/31.8Ω	Flame- retardant PVC .030/.76	Black White Gray .272/6.9 by .575/14.6	16.2	53.1	82%	75Ω	1	0.37	1.21
										10	0.66	2.16














75Ω Coax Cable, Plenum Series 59 (RG 59 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
2020V 4135703/10 Plenumax  NEC CMP CEC CMP 	20 AWG Solid CCS 48.2Ω/158Ω	Foam FEP .135/3.43	Al foil and 65% Al braid 10.3Ω/33.8Ω	PVDF(K) .015/.38	Cream .202/5.1	16.0	52.5	84%	75Ω	1	0.48	1.56
				CommFlex(V) .015/.38	White .202/5.1					10	0.88	2.87
										50	1.85	6.07
										100	2.51	8.24
										200	3.58	11.73
										400	5.50	18.04
										700	7.45	24.44
										900	8.70	28.54
										1000	9.31	30.55

 = 1,000 ft Reel

Video

75Ω Coax Cable, Non-Plenum Series 6 (RG 6 Type)







Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
									MHz	dB/100'	dB/100 m
5730 4202613/10  NEC CM CEC CMH  	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Al foil and 60% Al braid 9.7Ω/31.8Ω	Flame- retardant PVC 030/.76	Black White Gray Beige .272/6.9	16.2 53.1	82%	75Ω	1	0.37	1.21
									10	0.66	2.16
									50	1.41	4.62
									100	1.92	6.30
									200	2.64	8.66
									400	3.73	12.23
									700	5.05	16.56
									900	5.79	18.99
									1000	6.11	20.04
									1200	6.73	22.07
									1450	7.49	24.57
									1800	8.43	27.65
									2200	9.35	30.67
3000	10.92	33.28									
5730H 4265603/10  NEC CM CEC CMH  	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Al foil and 60% Al braid 9.7Ω/31.8Ω	Low Smoke Zero Halogen 030/.76	Black White Gray Beige .272/6.9	16.2 53.1	82%	75Ω	1	0.37	1.21
									10	0.66	2.16
									50	1.41	4.62
									100	1.92	6.30
									200	2.64	8.66
									400	3.73	12.23
									700	5.05	16.56
									900	5.79	18.99
									1000	6.11	20.04
									1200	6.73	22.07
									1450	7.49	24.57
									1800	8.43	27.65
									2200	9.35	30.67
3000	10.92	33.28									
5781 8223514/10 Quad Shield  NEC CM CEC CMG  	18 AWG Solid BC 6.5Ω/21.2Ω	Foam PE .180/4.57	Quad shield Al foil, 60% Al braid, Al foil, 40% Al braid 4.9Ω/16.1Ω	Flame- retardant PVC .033/.83	Black White .300/7.6	16.2 53.1	82%	75Ω	1	0.25	0.82
									10	0.66	2.16
									50	1.41	4.62
									100	1.92	6.30
									200	2.64	8.66
									400	3.73	12.23
									700	5.05	16.56
									900	5.79	18.99
									1000	6.11	20.04
									1200	6.73	22.07
									1450	7.49	24.57
									1800	8.43	27.65
									2200	9.35	30.67
5738 4685213/10 Burial  	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam PE .180/4.57	Al foil and 60% Al braid 9.7Ω/31.8Ω	PE with Floodant .030/.76	Black .272/6.9	16.2 53.1	82%	75Ω	1	0.37	1.21
									10	0.66	2.16
									50	1.41	4.62
									100	1.92	6.30
									200	2.64	8.66
									400	3.73	12.23
									700	5.05	16.56
									900	5.79	18.99
									1000	6.11	20.04
									1200	6.73	22.07
									1800	8.43	27.65
									2200	9.35	30.67

 = 1,000 ft Reel

 = We Tote Box

Video

75Ω Coax Cable, Plenum Series 6 (RG 6 Type)







Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
2275V 4137003/10 Plenumax  NEC CMP CEC CMP 	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	Al foil and 60% Al braid 9.0Ω/21.0Ω	PVDF(K) .016/.41	Cream .239/6.1	16.0	52.5	84%	75Ω	1	0.38	1.25
										10	0.70	2.30
										50	1.48	4.85
										100	2.01	6.59
										200	2.86	9.38
										400	4.23	13.87
					White .239/6.1	16.0	52.5	84%	75Ω	700	5.96	19.55
										900	6.96	22.83
										1000	7.45	24.44
										1450	9.34	30.64
										1800	10.69	35.06
										2200	11.54	37.85
										3000	13.07	42.87
2227K/2227V K 4112704/10 V 4104504/10 Plenumax  NEC CMP CEC CMP 	18 AWG Solid CCS 28.6Ω/93.8Ω	Foam FEP .170/4.32	Quad shield Al foil, 60% Al braid, 40% Al braid 5.3Ω/17.4Ω	PVDF(K) .015/.41	Cream .260/6.6	16.0	52.5	84%	75Ω	1	0.38	1.25
										10	0.70	2.30
										50	1.48	4.85
										100	2.01	6.59
										200	2.86	9.38
										400	4.23	13.87
					White .260/6.6	16.0	52.5	84%	75Ω	700	5.96	19.55
										900	6.96	22.83
										1000	7.45	24.44
										1200	8.25	24.75
										1450	9.34	28.02
										1800	10.69	32.07
										2200	11.54	34.62
3000	13.07	42.87										
2279V 4135303/10 Plenumax  NEC CMP CEC CMP 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam FEP .170/4.32	Al foil and 95% TC braid 2.8Ω/9.3Ω	CommFlex(V) .015/.406	White .237/6.02	16.0	52.5	84%	75Ω	1	0.26	0.85
										3.6	0.47	1.54
										10	0.70	2.30
										71.5	1.65	5.41
										135	2.39	7.84
										270	3.40	11.15
										360	4.08	13.38
										720	6.05	19.84
										1000	7.45	24.44
										1200	7.77	25.49
										1450	8.61	28.24
										1800	9.73	31.91
										2500	11.70	38.38
3000	13.07	42.87										



 = 1,000 ft Reel

Video





75Ω Coax Cable, Non-Plenum Series 11 (RG 11 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
5916 8203603/10  NEC CM CEC CMH 	14 AWG Solid CCS 11.0Ω/36.1Ω	Foam PE .280/7.11	Al foil and 60% Al braid 6.9Ω/22.6Ω	Flame- retardant PVC .045/1.1	Black .395/10.0	16.2	53.1	82%	75Ω	1	0.20	0.66
										10	0.45	1.48
										50	0.89	2.92
										100	1.21	3.97
										200	1.68	5.51
										400	2.37	7.77
										700	3.27	10.73
										900	3.77	12.37
										1000	3.95	12.96
										1200	4.46	13.59
										1450	5.08	15.48
										1800	5.58	17.01
										2200	6.29	19.17
2500	6.79	22.27										
3000	7.58	24.86										
5940 7413004/10  NEC CM CEC CMH 	14 AWG Solid CCS 11.0Ω/36.1Ω	Foam PE .280/7.11	Quad shield Al foil, 60% Al braid, Al foil and 40% Al braid 3.7Ω/12.1Ω	Flame- retardant PVC .035/.89	Black .405/10.3	16.0	52.5	84%	75Ω	1	0.17	0.56
										10	0.45	1.48
										50	0.89	2.92
										100	1.21	3.97
										200	1.68	5.51
										400	2.37	7.77
										700	3.27	10.73
										900	3.77	12.37
										1000	3.95	12.96
										1200	4.46	13.59
										1450	5.08	15.48
										1800	5.58	17.01
										2200	6.29	19.17
5917 8292903/10 Burial  	14 AWG Solid CCS 11.0Ω/36.1Ω	Foam PE .280/7.11	Al foil and 60% Al braid 6.9Ω/22.6Ω	PE with Floodant .045/1.1	Black .395/10.0	16.2	53.1	82%	75Ω	1	0.20	0.66
										10	0.45	1.48
										50	0.89	2.92
										100	1.21	3.97
										200	1.68	5.51
										400	2.37	7.77
										700	3.27	10.73
										900	3.77	12.37
										1000	3.95	12.96
										1200	4.46	13.59
										1450	5.08	15.48
										1800	5.58	17.01
										2200	6.29	19.17





