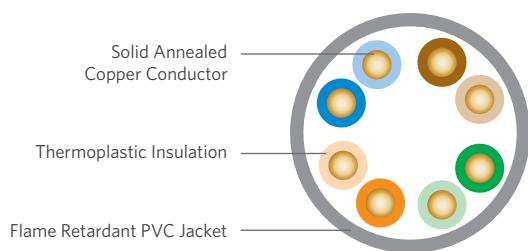


Marathon LAN® Category 5e

CMR/CMP



SPECIFICATIONS

| | |
|-------------------------------------|--|
| Pair Count | 4 |
| Conductor | Solid annealed copper |
| AWG (mm) | 24 (0.51) |
| Insulation | Thermoplastic |
| Insulation Colors | Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown |
| Jacket | CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC |
| Characteristic Impedance (Ohms) | 100 ± 15 |
| Nominal Velocity of Propagation (%) | CMR: 71 CMP: 74 |
| Performance Compliance | UL 444 CSA C22.2 No. 214-08 UL 1666 NFPA 262 ANSI/TIA-568-C.2 Article 800, NEC (NFPA 70) RoHS-compliant |
| NRTL Programs | UL Verified CAT 5e UL, c(UL) Listed CMR UL, c(UL) Listed CMP |

PRODUCT DESCRIPTION

Marathon LAN® Category 5e cable offers an exceptional value for jobs that require standards compliance at a cost-effective price. While Marathon LAN cable meets all of the ANSI/TIA-568-C.2 specifications, it also offers other features that make it easier to use, save on installation time and expense and ensure product quality during the installation. From the QuickCount® feature, which marks the exact cable remaining in the box, to the WideMouth payout design, which reduces tension on the wire as it is pulled during installation, Marathon LAN cable provides more overall value than any other CAT 5e product available today.

APPLICATIONS

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) - IEEE 802.3af
- PoE+ - IEEE 802.3at Type 1 and 2
- ATM and token ring

FEATURES

- Meets ANSI/TIA-568-C.2 specification
- Tested to 350 MHz
- "WideMouth" POP™ box design
- CableID® alpha numeric code printed every 2 feet
- QuickCount marking system in feet and meters
- ColorTip™ circuit identification system
- Color coded box labels

BENEFITS

- Provides cost-effective solution
- Assures ample bandwidth headroom
- Reduces tension on wire to ensure proper electrical performance after installation
- 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

PART NUMBERS AND PHYSICAL CHARACTERISTICS

| Listing | Part Number ¹ | Nominal Diameter in (mm) | Approx. Weight lbs/kft (kg/km) | Package | Packages per Pallet |
|---------|--------------------------|--------------------------|--------------------------------|----------------------|---------------------|
| CMR | 51-243-x5 | 0.18 (4.6) | 17 (25) | 1,000' Reel-in-a-Box | 45 |
| CMR | 51-240-x5 | 0.18 (4.6) | 17 (25) | 1,000' POP box | 45 |
| CMR | 51-220-x5 | 0.18 (4.6) | 17 (25) | 1,000' Plywood reel | 36 |
| CMR | 51-273-x5 | 0.18 (4.6) | 17 (25) | 2,500' Plywood reel | 16 |
| CMP | 51-243-x8 | 0.19 (4.8) | 20 (30) | 1,000' Reel-in-a-Box | 45 |
| CMP | 51-241-x8 | 0.19 (4.8) | 20 (30) | 1,000' POP box | 45 |
| CMP | 51-220-x8 | 0.19 (4.8) | 20 (30) | 1,000' Plywood reel | 36 |
| CMP | 51-273-x8 | 0.19 (4.8) | 20 (30) | 2,500' Plywood reel | 16 |

JACKET COLORS

¹Replace "x" with: Blue = 2 Gray = 3 White = 4 Green = 5 Yellow = 6 Purple = 7 Red = 9 Pink = C Orange = D Black = E

