

WIREFATH

BULK WIRE

SP-CAT6-SH-1000-XXX

F/UTP, 23AWG solid bare copper, CAT 6, CM/CMG.

Features

- 23 AWG 4 Conductor Cat 6 Wire, CMG Rated
- Shielded twisted pair, 100% Aluminum Mylar Shielding
- Wooden drum spool
- Sweep frequency up to 550 MHz

Application

- LAN/Network cable
- Environments with high EMI noise
- Digital and analog transmission for video, audio, data, and phone
- IEEE 802.3ab 100BASE-T, 1000BASE-TX and legacy speeds
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

Electrical Transmission

- ANSI/TIA-568-C.2 (2009)
- ISO/IEC 11801 (Edition 2.2)
- IEC 61156-5 (Edition 2.0)

Flame Test

- UL 1685 (CM/CMG)

Material and Construction

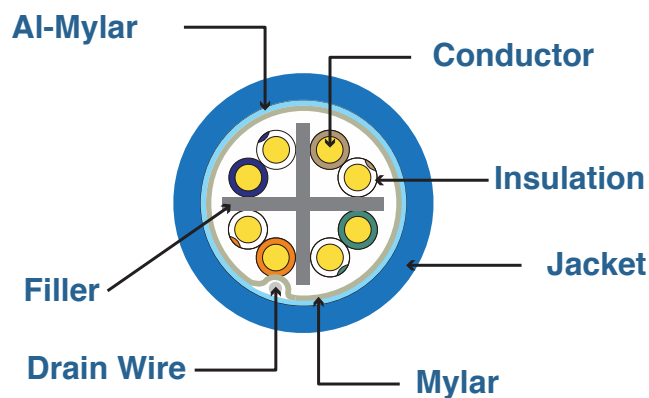
- UL 444
- CSA 22.2 NO.214

EU Directive 2011/65/EC (RoHS2)

EU Directive 2006/95/EC (LVD)

CE compliance date: 2010.01.01

Sectional Drawing



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Material and Construction			
Conductor	Material	23AWG solid bare copper	
Insulation	Material	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue Stripe	1.08 ± 0.02 mm
		Orange & white/orange stripe	1.05 ± 0.02 mm
		Green & white/green stripe	1.08 ± 0.02 mm
Brown & white/brown stripe		1.05 ± 0.02 mm	
Twisted	Material	Left hand direction	
Assembly	Material	Left hand direction	
Filler	Material	Polyolefin (PO)	
Shield	Material	Mylar tape	
Drain wire	Material	26AWG solid tinned copper	
Shield	Material	Al Mylar tape	
	Description	100% coverage and mylar side facing out	
Jacket	Material	Flame retardant polyvinyl chloride (FRPVC)	
	Diameter	7.20 ± 0.2 mm	
	Thickness	0.45 ± 0.05 mm	
	Color	As ordered	
Marking	WirePath™ Bulk Wire by SnapAV, E325177-W C(UL)US CMG 4PAIR 23AWG 75°C FT-4, ANSI/TIA-568-C.2, FTP CAT6E SHIELDED 350MHz, DDMMYY, 0000/1000 FT ~~~ 0998/0002 FT		

Usage & Environmental Condition		
Temperature range	Storage & shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum bending radius		≥ 4 times of overall diameter
Maximum pulling tension		≤ 110 N

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Physical & Electrical Characteristics (at 20°C)

Temperature & voltage rating	75°C / 300V
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance unbalance	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ·Km
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m

Material and Construction

Frequency (MHz)	IL	NEXT	PS.NEXT	ACR	PS.ACR	ACRF	PS.ACRF	RL	Propagation Delay	Delay Skew
	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	2.03	74.30	72.30	72.28	70.28	67.80	64.80	20.00	570.00	45.00
4	3.78	65.27	63.27	61.49	59.49	55.76	52.76	23.01	552.00	
8	5.32	60.75	58.75	55.43	53.43	49.74	46.74	24.52	546.73	
10	5.95	59.30	57.30	53.35	51.35	47.80	44.80	25.00	545.38	
16	7.55	56.24	54.24	48.68	46.68	43.72	40.72	25.00	543.00	
20	8.47	54.78	52.78	46.31	44.31	41.78	38.78	25.00	542.05	
25	9.51	53.33	51.33	43.83	41.83	39.84	36.84	24.32	541.20	
31.25	10.67	51.88	49.88	41.20	39.20	37.90	34.90	23.64	540.44	
62.5	15.38	47.36	45.36	31.98	29.98	31.88	28.88	21.54	538.55	
100	19.80	44.30	42.30	24.50	22.50	27.80	24.80	20.11	537.60	
150	24.71	41.66	39.66	16.95	14.95	24.28	21.28	18.87	536.94	
200	28.98	39.78	37.78	10.80	8.80	21.78	18.78	18.00	536.55	
250	32.85	38.33	36.33	5.48	3.48	19.84	16.84	17.32	536.28	
300	36.43	37.14	35.14	0.72	N.A.	18.26	15.26	16.77	536.08	
350	44.85	27.14	24.14	N.A.	N.A.	16.92	13.92	16.30	535.92	
400	42.97	35.27	33.27	N.A.	N.A.	15.76	12.76	15.89	535.80	
450	46.01	34.50	32.50	N.A.	N.A.	14.74	11.74	15.53	535.70	
500	48.94	33.82	31.82	N.A.	N.A.	13.82	10.82	15.21	535.61	
550	51.76	33.19	31.19	N.A.	N.A.	12.99	9.99	14.92	535.54	

Values above 250MHz are for information only.