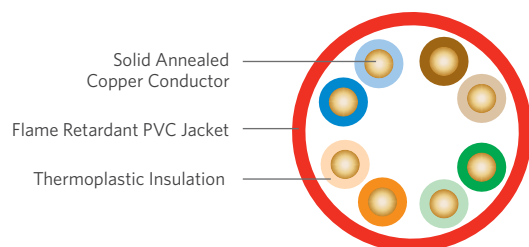


# Category 6

CMR/CMP



## SPECIFICATIONS

|                                   |                                                                                                                                                          |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pair Count                        | 4                                                                                                                                                        |
| Conductor                         | Solid annealed copper                                                                                                                                    |
| AWG (mm)                          | 23 (0.57)                                                                                                                                                |
| Insulation                        | CMR: Polyolefin<br>CMP: FEP                                                                                                                              |
| Insulation Colors                 | Pair 1: ColorTip Light Blue, Blue<br>Pair 2: ColorTip Light Orange, Orange<br>Pair 3: ColorTip Light Green, Green<br>Pair 4: ColorTip Light Brown, Brown |
| Jacket                            | CMR: Flame retardant (FR) PVC<br>CMP: FR, low smoke PVC                                                                                                  |
| Characteristic Impedance Ohms     | 100 ± 15                                                                                                                                                 |
| Nominal Velocity of Propagation % | CMR: 70<br>CMP: 73                                                                                                                                       |
| Performance Compliance            | UL 444<br>CSA C22.2 No. 214-08<br>UL 1666<br>NFPA 262<br>ANSI/TIA-568-C.2<br>Article 800, NEC (NFPA 70)                                                  |
| NRTL Programs                     | UL Verified CAT 6<br>UL, c(UL) Listed CMR<br>UL, c(UL) Listed CMP                                                                                        |
| Sustainability                    | UL Certified EPD<br>HPD<br>Multi-Attribute Certification<br>USGBC® Member<br>RoHS-compliant/RoHS 2-compliant<br>REACH-compliant                          |

## PRODUCT DESCRIPTION



**FIRST MANUFACTURER IN THE INDUSTRY**  
to offer products that contribute toward LEED!

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

## 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

- UL Certified Environmental Product Declaration (EPD)
- Health Product Declaration™ (HPD™)
- Multi-Attribute Certification by GreenCircle Certified, LLC
- Meets ANSI/TIA-568-C.2 specification
- 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

## 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
- 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

## PART NUMBERS AND PHYSICAL CHARACTERISTICS

| Listing | Part Number <sup>1</sup> | Nominal Diameter in (mm) | Approx. Weight lbs/kft (kg/km) | Package |
|---------|--------------------------|--------------------------|--------------------------------|---------|
| CMR     | 77-xxx-yA                | 0.21 (5.3)               | 22 (33)                        | use key |
| CMP     | 77-xxx-yB                | 0.20 (5.1)               | 23 (34)                        | use key |

## PACKAGING

|                                  | 150 ft Coil | 200 ft Coil | 250 ft Coil | 300 ft Coil | 1,000 ft POP Box | 1,000 ft BrakeBox | 1,000 ft Plywood Reel | 2,500 ft Plywood Reel |
|----------------------------------|-------------|-------------|-------------|-------------|------------------|-------------------|-----------------------|-----------------------|
| <sup>1</sup> Replace "xxx" with: | 225         | 229         | 230         | 231         | 240              | 246               | 272                   | 273                   |
| Packages per Pallet              | 120         | 120         | 144         | 120         | 36               | 27                | 16                    | 12                    |

