



2012 CORPORATE LANE, SUITE 116 NAPERVILLE, IL 60563 TOLL FREE: 888-888-8045

Part #: AVELANVIA-06
Elan System Specific

Description: Three element composite cable, 2 conductors 18 AWG unshielded, a CAT 5E component, and a RG59 component, with an overall PVC jacket for data communications and controls applications manufactured in the USA and (UL) listed CL3R or CMR c(UL)us, 75°C.

Element 1: (Power/Control) 18 AWG, 2 Conductors Unshielded, Insulated with Polyvinylchloride

1. Conductor

- 1.1 AWG & Stranding: 18 AWG, Class B 7 Strands
- 1.2 Material: Annealed Bare Copper
- 1.3 Conductor Count: 2 Conductor

2. Insulation

- 2.1 Material: Polyvinylchloride (PVC)
- 2.2 Wall Thickness: 0.010"
- 2.3. Color Code: Red, Black

Element 2: (Data/Communications) Jacketed CAT 5E 350 mhz Component, White

3. Nominal Electrical Characteristics

- 3.1. Impedance: 100 +/- 15Ω (0.772 to 100 MHz)
- 3.2. Max Conductor Resistance: 9.8 Ω/100 Meters @ 20°C
- 3.3. Max Resistance Unbalance: 5%
- 3.4. Max Capacitance Unbalance: 330 pF/100 Meters
- 3.5. Max Delay Skew: 45 ns/100 Meters
- 3.6. Max Propagation Velocity: 68%

Transmission Specifications

Freq (MHz)	Ins. Loss (dB/100m)	NEXT Loss (dB)	PSNEXT Loss (dB)	ACR (dB)	PSACR (dB)	ELFEXT (dB)	PSELFEXT (dB)	Return Loss (dB)
1	2.0	65.3	62.3	63.3	60.3	63.8	60.8	20.0
4	4.1	56.3	53.3	52.2	49.2	51.8	48.8	23.0
8	5.8	51.8	48.8	46.0	43.0	45.7	42.7	24.5
10	6.5	50.3	47.3	43.8	40.8	43.8	40.8	25.0
16	8.2	47.2	44.2	39.0	36.0	39.7	36.7	25.0
31.25	11.7	42.9	39.9	31.2	28.2	33.9	30.9	23.6
62.5	17.0	38.4	35.4	21.4	18.4	27.9	24.9	21.5
100	22.0	35.3	32.3	13.3	10.3	23.8	20.8	20.1
155	28.1	32.4	29.4	4.3	1.3	20.0	17.0	18.8

200	32.4	30.8	27.8	-	-	17.8	14.8	18.0
250	36.9	29.3	26.3	-	-	15.8	12.8	17.3
400	48.5	26.3	23.3	-	-	11.8	8.8	15.9

TIA/EIA-568-b.2 Category 5e Compliant
ISO/IEC 11801, 2nd Ed. Class D Compliant

Element 3: (CCTV) Jacketed RG 59 20AWG 95% coverage bare copper braid Component, Black

4. Nominal Electrical Characteristics

- 4.1. Cond. DC Resistance: 10.3 Ω /Mft @ 20°C
- 4.2. Shield DC Resistance: 3.9 Ω /Mft @ 20°C
- 4.3. Capacitance: 16.2 pF/ft
- 4.4. Impedance: 75 $\Omega \pm 3$
- 4.5. Propagation Velocity: 82%
- 4.6. Return Loss: >-21 dB from 1MHz to 455GHz, >-17 dB from 455MHz to 1GHz

Overall Cable:

5. Assembly - Elements 1, 2 & 3

- 5.1 Cable Fillers: N/A
- 5.2 Cable Binder: N/A
- 5.3 Cable Shield: N/A
- 5.4 Cable Drain Wire: N/A

6. Jacket

- 6.1 Material: Polyvinylchloride (PVC)
- 6.2 Wall Thickness: 0.030"
- 6.3 Diameter: 0.432"
- 6.4 Color: Light Blue

7. Markings

- 7.1 Type: Cable shall be permanently identified via surface inkjet print
- 7.2 Legend: ELAN VIA ! CABLE MFG BY LAKE CABLE MADE IN THE USA A B C D E 0 1 2 3 4 5 6
7 8 9 E171197 20 AWG RG59 CCTV & 24 AWG 4PR CAT5E & 18 AWG 2C ONTROL
(UL) CL3R OR CMR C(UL)US 75°C FT-4 _____"ROHS"

8. Cable Characteristics:

- 8.1 Bend Radius: 6.50"

9. Standards

- 9.1 Refer to NEC (NFPA 70) article 725 and article 800 for installation guidelines
- 9.2 UL listed as type CL2R per UL standard 13 and as type CMR c(UL)us 75°C FT-4 per UL standard 444
- 9.3 All materials used in the manufacture of this cable are RoHS compliant
- 9.4 Recommended Operating Voltage: 300V
- 9.5 Made in the USA

ALL SPECIFIED PARAMETERS ARE NOMINAL AND SUBJECT TO VERIFICATION