 = 1,000 ft Reel

Video

75Ω Coax Cable, Plenum Series 11 (RG 11 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation			
						pF/ft	pF/m			MHz	dB/100'	dB/100 m	
2285K 4136903/10 Plenumax  NEC CMP CEC CMP 	14 AWG Solid CCS 11.0Ω/36.1Ω	Foam FEP .280/7.11	Al foil and 60% Al braid 6.9Ω/22.6Ω	Kynar (PVDF) .020/.51	Cream .351/8.9	16.0	52.5	84%	75Ω	1	0.15	0.49	
										10	0.45	1.48	
											50	0.90	2.95
											100	1.28	4.20
											200	1.85	6.07
											400	2.75	9.02
											700	3.92	12.86
											900	4.72	15.48
											1000	5.04	16.53
2287K 4103304/10 Plenumax  NEC CMP CEC CMP 	14 AWG Solid CCS 11.0Ω/36.1Ω	Foam FEP .280/7.11	Quad shield Al foil, 60% Al braid Al foil and 40% Al braid 3.9Ω/12.8Ω	Kynar (PVDF) .020/.51	Cream .372/9.4	16.0	52.5	84%	75Ω	1	0.15	0.49	
										10	0.45	1.48	
											50	0.90	2.95
											100	1.28	4.20
											200	1.85	6.07
											400	2.75	9.02
											700	3.92	12.86
											900	4.72	15.48
											1000	5.04	16.53
											1450	6.67	21.87
											1800	7.71	25.28
											2200	8.50	27.88


75Ω Coax Cable, Alternative Plenum RG Series 11 (RG 11 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation			
						pF/ft	pF/m			MHz	dB/100'	dB/100 m	
2285V WTRL RG11 60 1000 4101403/10 Plenumax  NEC CMP CEC CMP 	14 AWG Solid CCS 11.0Ω/36.1Ω	Foam FEP .280/7.11	Al foil and 60% Al braid 6.9Ω/22.6Ω	PVC .020/.51	White .351/8.9	16.0	52.5	84%	75Ω	1	0.15	0.49	
										10	0.45	1.48	
											50	0.90	2.95
											100	1.28	4.20
											200	1.85	6.07
											400	2.75	9.02
											700	3.92	12.86
											900	4.72	15.48
											1000	5.04	16.53
2287V WTRL RG11 QD 1000 4101204/10 Plenumax  NEC CMP CEC CMP 	14 AWG Solid CCS 11.0Ω/36.1Ω	Foam FEP .280/7.11	Quad shield Al foil, 60% Al braid Al foil and 40% Al braid 3.9Ω/12.8Ω	PVC .020/.51	White .372/9.4	16.0	52.5	84%	75Ω	1	0.15	0.49	
										10	0.45	1.48	
											50	0.90	2.95
											100	1.28	4.20
											200	1.85	6.07
											400	2.75	9.02
											700	3.92	12.86
											900	4.72	15.48
											1000	5.04	16.53
											1450	6.67	21.87
											1800	7.71	25.28
											2200	8.50	27.88


 = 1,000 ft Reel



75Ω Coax Cable, Plenum Hardline







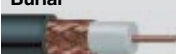

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
2312K 4110103/24 Plenum Trunk Plenumax  NEC CMP CEC CMP	.109/2.76 Solid CCA 1.3Ω/4.26Ω	Foam FEP .450/11.4	Al sheath .40Ω/1.3Ω	PVDF(K) .012/.31	Cream .524/13.3	16.0	52.5	86%	75Ω	1	0.07	0.23
										10	0.23	0.75
										50	0.56	1.84
										100	0.83	2.72
										200	1.25	4.10
										400	1.97	6.46
										700	2.92	9.58
900	3.47	11.38										
1000	3.78	12.40										

75Ω Coax Cable, Industrial





Catalog Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
5060/5060H 8224604/10 H 4265404/10 Plenumax  NEC CEC CMG 1000	18 AWG Copper Covered Steel 28.6Ω/93.8Ω	Foam FEP .180/4.57	Al foil 60% Al braid, Al foil and 40% Al braid 3.9Ω/12.8Ω	Flame- retardant PVC .034/.864	Black .300/7.62	16.0	52.5	82%	75Ω	1	0.36	1.18
										2	0.38	1.25
										5	0.45	1.48
										10	0.59	1.94
										20	0.86	2.82
										50	1.38	4.53

