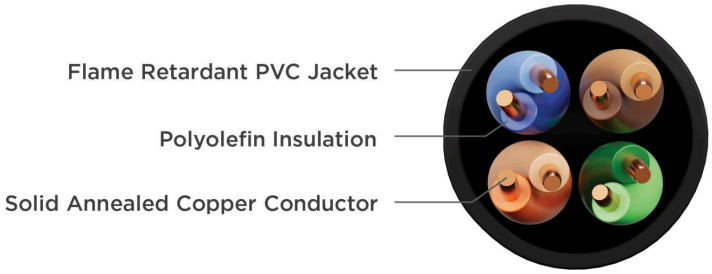
Premises Copper > Indoor > Category 6 > 4 Pairs > 23 AWG

Category 6 / Indoor / 4 Pairs / 23 AWG / CMR / Black / 1K FT POP™ Box

CMR

Part Number: 77-240-EA
Status: Available





MADE IN THE USA

RoHS

GENERAL SPECIFICATIONS

Jacket	PVC
Cable Configuration	Copper pairs surrounded by an outer jacket
End User Application	LAN
Pairs	4
Conductor	Bare Copper
Conductor Type	Solid
Conductor Description	Solid annealed copper
Conductor Count	8
AWG (mm)	23 (0.57)
Insulation	Polyolefin
Insulation Colors	ColorTip®: Pair 1: Light Blue / Blue Pair 2: Light Orange / Orange Pair 3: Light Green / Green Pair 4: Light Brown / Brown
Characteristic Impedance (Ohms)	100 ± 15
Nominal Velocity of Propagation (%)	70
Temperature Rating	75°C

COMPLIANCE & SUSTAINABILITY

Standards Compliance	UL 444 CSA C22.2 No. 214-08

COMPLIANCE & SUSTAINABILITY

	UL 1666 ANSI/TIA-568.2-E Article 800, NEC (NFPA 70) RoHS-compliant
NRTL Programs	UL Verified CAT 6 UL, c(UL) Listed CMR
Sustainability	UL Certified EPD HPD™ Multi-Attribute Certification USGBC® Member

PHYSICAL CHARACTERISTICS

Nominal Diameter in (mm)	0.21 (5.3)
Nominal Weight lbs/kft (kg/km)	22 (33)
Pallet Quantity (ft)	36,000
Package Length	1,000
Package Type	POP™ Box
Packages per Pallet	36
Standard Length ft (m)	1,000 (305)

Product Description

Superior Essex Category 6 cable provides exceptional value for jobs that require standards compliant Category 6 cable at a cost-effective price. Part number 77-240-EA is the riser-rated (CMR) black version: a 4-pair, 23 AWG UTP construction with solid annealed copper conductors, polyolefin insulation and a flame-retardant PVC jacket. Nominal diameter is 0.21 (5.3) in (mm) with an approximate weight of 22 (33) lbs/kft (kg/km), supplied in a 1,000 ft POP™ Box.

Applications

- 10BASE-T through 5GBASE-T Ethernet
- Power-over-Ethernet (PoE) – IEEE 802.3bt Type 1 to 4
- ATM and token ring

Features

- UL Certified Environmental Product Declaration (EPD)
- Health Product Declaration™ (HPD™)
- Multi-Attribute Certification by GreenCircle Certified, LLC
- Meets ANSI/TIA-568.2-E specification

Benefits

- Contributes toward 1 LEED point under the Material and Resources credit (MRc)
- Contributes toward 1 LEED point under the MRc
- Offers an overview of the sustainability of a product, its packaging and manufacturing
- Provides cost effective solution

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- BrakeBox® payout control system
- CableID® alpha numeric code printed every 2 feet
- QuickCount® marking system in feet and meters
- ColorTip® circuit identification system
- Color coded box labels
- Adjustable tension control on reel prevents over spin and entangling of cable
- Allows both ends of a cable run to be easily identifiable without the need to separately label or tone the cable
- Provides remaining length of cable on reel
- Easily identifiable conductor mates even in low-light environments
- Easily identifies jacket colors

Technical Guideline

Technical Guideline TG029 "Premises Cable Temperature Guidelines" provides operating, storage and installation temperature ranges for premises cables. Click here for more information.