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 | |
|------------------|---|----------------|--------------------------|----------------|-------------------------|----------------|----------------------------|----------------|
| | TIA-568-C.2 | Superior Essex | TIA-568-C.2 | Superior Essex | TIA-568-C.2 | Superior Essex | TIA-568-C.2 | Superior Essex |
| | Specified | Typical | Specified | Typical | Calculated | Typical | Specified | Typical |
| 0.772 | 1.8 | 1.5 | 67.0 | 78.5 | 65.2 | 83.0 | 64.0 | 77.0 |
| 1 | 2.0 | 1.8 | 65.3 | 76.8 | 63.3 | 81.0 | 62.3 | 75.3 |
| 4 | 4.1 | 3.7 | 56.3 | 67.8 | 52.2 | 70.1 | 53.3 | 66.3 |
| 8 | 5.8 | 5.4 | 51.8 | 63.3 | 46.0 | 63.9 | 48.8 | 61.8 |
| 10 | 6.5 | 6.0 | 50.3 | 61.8 | 43.8 | 61.8 | 47.3 | 60.3 |
| 16 | 8.2 | 7.7 | 47.2 | 58.7 | 39.0 | 57.0 | 44.3 | 57.2 |
| 20 | 9.3 | 8.6 | 45.8 | 57.3 | 36.5 | 54.7 | 42.8 | 55.8 |
| 25 | 10.4 | 9.6 | 44.3 | 55.8 | 33.9 | 52.2 | 41.3 | 54.3 |
| 31.25 | 11.7 | 10.8 | 42.9 | 54.4 | 31.2 | 49.6 | 39.9 | 52.9 |
| 62.5 | 17.0 | 15.5 | 38.4 | 49.9 | 21.4 | 40.4 | 35.4 | 48.4 |
| 100 | 22.0 | 19.8 | 35.3 | 46.8 | 13.3 | 33.0 | 32.3 | 45.3 |
| 155 | | 24.8 | | 43.9 | | 25.1 | | 42.4 |
| 200 | | 28.2 | | 42.3 | | 20.1 | | 40.8 |
| 250 | | 31.8 | | 40.8 | | 15.0 | | 39.3 |
| 300 | | 35.0 | | 39.6 | | 10.6 | | 38.1 |
| 350 | | 38.3 | | 38.6 | | 6.3 | | 37.1 |

| Frequency MHz | PSACR Minimum dB/100 m | | Return Loss Minimum dB/100 m | | ELFEXT Minimum dB/100 m | | PSELFEXT Minimum dB/100 m | |
|------------------|---------------------------|----------------|---------------------------------|----------------|----------------------------|----------------|------------------------------|----------------|
| | TIA-568-C.2 | Superior Essex | TIA-568-C.2 | Superior Essex | TIA-568-C.2 | Superior Essex | TIA-568-C.2 | Superior Essex |
| | Calculated | Typical | Specified | Typical | Specified | Typical | Specified | Typical |
| 0.772 | 62.2 | 80.3 | 19.4 | 32.4 | 66.0 | 76.8 | 63.0 | 71.5 |
| 1 | 60.3 | 78.3 | 20.0 | 33.0 | 63.8 | 74.6 | 60.8 | 69.3 |
| 4 | 49.2 | 67.4 | 23.0 | 36.0 | 51.8 | 62.6 | 48.8 | 57.3 |
| 8 | 43.0 | 61.2 | 24.5 | 37.5 | 45.7 | 56.5 | 42.7 | 51.2 |
| 10 | 40.8 | 59.1 | 25.0 | 38.0 | 43.8 | 54.6 | 40.8 | 49.3 |
| 16 | 36.1 | 54.3 | 25.0 | 38.0 | 39.7 | 50.5 | 36.7 | 45.2 |
| 20 | 33.5 | 52.0 | 25.0 | 38.0 | 37.8 | 48.6 | 34.8 | 43.3 |
| 25 | 30.9 | 49.5 | 24.3 | 37.3 | 35.8 | 46.6 | 32.8 | 41.3 |
| 31.25 | 28.2 | 46.9 | 23.6 | 36.6 | 33.9 | 44.7 | 30.9 | 39.4 |
| 62.5 | 18.4 | 37.7 | 21.5 | 34.5 | 27.9 | 38.7 | 24.9 | 33.4 |
| 100 | 10.3 | 30.3 | 20.1 | 33.1 | 23.8 | 34.6 | 20.8 | 29.3 |
| 155 | | 22.4 | | 31.8 | | 30.8 | | 25.5 |
| 200 | | 17.4 | | 31.0 | | 28.6 | | 23.3 |
| 250 | | 12.3 | | 30.3 | | 26.6 | | 21.3 |
| 300 | | 7.9 | | 29.8 | | 25.1 | | 19.8 |
| 350 | | 3.6 | | 29.3 | | 23.7 | | 18.4 |