1000 = 1,000 ft Reel

75Ω Coax Cable, Non-Plenum Series 59 (RG 59 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
									MHz	dB/100'	dB/100 m
5553 8836303/10  NEC CM CEC CMH 	20 AWG Solid BC 10.5Ω/34.4Ω	Foam PE .144/3.66	93% BC Braid 3.9Ω/12.8Ω	Flame- retardant PVC .037/.94	Black, White Gray .242/6.1	16.7 54.8	82%	75Ω	1	0.30	0.98
									10	0.84	2.76
									100	2.71	8.89
									400	5.85	19.19
									700	8.42	27.62
5553H 4265303/10  NEC CM CEC CMH 	20 AWG Solid BC 10.5Ω/34.4Ω and 18 AWG Pair (7x26) BC	Foam PE .144/3.66	93% BC Braid 3.9Ω/12.8Ω	Low Smoke Zero Halogen .037/.94	Black .242/6.1 by .484/12.3 wide	16.7 54.8	82%	75Ω	1	0.30	0.98
									10	0.84	2.76
									100	2.71	8.89
									400	5.85	19.19
									700	8.42	27.62
5554 4254203/10  NEC CM CEC CMH 	20 AWG Solid BC 10.5Ω/34.4Ω and 18 AWG Pair (7x26) BC	Foam PE .144/3.66	93% BC Braid 3.9Ω/12.8Ω	Flame- retardant PVC .037/.94	Black .242/6.1 by .484/12.3 wide	16.7 54.8	82%	75Ω	1	0.30	0.98
									10	0.84	2.76
									100	2.71	8.89
									400	5.85	19.19
									700	8.42	27.62
5520 4209203/10 Burial  Outdoor 	20 AWG Solid BC 10.5Ω/34.4Ω	Foam PE .144/3.66	93% BC Braid 3.9Ω/12.8Ω	PE with flooding .037/.94	Black .242/6.1	16.7 54.8	82%	75Ω	1	0.30	0.98
									10	0.84	2.76
									100	2.71	8.89
									400	5.85	19.19
									700	8.42	27.62

75Ω Coax Cable, Plenum Series 59 (RG 59 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance pF/ft pF/m	Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
									MHz	dB/100'	dB/100 m
2037V 4131603/10 Plenumax  NEC CMP CEC CMP 	20 AWG Solid BC 10.5Ω/34.4Ω	Foam FEP .135/3.43	93% BC Braid 3.6Ω/11.8Ω	CommFlex(V) .016/.41	White .193/4.9	16.0 52.5	84%	75Ω	1	0.30	0.98
									10	0.86	2.82
									50	1.91	6.26
									100	2.78	9.12
									200	4.06	13.32
									400	6.01	19.71
									700	8.47	27.78
									900	9.82	32.21
									1000	10.47	34.34
									2054V 8721103/10 Plenumax  NEC CMP CEC CMP 	20 AWG Solid BC 10.5Ω/34.4Ω and 18 AWG pair (7x26) BC	Foam FEP .135/3.43
10	0.86	2.82									
50	1.91	6.26									
100	2.78	9.12									
200	4.06	13.32									
400	6.01	19.71									
700	8.47	27.78									
900	9.82	32.21									
1000	10.47	34.34									









 = 1,000 ft Reel

 = We Tote Box











Security









75Ω Coax Cable, Non-Plenum Series 6 (RG 6 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
5700 8288203/10  NEC CM CEC CMH 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam PE .180/4.57	92% BC Braid 3.0Ω/9.9Ω	Flame- retardant PVC .033/.84	Black .272/6.9	16.2	53.2	82%	75Ω	1	0.19	0.62
										10	0.65	2.14
5700H 4265703/10  NEC CM CEC CMH 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam PE .180/4.57	92% BC Braid 3.0Ω/9.9Ω	Low Smoke Zero Halogen .033/.84	Black .272/6.9	16.2	53.2	82%	75Ω	1	0.19	0.62
										10	0.65	2.14
5654 8288103/10  NEC CM CEC CMG 	18 AWG Solid BC 6.5Ω/21.2Ω and 18 AWG pair (7x26) JBC	Foam PE .180/4.57	92% BC Braid 3.0Ω/9.9Ω	Flame- retardant PVC .033/.84	Black .272/6.9 by .514/13.1 wide	16.2	53.2	82%	75Ω	1	0.19	0.62
										10	0.65	2.14
5720 8288603/10 Burial  Outdoor 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam PE .180/4.57	92% BC Braid 3.0Ω/9.9Ω	PE with floodant .033/.84	Black .272/6.9	16.2	53.2	82%	75Ω	1	0.19	0.62
										10	0.65	2.14