SUSTAINABILITY CERTIFICATIONS

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ELECTRICAL SPECIFICATIONS

Frequency MHz	Insertion Loss @ 20°C Maximum dB/100 m		NEXT Minimum dB/100 m		ACR Minimum dB/100 m		PSNEXT Minimum dB/100 m		PSACR Minimum dB/100 m		Return Loss Minimum dB/100 m		ELFEXT (ACRF) Minimum dB/100 m		PSELFEXT (PSACRF) Minimum dB/100 m	
	TIA-568.2-E	Superior Essex	TIA-568.2-E	Superior Essex	TIA-568.2-E	Superior Essex	TIA-568.2-E	Superior Essex	TIA-568.2-E	Superior Essex	TIA-568.2-E	Superior Essex	TIA-568.2-E	Superior Essex	TIA-568.2-E	Superior Essex
	Specified	Typical	Specified	Typical	Calculated	Typical	Specified	Typical	Calculated	Typical	Specified	Typical	Specified	Typical	Specified	Typical
1	2.0	1.7	74.3	82.9	72.3	82.2	72.3	81.9	70.3	80.2	20.0	26.0	67.8	78.7	64.8	76.6
4	3.8	3.4	65.3	77.6	61.5	74.2	63.3	75.0	59.5	71.6	23.0	31.1	55.8	65.9	52.8	64.2
8	5.3	4.8	60.8	74.4	55.4	68.9	58.8	71.9	53.4	67.1	24.5	34.5	49.7	60.1	46.7	58.4
10	6.0	5.4	59.3	70.1	53.3	64.7	57.3	68.3	51.3	62.9	25.0	36.3	47.8	58.1	44.8	56.4
16	7.6	6.9	56.2	69.6	48.6	62.5	54.2	67.1	46.6	60.2	25.0	37.7	43.7	54.0	40.7	52.2
20	8.5	7.8	54.8	68.7	46.3	60.7	52.8	65.7	44.3	58.1	25.0	36.0	41.8	52.1	38.8	50.3
25	9.5	8.8	53.3	66.1	43.8	58.7	51.3	64.7	41.8	56.1	24.3	38.6	39.8	50.2	36.8	48.4
31.25	10.7	9.8	51.9	67.8	41.2	56.2	49.9	63.4	39.2	53.6	23.6	38.3	37.9	48.1	34.9	46.4
62.5	15.4	14.2	47.4	64.0	32.0	47.8	45.4	59.1	30.0	45.0	21.5	32.8	31.9	41.4	28.9	40.3
100	19.8	18.2	44.3	58.0	24.5	38.7	42.3	55.0	22.5	37.0	20.1	30.7	27.8	36.8	24.8	35.2
155	25.2	23.0	41.4	54.5	16.3	31.6	39.4	52.1	14.3	29.1	18.8	28.8	24.0	33.3	21.0	31.9
200	29.0	26.6	39.8	53.8	10.8	26.5	37.8	50.6	8.8	24.0	18.0	27.6	21.8	32.6	18.8	31.8
250	32.8	30.1	38.3	51.0	5.5	21.1	36.3	48.7	3.5	18.8	17.3	28.5	19.8	32.5	16.8	31.3
300	-	33.4	-	53.8	-	19.4	-	49.1	-	15.8	-	28.6	-	30.8	-	28.9
350	-	36.5	-	50.1	-	14.3	-	47.5	-	11.6	-	29.0	-	26.8	-	25.4
400	-	39.5	-	49.1	-	8.0	-	44.5	-	5.0	-	24.9	-	24.7	-	23.5
450	-	42.3	-	44.6	-	3.3	-	43.4	-	1.2	-	23.9	-	23.2	-	21.9
500	-	45.1	-	42.9	-	-	-	41.7	-	-	-	25.0	-	22.5	-	21.5
550	-	47.7	-	41.6	-	-	-	39.1	-	-	-	24.2	-	22.4	-	22.0

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