

WIREFATH

BULK WIRE

NST-CAT5EPL-1000-XXX

U/UTP, 24AWG solid bare copper, CAT 5E, CMP

Features

- 24 AWG 4 conductor Cat 5e wire, CMP rated
- Unshielded twister pair, solid bare copper conductors
- Sweep frequency up to 350 MHz
- Reel coiled with REELEX technology to ensure tangle-free pull
- Nest in box packaging

Application

- LAN/Network cable
- Digital and analog transmission for data, video, audio and phone
- IEEE 802.3u 100BASE-T, 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

- NFPA 262 (CMP)

Material and Construction

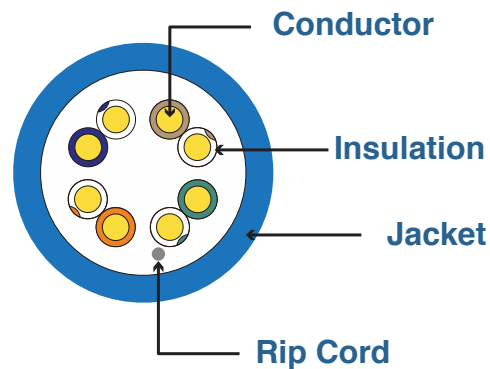
- UL 444
- CSA 22.2 NO.214

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	24AWG solid bare copper		
Insulation	Material of single layer	Fluorinated Ethylene Propylene (FEP)		
	Material of dual layer	Polyolefin (PO)		
		Fluorinated Ethylene Propylene (FEP)		
	Color code & diameter	Blue & white/blue Stripe	0.85 ± 0.02 mm	
		Orange & white/orange stripe	0.86 ± 0.02 mm	
Green & white/green stripe		0.87 ± 0.02 mm		
Brown & white/brown stripe		0.86 ± 0.02 mm		
Twisted	Description	Left hand direction		
Assembly	Description	Left hand direction		
Rip cord	Material	Polyester multi-yarn		
Jacket	Material	Low smoke flame retardant polyvinyl chloride (LSFRPVC)		
	Diameter	4.5 ± 0.2 mm		
	Thickness	0.38 ± 0.03 mm		
	Color	As ordered		
Marking	WirePath™ Bulk Wire by SnapAV, E325177-W C(UL)US CMP 4PAIR 24AWG 75°C PLENUM FT-6, ANSI/TIA-568-C.2, UTP CAT5E UNSHIELDED 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	2.04	65.30	62.30	63.26	60.26	63.80	60.80	20.00	570.00	45.00
4	4.05	56.27	53.27	52.22	49.22	51.76	48.76	23.01	552.00	
8	5.77	51.75	48.75	45.99	42.99	45.74	42.74	24.52	546.73	
10	6.47	50.30	47.30	43.83	40.83	43.80	40.80	25.00	545.38	
16	8.25	47.24	44.24	38.99	35.99	39.72	36.72	25.00	543.00	
20	9.27	45.78	42.78	36.52	33.52	37.78	34.78	25.00	542.05	
25	10.42	44.33	41.33	33.91	30.91	35.84	32.84	24.32	541.20	
31.25	11.72	42.88	39.88	31.15	28.15	33.90	30.90	23.64	540.44	
62.5	16.99	38.36	35.36	21.37	18.37	27.88	24.88	21.54	538.55	
100	21.98	35.30	32.30	13.33	10.33	23.80	20.80	20.11	537.60	
150	27.54	32.66	29.66	5.11	2.11	20.28	17.28	18.87	536.94	
200	32.42	30.78	27.78	N.A.	N.A.	17.78	14.78	18.00	536.55	
250	36.85	29.33	26.33	N.A.	N.A.	15.84	12.84	17.32	536.28	
300	40.97	28.14	25.14	N.A.	N.A.	14.26	11.26	16.77	536.08	
350	44.85	27.14	24.14	N.A.	N.A.	12.92	9.92	16.30	535.92	

Values above 100MHz are for information only.