

Category 6 CMR/CMP



Riser



Plenum

Product Description

Superior Essex Series 77 product line provides exceptional value for jobs which require standards compliance Category 6 cable at a cost-effective price.

Features

- Meets TIA/EIA 568-B.2-1 specification
- QuickCount® marking system
- Color coded box labels
- ColorTip™ Circuit Identification System
- BrakeBox™ payout control system

Benefits

- Provides cost effective solution
- Eliminates guess work of footage remaining in box or reel
- Easily identifiable jacket colors
- Easily identifiable conductor mates even in low light environments
- Adjustable tension control on reel prevents overspin and tangling of cable.

Applications

- 10BASE-T through 1000BASE-T Ethernet, ATM and Token Ring

Part Numbers and Physical Characteristics

	Part #	Pair Count	AWG (mm)	Jacket Color	Nom. Dia. inches (mm)	Approx. Weight lbs/kft (kg/km)	Package
CMR	77-246-2A	4	23 (0.57)	Blue	0.22 (5.6)	24 (36)	1000' BrakeBox*
	77-246-3A	4	23 (0.57)	Gray	0.22 (5.6)	24 (36)	1000' BrakeBox*
	77-246-4A	4	23 (0.57)	White	0.22 (5.6)	24 (36)	1000' BrakeBox*
	77-246-6A	4	23 (0.57)	Yellow	0.22 (5.6)	24 (36)	1000' BrakeBox*
	77-246-5A	4	23 (0.57)	Green	0.22 (5.6)	24 (36)	1000' BrakeBox*
	77-246-EA	4	23 (0.57)	Black	0.22 (5.6)	24 (36)	1000' BrakeBox*
	77-272-2A	4	23 (0.57)	Blue	0.22 (5.6)	24 (36)	1000' Reel
	77-272-3A	4	23 (0.57)	Gray	0.22 (5.6)	24 (36)	1000' Reel
	77-272-4A	4	23 (0.57)	White	0.22 (5.6)	24 (36)	1000' Reel
	77-272-6A	4	23 (0.57)	Yellow	0.22 (5.6)	24 (36)	1000' Reel
	77-272-5A	4	23 (0.57)	Green	0.22 (5.6)	24 (36)	1000' Reel
	77-240-2A	4	23 (0.57)	Blue	0.22 (5.6)	24 (36)	1000' POP Box
	77-240-3A	4	23 (0.57)	Gray	0.22 (5.6)	24 (36)	1000' POP Box
	77-240-4A	4	23 (0.57)	White	0.22 (5.6)	24 (36)	1000' POP Box
	77-240-5A	4	23 (0.57)	Green	0.22 (5.6)	24 (36)	1000' POP Box
	77-240-6A	4	23 (0.57)	Yellow	0.22 (5.6)	24 (36)	1000' POP Box
CMP	77-246-2B	4	23 (0.57)	Blue	0.20 (5.1)	24 (36)	1000' BrakeBox*
	77-246-3B	4	23 (0.57)	Gray	0.20 (5.1)	24 (36)	1000' BrakeBox*
	77-246-4B	4	23 (0.57)	White	0.20 (5.1)	24 (36)	1000' BrakeBox*
	77-246-6B	4	23 (0.57)	Yellow	0.20 (5.1)	24 (36)	1000' BrakeBox*
	77-246-5B	4	23 (0.57)	Green	0.20 (5.1)	24 (36)	1000' BrakeBox*
	77-246-EB	4	23 (0.57)	Black	0.20 (5.1)	24 (36)	1000' BrakeBox*
	77-272-2B	4	23 (0.57)	Blue	0.20 (5.1)	24 (36)	1000' Reel
	77-272-3B	4	23 (0.57)	Gray	0.20 (5.1)	24 (36)	1000' Reel
	77-272-4B	4	23 (0.57)	White	0.20 (5.1)	24 (36)	1000' Reel
	77-272-6B	4	23 (0.57)	Yellow	0.20 (5.1)	24 (36)	1000' Reel
	77-272-5B	4	23 (0.57)	Green	0.20 (5.1)	24 (36)	1000' Reel
	77-240-2B	4	23 (0.57)	Blue	0.20 (5.1)	24 (36)	1000' POP Box
	77-240-3B	4	23 (0.57)	Gray	0.20 (5.1)	24 (36)	1000' POP Box
	77-240-4B	4	23 (0.57)	White	0.20 (5.1)	24 (36)	1000' POP Box
	77-240-5B	4	23 (0.57)	Green	0.20 (5.1)	24 (36)	1000' POP Box
	77-240-6B	4	23 (0.57)	Yellow	0.20 (5.1)	24 (36)	1000' POP Box

* Reel-in-a-box with Dual Brake System, see page 236 for details.

