

## Technical Specifications

**Product Line:** 24-4P-P-L6ANS

### Description

4 pair 23 AWG solid, twisted, non-conductive shielded cable NEC type CMP and CEC type CMP FT6. Third party verified to ANSI/TIA-568 Category 6A performance. Product manufactured compliant to the requirements of UL444 for installations and applications in accordance with NEC article(s) 725, 800, and 760.

### Conductor

23 AWG  
 Solid annealed bare copper conductors  
 Diameter: 0.0226" | 0.574mm

### Electrical

DC resistance:  $\leq 28.6 \Omega / 1000'$  |  $93.8 \Omega/KM$   
 DCR Unbalance:  $\leq 3.0\%$   
 Capacitance:  $17.0 \text{ pF/FT}$  |  $56.0 \text{ pF/M}$   
 Impedance:  $100 \pm 15 \Omega$   
 Propagation Delay (Skew): 35ns/100m MAX  
 Velocity of Propagation: 71%  
 Voltage rating: 300V  
 Pair to ground capacitance Unbalance:  $\leq 330 \text{ pF/100M}$   
 Maximum current: 1.4A@25°C

### Insulation

Fluorinated ethylene propylene  
 Blue/Green: Wall thickness: 0.010" | 0.27mm  
 Diameter: 0.044" | 1.11mm  
 Orange/Brown: Wall thickness: 0.0095" | 0.24mm  
 Diameter: 0.042" | 1.06mm

### Regulatory

ANSI/TIA-568-D Category 6A  
 NEC: CMP 75°C  
 CEC: CMP FT6 60°C  
 EU RoHS III 2015/863/EU Compliant  
 REACH (EC) No 1907/2006 Compliant

### Color Code

Pair 1: Orange, White/orange stripe  
 Pair 2: Blue, White/blue stripe  
 Pair 3: Green, White/green stripe  
 Pair 4: Brown, White/brown stripe

### Packages

Reel: 1000' | 305M  
 Weight: 45 Lbs/1000' | 67 Kg/KM

### Assembly

Pairs twisted in varying lay lengths  
 Each pair in a polyolefin X separator interstice  
 Core twisted in a left-hand-lay

### Installation

Pull Tension: 25 Lbs | 111 N  
 Bend radius: 2.72" | 69mm unloaded  
 Bend radius: 5.44" | 138mm loaded  
 Plenum cable should be conditioned at room temperature for 24 hours prior to installation and never installed below 32°F | 0°C ambient temperature

### Construct

100% polyester tape binder

### Applications

Ground Loop Lift Solution for these technologies  
 Plenum LAN systems 10/100/1000BaseT and 10GBaseT  
 Plenum Phone, Voice, Video over IP and security video  
 BALUN support and media infrastructure  
 Infrared, audio

### Shield

100% Mylar/Aluminum/Mylar Tape  
 Non-Conductive EMI reject format

### Performance

LAN: 300 feet  
 Passive Baluns up to 2500 feet

### Jacket

Plenum rated polyvinyl chloride  
 Colors: White  
 Wall thickness: 0.018" | 0.45mm  
 Diameter: 0.272" | 6.90mm

### Final Outside Diameter (inches)

0.272

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Specification Revision Date:

May 23, 2019

Cat6A Performance Data:

Frequency (MHz)	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	PropagationDelay	DelaySkew
	Max. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Min. dB/100m	Max. ns/100m	Max. ns/100m
1	2.08	74.30	72.30	72.22	70.22	67.80	64.80	20.00	570.00	45
4	3.80	65.27	63.27	61.47	59.47	55.76	52.76	23.01	552.00	
8	5.31	60.75	58.75	55.44	53.44	49.74	46.74	24.52	546.73	
10	5.93	59.30	57.30	53.37	51.37	47.80	44.80	25.00	545.38	
16	7.49	56.24	54.24	48.75	46.75	43.72	40.72	25.00	543.00	
20	8.38	54.78	52.78	46.40	44.40	41.78	38.78	25.00	542.05	
25	9.38	53.33	51.33	43.95	41.95	39.84	36.84	24.32	541.20	
31.25	10.50	51.88	49.88	41.38	39.38	37.90	34.90	23.64	540.44	
62.5	14.99	47.36	45.36	32.37	30.37	31.88	28.88	21.54	538.55	
100	19.14	44.30	42.30	25.16	23.16	27.80	24.80	20.11	537.60	
150	23.68	41.66	39.66	17.98	15.98	24.28	21.28	18.87	536.94	
200	27.58	39.78	37.78	12.20	10.20	21.78	18.78	18.00	536.55	
250	31.07	38.33	36.33	7.26	5.26	19.84	16.84	17.32	536.28	
300	34.27	37.14	35.14	2.87	0.87	18.26	15.26	16.77	536.08	
350	37.25	36.14	34.14	-1.11	-3.11	16.92	13.92	16.30	535.92	
400	40.05	35.27	33.27	-4.78	-6.78	15.76	12.76	15.89	535.80	
450	42.71	34.50	32.50	-8.21	-10.21	14.74	11.74	15.53	535.70	
500	45.26	33.82	31.82	-11.44	-13.44	13.82	10.82	15.21	535.61	