Category 6 250 MHz CMR

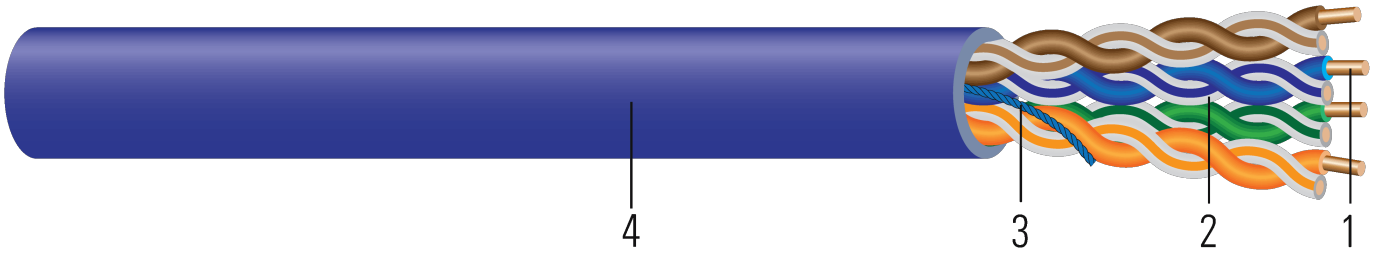

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Bare solid copper
2. **Insulation:** Fluorinated Polyethylene FEP
3. **Rip Cord:** Rip cord for ease of jacket removal
4. **Jacket:** Flame Retardant Polyvinyl Chloride PVC.

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 riser network installations type CMR (Riser 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.

- DC Resistance: <9.38 ohm/100m
- DC Resistance Unbalance: <5.00%
- Mutual Capacitance: <5.60 nF/100m
- Capacitance Unbalance (Pair to Ground): <330 pF/100m
- Insulation Resistance: > 500 MOhm/100m
- Dielectric Strength: 2.5 DCkV/sec
- Impedance (mean): >100+/- 15% (1 < freq < 250MHz)
- Propagation Delay Skew: <45 nano sec /100m)

SPECIFICATIONS:

- UL 444 Listed CMR
- UL 1666 Standard for Test for Flame Propagation Height of Electrical and Optical-Fiber Cables Installed Vertically in Shafts
- IEEE 802.3 and IEC 61156-5 Ed. 2.0
- RoHS-3 Complies with European Directive 2015/863
- TIA/EIA 568.D.2 (Cat.6) Standard
- NEC Article 800

SAMPLE PRINT LEGEND:

6R CAT6 SOUTHWIRE (R) TAPPAN (TM) I99995 E118871-LBI 23AWG 4PR UTP TYPE CMR 75C C(UL)US LISTED SUN RES UL VERIFIED TO TIA/EIA-568.D.2 CATEGORY 6 ROHS-2 COMPLIANT ZZYYMMDDHHmm 0000FT

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Number of Pairs	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	pair	mil	inch	lb/1000ft
I99995	23	4	18	0.213	24

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Number of Pairs	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	pair	mm	mm	lb/km
I99995	23	4	0.46	5.41	36

Electrical Performance

Freq. (MHz)	Attenuation (dB/ 100m)Max	NEXT (dB/100m) Min	PSNEXT (dB/ 100m)Min	ELFEXT (dB/ 100m)Min	PSELFEXT (dB/ 100m)Min	TCL (dB/100m) Min	RL (dB/100m) Min	P.Delay (ns/ 100m)Max
1	2	74.3	72.3	67.8	64.8	40	20	570
4	3.8	65.3	63.3	55.8	52.8	40	23	552
8	5.5	60.8	58.8	49.7	46.7	40	24.5	547
10	6	59.3	57.3	47.8	44.8	40	25	545
16	7.6	56.2	54.2	43.7	40.7	38	25	543
20	8.5	54.8	52.8	41.8	38.8	37	25	542
25	9.5	53.3	51.3	39.8	36.8	36	24.3	541
31.25	10.7	51.9	49.9	37.9	34.9	35.1	23.6	540
62.5	15.4	47.4	45.4	31.9	28.9	32	21.5	539
100	19.8	44.3	42.3	27.8	24.8	30	20.1	538
200	29	39.8	37.8	21.8	18.8	27	18	537
250	32.8	38.3	36.3	19.8	16.8	26	17.3	536