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Product Description CMR

• Conductor: 23 AWG (0.57 mm) Solid Annealed Bare Copper • Insulation: Thermoplastic • Tape Separator • Jacket: Flame Retardant PVC (Polyvinyl Chloride)

Product Description CMP

• Conductor: 23 AWG (0.57 mm) Solid Annealed Bare Copper • Insulation: Thermoplastic • Jacket: Flame Retardant, Low Smoke PVC (Polyvinyl Chloride)

Electrical								
Frequency MHz	Attenuation (dB/100m) @ 20°C Maximum		NEXT (dB/100m) Minimum		ACR (dB/100m) Minimum		PS-NEXT (dB/100m) Minimum	
	TIA 568-B.2-1	Superior Essex	TIA 568-B.2-1	Superior Essex	TIA 568-B.2-1	Superior Essex	TIA 568-B.2-1	Superior Essex
	Specified	Typical	Specified	Typical	Calculated	Typical	Specified	Typical
1	2.0	1.9	74.3	85.1	72.3	83.2	72.3	83.9
4	3.8	3.5	65.3	75.4	61.5	71.9	63.3	74.3
10	6.0	5.6	59.3	68.9	53.3	63.3	57.3	67.8
16	7.6	7.1	56.2	65.9	48.6	58.8	54.2	64.8
20	8.5	8.0	54.8	64.6	46.3	56.6	52.8	63.4
25	9.5	9.0	53.3	62.6	43.8	53.6	51.3	61.7
31.25	10.7	10.1	51.9	61.7	41.2	51.6	49.9	60.4
62.5	15.4	14.5	47.4	57.1	32.0	42.6	45.4	55.8
100	19.8	18.6	44.3	54.1	24.5	35.5	42.3	52.8
200	29.0	27.2	39.8	48.8	10.8	21.6	37.8	47.7
250	32.8	30.7	38.3	47.7	5.5	17.0	36.3	46.2

Frequency MHz	PS-ACR (dB/100m) Minimum		Return Loss (dB/100m) Minimum		ELFEXT (dB/100m) Minimum		PS-ELFEXT (dB/100m) Minimum	
	TIA 568-B.2-1	Superior Essex	TIA 568-B.2-1	Superior Essex	TIA 568-B.2-1	Superior Essex	TIA 568-B.2-1	Superior Essex
	Calculated	Typical	Specified	Typical	Specified	Typical	Specified	Typical
1	70.3	82.0	20.0	23.8	67.8	74.2	64.8	71.7
4	59.5	70.8	23.0	27.9	55.8	62.3	52.8	59.8
10	51.3	62.2	25.0	30.1	47.8	54.4	44.8	51.8
16	46.6	57.7	25.0	30.1	43.7	50.3	40.7	47.8
20	44.3	55.4	25.0	30.0	41.8	48.4	38.8	45.9
25	41.8	52.7	24.3	29.7	39.8	46.5	36.8	43.9
31.25	39.2	50.3	23.6	29.2	37.9	44.6	34.9	42.0
62.5	30.0	41.3	21.5	26.9	31.9	38.7	28.9	36.0
100	22.5	34.2	20.1	25.7	27.8	34.7	24.8	32.1
200	8.8	20.5	18.0	23.6	21.8	28.8	18.8	26.0
250	3.5	15.5	17.3	23.2	19.8	26.7	16.8	24.1

Input Impedance (Ohms) Guaranteed		Delay Skew (ns/100m)		Velocity of Propagation (%) Nominal	DC Resistance (Ohms/100m)		Resistance Unbalance (%)	
		Maximum	Typical		Maximum	Typical	Maximum	Typical
100+/-15 @ 1-100MHz	CMR	45	25	68	9.38	7.0	3.0	0.5
100+/-22 @ 100-250MHz	CMP	45	25	71	9.38	7.0	3.0	0.5

Standards Compliance:

UL 444, UL Listed CMP (NFPA 262), UL Listed CMR (UL 1666), ISO/IEC 11801, ANSI/TIA/EIA 568-B.2-1, UL Verified to Category 6, RoHS Compliant.