Category 6A CMR-LP

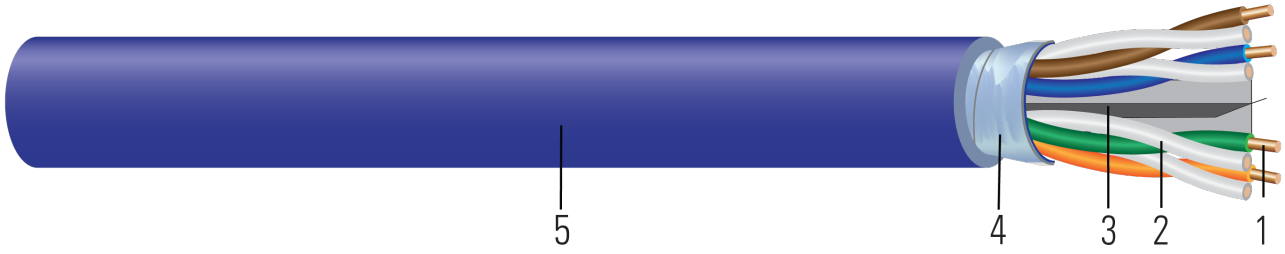

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Bare solid copper
2. **Insulation:** High density polyethylene HDPE
3. **Separator:** Spline separator cabled and jacketed
4. **Tape:** Non-continuous aluminum tape
5. **Jacket:** Fire Resistant Polyvinyl Chloride FR PVC.

APPLICATIONS AND FEATURES:

Southwire Cat 6A 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: Max 4.00%
- Mutual Capacitance: 56 pF/m
- Capacitance Unbalance (Pair to Ground): 3.3 pF/m
- Insulation Resistance: >1000 MOhm-km
- Impedance (mean): 100+/- 15% (1 < freq < 500MHz)

SPECIFICATIONS:

- UL 444 Listed CMR
- 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. 6A) Standard
- NEC Article 800

SAMPLE PRINT LEGEND:

6AR AUGMENTED - CAT 6A SOUTHWIRE (R) TAPPAN (TM) I99980 - E160837 23AWG 4PR U/UTP TYPE CMR-LP (0.5A) 75°C C(UL)US LISTED -- ETL VERIFIED TO TIA-568.2-D CATEGORY 6A ROHS-2 COMPLIANT ZYYMMDDHHmm(*) (**)FT

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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
I99980	23	4	18	0.307	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	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	pair	mm	mm	lb/km
I99980	23	4	0.46	7.80	39

Electrical Performance

MHz	RL	IL	NEXT	PSNEXT	PSELFEXT	PSANEXT	PSAACRF	Skew
	(Min-dB)	(Max-dB)	(Min-dB)	(Min-dB)	(Min-dB)	(Min-dB)	(Min-dB)	(Max-ns)
1	20	2.1	74.3	72.3	72.3	67	67	45
4	23	3.8	65.3	63.3	63.3	67	66.2	45
8	24.5	5.3	60.8	58.8	58.8	67	60.1	45
10	25	5.9	59.3	57.3	57.3	67	58.2	45
16	25	7.5	56.2	54.2	54.2	67	54.1	45
20	25	8.4	54.8	52.8	52.8	67	52.2	45
25	24.3	9.4	53.3	51.3	51.3	67	50.2	45
31.25	23.6	10.5	51.9	49.9	49.9	67	48.3	45
62.5	21.5	15	47.4	45.4	45.4	65.6	42.3	45
100	20.1	19.1	44.3	42.3	42.3	62.5	38.2	45
200	18	27.6	39.8	37.8	37.8	58	32.2	45
250	17.3	31.1	38.3	36.3	36.3	56.5	30.2	45
300	16.8	34.3	37.1	35.1	35.1	55.3	28.7	45
400	15.9	40.1	35.3	33.3	33.3	53.5	26.2	45
500	15.2	45.3	33.8	31.8	31.8	52	24.2	45

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