

# 23 AWG /4 Pair CAT6 CMP Cable

75°C, 300V 250MHz PLENUM RATED; 4 UNSHIELDED TWISTED PAIRS

### CONSTRUCTION:

- 1. Conductors:** 23 AWG SOLID BARE COPPER
- 2. Insulation:** FEP BLUE & WHITE/BLUE STRIPE; ORANGE & WHITE/ORANGE STRIPE; GREEN & WHITE/GREEN STRIPE; BROWN & WHITE/BROWN STRIPE
- 3. Assembly:** 4 PAIRS INDIVIDUALLY TWISTED, CABLED; UNSHIELDED; AND JACKETED
- 4. Jacket:** LS-PVC, Color : Consult factory for jacket color options.

### APPLICATIONS AND FEATURES:

Southwire Cat 6 unshielded twisted pair cable is a high performance data communication cable. This ethernet cable is designed for indoor and plenum network installations type CMP (Plenum rated communication cable), may be used in Ethernet Networking system, PoE applications, Video MPEG4 / M JPEG / Digital / Analog / Baseband / Broadband and other Multimedia Voice applications.

### SPECIFICATIONS:

- Meets or exceeds TIA/EIA 568-C.2
- NEC ARTICLE 800
- Passes IEEE 802.3af
- UL 444 CMP
- NFPA 262 ( UL 910) / CSA FT6
- Directive (EU) 2015/863 – RoHS 3

### SAMPLE PRINT LEGEND:

6P SOUTHWIRE® TAPPAN(TM) CAT6 23 AWG 4PR UTP E118871 C(UL)US CMP 75C -- TYPE CMP-LP(0.5A) FT6 ETL VERIFIED TO TIA/EIA-568-C.2 CATEGORY 6 250MHZ ROHS-3 COMPLIANT -- SEQ FTG -- XX/XX/XX(MONTH/DAY/YEAR) HH:MM(HOUR/MINUTE)

**PACKAGING** Standard lengths 1000 FT. Consult factory for packaging options.

TABLE 1 - Product Electrical Characteristics

Stock Code	Max Capacitance (nF/100m @ 1 kHz) (AWG)	Max DC Resistance (Ω/100m @ 68°F)	Max Delay Skew (ns/100m)	Nom Velocity of Propagation (%)	Characteristic Impedance (Ω @ 1-100 MHz)	Nominal OD (Inches)	Nominal OD (mm)	Nominal Weight (Lbs/Mft)	Nominal Weight (kg/km)
199993	3.3	9.38	45.0	68.0	100 +/- 15%	0.210	5.334	26.0	38.7

Freq. (MHz)	Attenuation (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)		PSNEXT (dB/100m)		PSACR (dB/100m)		ACRF (dB/100m)		PS ACRF (dB/100m)		RL (dB)	
	Std.	Avg.	Std.	Avg.	"Std"	Avg.	Min.	Avg.	"Std"	Avg.	Std.	Avg.	Min.	Avg.	Min.	Avg.
1	2	1.9	74.3	82	72.3	80.1	72.3	80	70.3	78.1	67.8	76	64.8	75	20.0	28
4	3.8	3.7	65.1	75	61.3	71.3	63.1	73	59.3	69.3	55.5	64	52.5	63	23.1	34
8	5.3	5.1	60.9	70	55.6	64.9	58.9	68	53.6	62.9	49.9	59	46.9	58	24.5	35
10	6.1	5.9	59.1	69	53.0	63.1	57.1	67	51	61.1	47.5	56	44.5	55	25.0	35
16	7.5	7.4	56.3	67	48.8	59.6	54.3	64	46.8	56.6	43.7	53	40.7	52	25.0	34
20	8.5	8.4	54.7	66	46.2	57.6	52.7	63	44.2	54.6	41.6	51	38.6	50	25.0	35
25	9.6	9.4	53.2	63	43.6	53.6	51.2	61	41.6	51.6	39.7	49	36.7	48	24.3	33
31.25	10.7	10.6	51.8	62	41.1	51.4	49.8	60	39.1	49.4	37.8	48	34.8	47	23.6	32
62.5	15.4	15.2	47.3	58	31.9	42.8	45.3	56	29.9	40.8	31.8	41	28.8	40	21.5	29
100	19.8	19.5	44.3	55	24.5	35.5	42.3	53	22.5	33.5	27.8	37	24.8	36	20.1	28
200	29.0	28.0	39.8	50	10.8	22.0	37.8	48	8.8	20.0	21.8	30	18.8	29	18.0	25
250	32.8	31.6	38.3	48	5.5	16.4	36.3	46	3.5	14.4	19.8	27	16.8	26	17.3	24
300	--	34.8	--	47	--	12.2	--	45	--	10.2	--	25	--	23	--	24
400	--	40.7	--	42	--	1.3	--	40	--	(0.7)	--	19	--	18	--	23

Attenuation: Std. is a TIA 568C.2 Maximum (also called "Insertion Loss") Lower is better.  
 NEXT: Std. is a TIA 568C.2 Minimum. (Near End Crosstalk) Higher is better.  
 ACR: NEXT minus Attenuation ; ("Attenuation to Crosstalk Ratio") Higher is better.  
 PSNEXT: Std. is a TIA 568C.2 Minimum. (Power Sum Near End Crosstalk) Higher is better.  
 PSACR: PSNEXT minus Attenuation ; ("Attenuation to PSNEXT Ratio") Higher is better.  
 ACRF: Std. is a TIA 568C.2 Minimum. (Attenuation Crosstalk Ratio at Far End) Higher is better.  
 PSACRF: Std. is a TIA 568C.2 Minimum. (Power Sum Atten.' to Crosstalk Ratio) Higher is better.  
 RL: Std. is a TIA 568C.2 Minimum. (Return Loss) Higher is better.

All dimensions are nominal and subject to nominal manufacturing tolerances. The customer will accept all factory lengths and +/- 10 percent of total order requested.

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