

IV. Physical Characteristics (16 AWG Conductors):

AWG:

# Conductors	AWG	Stranding	Conductor Material
2	16	19x29	BC - Bare Copper

- Insulation Material PVC - Polyvinyl Chloride
- Nom. Insulation Thickness .016"
- Nom. Insulation Diameter .089"
- Color Code Red & White

V. Physical Characteristics (20 AWG Conductors):

AWG:

# Conductors	AWG	Stranding	Conductor Material
2	20	19x32	BC - Bare Copper

- Insulation Material PVC - Polyvinyl Chloride
- Nom. Insulation Thickness .016"
- Nom. Insulation Diameter .069"
- Color Code Brown & Green

VI. Physical Characteristics (22 AWG Pairs):

AWG:

# Pairs	AWG	Stranding	Conductor Material
2	22	19x34	BC - Bare Copper

- Insulation Material PVC - Polyvinyl Chloride
- Nom. Insulation Thickness .010"
- Nom. Insulation Diameter .051"
- Nom. Pair Diameter .102"
- Color Code Blue & Orange, Yellow & Violet

VII. Electrical Characteristics (Cat 5e):

Nom. Mutual Capacitance:

Capacitance (pF/ft)
15

Maximum Capacitance Unbalance (pF/100 m): 66

Nominal Velocity of Propagation:

VP (%)
70

Maximum Delay:

Delay (ns/100 m)
510

Max. Delay Skew:

Delay Skew (ns/100 m)
25

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9

Max. Operating Voltage - UL:

Voltage
300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)
3

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1	2.4	65.3	65.3	62.9	20.0
4	4.8	56.3	56.3	51.5	23.0
8	6.8	51.8	51.8	45.0	24.5
10	7.7	50.3	50.3	42.6	25.0
16	9.7	47.3	47.3	37.5	25.0
20	11.0	45.8	45.8	34.8	25.0
25	12.4	44.3	44.3	31.9	24.3
31.25	13.9	42.9	42.9	29.0	23.6
62.5	20.2	38.4	38.4	18.3	21.5

100	26.0	35.3	35.3	9.2	20.1
155	33.2	32.5	32.5	0	19.0
200	38.4	30.8	30.8		19.0
250	43.7	29.3	29.3		18.0
300	48.6	28.2	28.2		18.0
310	49.5	27.9	27.9		18.0
350	53.2	27.2	27.2		17.0

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 12	105 ± 10	63.8	60.8
4	100 ± 12	100 ± 10	51.7	48.7
8	100 ± 12	100 ± 10	45.7	42.7
10	100 ± 12	100 ± 10	43.8	40.8
16	100 ± 12	100 ± 10	39.7	36.7
20	100 ± 12	100 ± 10	37.7	34.7
25	100 ± 15	100 ± 10	35.8	32.8
31.25	100 ± 15	100 ± 10	33.9	30.9
62.5	100 ± 15	100 ± 10	27.8	24.9
100	100 ± 15	100 ± 10	23.8	20.8
155	100 ± 18	100 ± 10	19.9	16.9
200	100 ± 20	100 ± 10	17.7	14.7
250	100 ± 20	100 ± 10	15.8	12.8
300	100 ± 20	100 ± 10	14.2	11.2
310	100 ± 20	100 ± 10	13.9	10.9
350	100 ± 22	100 ± 10	12.9	9.9

Electrical characteristics shown are prior to bundling into a composite cable

VIII. Electrical Characteristics (12 AWG Conductors):

- Nom. Conductor DC Resistance 1.6 Ohm/1000 ft @ 20°C
- Max. Operating Voltage 300 V RMS

IX. Electrical Characteristics (16 AWG Conductors):

- Nom. Conductor DC Resistance 4.2 Ohm/1000 ft @ 20°C
- Max. Operating Voltage 300 V RMS

X. Electrical Characteristics (20 AWG Conductors):

- Nom. Conductor DC Resistance 10.2 Ohm/1000 ft @ 20°C
- Max. Operating Voltage 300 V RMS

XI. Electrical Characteristics (22 AWG Pairs):

- Nom. Conductor DC Resistance 16.3 Ohm/1000 ft @ 20°C
- Max. Operating Voltage 300 V RMS

XII. Physical Characteristics (Overall):

- Outer Shield Type Braid
- Outer Shield Material Tinned Copper
- Outer Shield Coverage 65%

-Overall Cabling Separator Material	PE Tape
-Outer Jacket Material	PVC - Polyvinyl Chloride (matte finish)
-Nom. Outer Jacket Thickness	.050"
-Overall Nom. Diameter	0.650"

XIII. Mechanical Characteristics (Overall):

-Operating Temperature Range	-20°C To +75°C
-Max. Recommended Pulling Tension	375 lbs.
-Min. Bend Radius	6.5"

XIV. Applicable Specifications and Agency Compliance (Overall):

-EU Directive 2011/65/EU (ROHS II)	Yes
-EU CE Mark	Yes
-EU Directive 2000/53/EC (ELV)	Yes
-EU Directive 2002/95/EC (RoHS)	Yes
-EU Directive 2002/96/EC (WEEE)	Yes
-EU Directive 2003/11/EC (BFR)	Yes
-CA Prop 65 (CJ for Wire & Cable)	Yes
-MII Order #39 (China RoHS)	Yes