75Ω Coax Cable, Plenum Series 6 (RG 6 Type)

Product Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
2277V 4123803/10 Plenumax  NEC CMP CEC CMP 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam FEP .170/4.32	92% BC Braid 4.4Ω/14.4Ω	CommFlex(V) .016/.41 PVDF .018/.46	White .226/5.7	16.0	52.5	84%	75Ω	1	0.21	0.69
										10	0.65	2.13
2277V 4123803/10 Plenumax  NEC CMP CEC CMP 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam FEP .170/4.32	92% BC Braid 4.4Ω/14.4Ω	CommFlex(V) .016/.41 PVDF .018/.46	White .226/5.7	16.0	52.5	84%	75Ω	100	2.04	6.69
										400	4.46	14.63
2277V 4123803/10 Plenumax  NEC CMP CEC CMP 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam FEP .170/4.32	92% BC Braid 4.4Ω/14.4Ω	CommFlex(V) .016/.41 PVDF .018/.46	White .226/5.7	16.0	52.5	84%	75Ω	700	5.89	19.32
										900	7.47	24.50
2277V 4123803/10 Plenumax  NEC CMP CEC CMP 	18 AWG Solid BC 6.5Ω/21.2Ω	Foam FEP .170/4.32	92% BC Braid 4.4Ω/14.4Ω	CommFlex(V) .016/.41 PVDF .018/.46	White .226/5.7	16.0	52.5	84%	75Ω	1000	8.02	26.31

75Ω Coax Cable, Plenum Series 11 (RG 11 Type)

Catalog Number Material ID Packaging Options Safety Rating	Conductor Size & Type Nom DCR kft/km	Dielectric Type Nom OD in/mm	Shields Type & Coverage Nom DCR kft/km	Jacket Type & Thickness in/mm	Cable Color & Dimensions in/mm	Nominal Capacitance		Nom Vel. of Prop.	Nom Imp.	Typical Attenuation		
						pF/ft	pF/m			MHz	dB/100'	dB/100 m
2286K 4138303/10  NEC CMP CEC CMP 	14 AWG Solid BC 2.9Ω/9.5Ω	Foam FEP .280/7.11	95% BC Braid 2.5Ω/8.2Ω	PVDF(K) .020/.51	Cream .347/8.7	16.0	52.5	82%	75Ω	1	0.09	0.27
										10	0.43	1.41
2286K 4138303/10  NEC CMP CEC CMP 	14 AWG Solid BC 2.9Ω/9.5Ω	Foam FEP .280/7.11	95% BC Braid 2.5Ω/8.2Ω	PVDF(K) .020/.51	Cream .347/8.7	16.0	52.5	82%	75Ω	100	1.48	4.85
										400	3.24	9.72
2286K 4138303/10  NEC CMP CEC CMP 	14 AWG Solid BC 2.9Ω/9.5Ω	Foam FEP .280/7.11	95% BC Braid 2.5Ω/8.2Ω	PVDF(K) .020/.51	Cream .347/8.7	16.0	52.5	82%	75Ω	700	4.67	14.01
										900	5.46	16.38
2286K 4138303/10  NEC CMP CEC CMP 	14 AWG Solid BC 2.9Ω/9.5Ω	Foam FEP .280/7.11	95% BC Braid 2.5Ω/8.2Ω	PVDF(K) .020/.51	Cream .347/8.7	16.0	52.5	82%	75Ω	1000	5.83	17.49

 = 1,000 ft Reel

 = We Tote Box

Copper Reference

GigASPEED X10D

GigASPEED Xpress

GigASPEED XL

PowerSUM

InstaPATCH Cu

VisiPatch

Additional Copper Connectivity

Coaxial Cable