Category 6E CMR

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Bare solid copper
2. **Insulation:** High Density Polyethylene HDPE
3. **Separator:** Spline separator cabled and jacketed
4. **Rip Cord:** Rip cord for ease of jacket removal
5. **Jacket:** Fire Resistant Polyvinyl Chloride FR PVC.

APPLICATIONS AND FEATURES:

Southwire Cat 6E 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: <93.8 Ohm/m
- Mutual Capacitance @ 1 kHz : 56 pF/m
- Max. Unbalance Capacitance Pair x Ground @ 1 kHz : 3,3 pF/m
- Insulation Resistance: >100 MOhm-100m
- Impedance (mean): >100+/- 15% (1 < freq < 500MHz)
- Maximum Propagation Delay: 545ns/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
- NFPA 262
- TIA/EIA 568.D.2 (Cat.6) Standard
- NEC Article 800

SAMPLE PRINT LEGEND:

CAT6E SOUTHWIRE (R) TAPPAN (TM) I99998 - E160837 23AWG4 PR UTP TYPE CMR 75C C(UL)US LISTED SUN RES -- ETL VERIFIED TO TIA-568.2-D CATEGORY 6 ROHS-2 COMPLIANT ZYYMMDDHHmm(*) (**)

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Number of Pairs	Insul. Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	pair	mil	inch	lb/1000ft
I99998	23	4	18	0.244	26

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	Insul. Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	pair	mm	mm	lb/km
I99998	23	4	0.46	6.20	39

Electrical Performance

Frequency (MHz)	Insertion Loss Maixmum (dB/ 100m)	NEXT Minimum (dB/100m)	PSNEXT Minimum (dB/ 100m)	Return Loss Minimum (dB/ 100m)
1	2.0	74.3	72.3	20.0
4	3.8	65.3	63.3	23.0
8	5.3	60.8	58.8	24.5
10	6.0	59.3	57.3	25.0
16	7.6	56.2	54.2	25.0
20	8.5	54.8	52.8	25.0
25	9.5	53.3	51.3	24.3
31.25	10.7	51.9	49.9	23.6
62.5	15.4	47.4	45.4	21.5
100	19.8	44.3	42.3	20.1
155	25.2	41.4	39.4	18.8
200	29.0	39.8	37.8	18.0
250	32.8	38.3	36.3	17.3
300	36.4	37.1	35.1	16.8
350	39.8	36.1	34.1	16.3
400	43.0	35.3	33.3	15.9
500	48.9	33.8	31.8	15.2
550	51.8	33.2	31.2	14.9
600	54.5	32.6	30.6	14.7