## JACKET COLORS

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

## ELECTRICAL SPECIFICATIONS

| Frequency<br>MHz | Insertion Loss @ 20°C Maximum<br>dB/100 m |                | NEXT Minimum<br>dB/100 m |                | ACR Minimum<br>dB/100 m |                | PSNEXT Minimum<br>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        |
| 1                | 2.0                                       | 1.7            | 74.3                     | 82.9           | 72.3                    | 82.2           | 72.3                       | 81.9           |
| 4                | 3.8                                       | 3.4            | 65.3                     | 77.6           | 61.5                    | 74.2           | 63.3                       | 75.0           |
| 8                | 5.3                                       | 4.8            | 60.8                     | 74.4           | 55.4                    | 68.9           | 58.8                       | 71.9           |
| 10               | 6.0                                       | 5.4            | 59.3                     | 70.1           | 53.3                    | 64.7           | 57.3                       | 68.3           |
| 16               | 7.6                                       | 6.9            | 56.2                     | 69.6           | 48.6                    | 62.5           | 54.2                       | 67.1           |
| 20               | 8.5                                       | 7.8            | 54.8                     | 68.7           | 46.3                    | 60.7           | 52.8                       | 65.7           |
| 25               | 9.5                                       | 8.8            | 53.3                     | 66.1           | 43.8                    | 58.7           | 51.3                       | 64.7           |
| 31.25            | 10.7                                      | 9.8            | 51.9                     | 67.8           | 41.2                    | 56.2           | 49.9                       | 63.4           |
| 62.5             | 15.4                                      | 14.2           | 47.4                     | 64.0           | 32.0                    | 47.8           | 45.4                       | 59.1           |
| 100              | 19.8                                      | 18.2           | 44.3                     | 58.0           | 24.5                    | 38.7           | 42.3                       | 55.0           |
| 155              | 25.2                                      | 23.0           | 41.4                     | 54.5           | 16.3                    | 31.6           | 39.4                       | 52.1           |
| 200              | 29.0                                      | 26.6           | 39.8                     | 53.8           | 10.8                    | 26.5           | 37.8                       | 50.6           |
| 250              | 32.8                                      | 30.1           | 38.3                     | 51.0           | 5.5                     | 21.1           | 36.3                       | 48.7           |
| 300              |                                           | 33.4           |                          | 53.8           |                         | 19.4           |                            | 49.1           |
| 350              |                                           | 36.5           |                          | 50.1           |                         | 14.3           |                            | 47.5           |
| 400              |                                           | 39.5           |                          | 49.1           |                         | 8.0            |                            | 44.5           |
| 450              |                                           | 42.3           |                          | 44.6           |                         | 3.3            |                            | 43.4           |
| 500              |                                           | 45.1           |                          | 42.9           |                         |                |                            | 41.7           |
| 550              |                                           | 47.7           |                          | 41.6           |                         |                |                            | 39.1           |

| Frequency<br>MHz | PSACR Minimum<br>dB/100 m |                | Return Loss Minimum<br>dB/100 m |                | ELFEXT Minimum<br>dB/100 m |                | PSELFEXT Minimum<br>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        |
| 1                | 70.3                      | 80.2           | 20.0                            | 26.0           | 67.8                       | 78.7           | 64.8                         | 76.6           |
| 4                | 59.5                      | 71.6           | 23.0                            | 31.1           | 55.8                       | 65.9           | 52.8                         | 64.2           |
| 8                | 53.4                      | 67.1           | 24.5                            | 34.5           | 49.7                       | 60.1           | 46.7                         | 58.4           |
| 10               | 51.3                      | 62.9           | 25.0                            | 36.3           | 47.8                       | 58.1           | 44.8                         | 56.4           |
| 16               | 46.6                      | 60.2           | 25.0                            | 37.7           | 43.7                       | 54.0           | 40.7                         | 52.2           |
| 20               | 44.3                      | 58.1           | 25.0                            | 36.0           | 41.8                       | 52.1           | 38.8                         | 50.3           |
| 25               | 41.8                      | 56.1           | 24.3                            | 38.6           | 39.8                       | 50.2           | 36.8                         | 48.4           |
| 31.25            | 39.2                      | 53.6           | 23.6                            | 38.3           | 37.9                       | 48.1           | 34.9                         | 46.4           |
| 62.5             | 30.0                      | 45.0           | 21.5                            | 32.8           | 31.9                       | 41.4           | 28.9                         | 40.3           |
| 100              | 22.5                      | 37.0           | 20.1                            | 30.7           | 27.8                       | 36.8           | 24.8                         | 35.2           |
| 155              | 14.3                      | 29.1           | 18.8                            | 28.8           | 24.0                       | 33.3           | 21.0                         | 31.9           |
| 200              | 8.8                       | 24.0           | 18.0                            | 27.6           | 21.8                       | 32.6           | 18.8                         | 31.8           |
| 250              | 3.5                       | 18.8           | 17.3                            | 28.5           | 19.8                       | 32.5           | 16.8                         | 31.3           |
| 300              |                           | 15.8           |                                 | 28.6           |                            | 30.8           |                              | 28.9           |
| 350              |                           | 11.6           |                                 | 29.0           |                            | 26.8           |                              | 25.4           |
| 400              |                           | 5.0            |                                 | 24.9           |                            | 24.7           |                              | 23.5           |
| 450              |                           | 1.2            |                                 | 23.9           |                            | 23.2           |                              | 21.9           |
| 500              |                           |                |                                 | 25.0           |                            | 22.5           |                              | 21.5           |
| 550              |                           |                |                                 | 24.2           |                            | 22.4           |                              | 22.0           |

## SUSTAINABILITY LEADERSHIP



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