



Product: [ATMM100](#)

CAT3 Backbone, 100pr, Armor Shield, PVC Jkt, CMR

Product Description

CAT3, ATMM/ARMM, 100-Pair, F/UTP-foil shield , Riser-CMR, Premise Backbone Cable, 24 AWG solid bare copper conductors, foam polyolefin insulation with PVC skin, ripcord, corrugated aluminum shield bonded to overall PVC jacket

Technical Specifications

Product Overview

| | |
|------------------------|------------------------|
| Suitable Applications: | Premise Backbone Cable |
|------------------------|------------------------|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Pairs |
|-----|-----------|------------------|--------------|
| 24 | Solid | BC - Bare Copper | 100 |

| | |
|------------------------|-----|
| Conductor Count: | 200 |
| Total Number of Pairs: | 100 |

Insulation

| Material |
|------------------------|
| PO - Polyolefin (Foam) |

| | |
|--------------|-----|
| Bonded-Pair: | N/A |
|--------------|-----|

Color Chart

| Number | Color |
|--------|-----------------|
| 1 | White & Blue |
| 2 | White & Orange |
| 3 | White & Green |
| 4 | White & Brown |
| 5 | White & Slate |
| 6 | Red & Blue |
| 7 | Red & Orange |
| 8 | Red & Green |
| 9 | Red & Brown |
| 10 | Red & Slate |
| 11 | Black & Blue |
| 12 | Black & Orange |
| 13 | Black & Green |
| 14 | Black & Brown |
| 15 | Black & Slate |
| 16 | Yellow & Blue |
| 17 | Yellow & Orange |
| 18 | Yellow & Green |
| 19 | Yellow & Brown |
| 20 | Yellow & Slate |
| 21 | Violet & Blue |
| 22 | Violet & Orange |

| | |
|--------------------|----------------|
| 23 | Violet & Green |
| 24 | Violet & Brown |
| 25 | Violet & Slate |
| Group One Binder | White/Blue |
| Group Two Binder | White/Orange |
| Group Three Binder | White/Green |
| Group Four Binder | White/Brown |

Color Chart 2

| Number | Color |
|--------|--------------|
| 1 | Blue/White |
| 2 | Orange/White |
| 3 | Green/White |
| 4 | Brown/White |

Outer Shield

| Material |
|----------|
| Aluminum |

Outer Jacket

| Material | Nominal Diameter | Ripcord |
|--------------------------|------------------|---------|
| PVC - Polyvinyl Chloride | 0.850 in | Yes |

Construction and Dimensions

Armor

| Type of Armor | Material | Thickness of Armoring Tape |
|---------------|----------|----------------------------|
| Corrugated | Aluminum | .008 in |

Electrical Characteristics

Conductor DCR

| Max. Conductor DCR | Max. DCR Unbalance |
|--------------------|--------------------|
| 93.8 Ohm/km | 5 % |

Capacitance

| Max. Capacitance Unbalance | Nom. Mutual Capacitance |
|----------------------------|-------------------------|
| 330 pF/100m | 17 pF/ft |

Delay

| Frequency [MHz] | Max. Delay | Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-----------------|-------------|-----------------|--|
| 16 MHz | 543 ns/100m | 45 ns/100m | 68% |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. RL (Return Loss) [dB] | Max./Min. Fitted Impedance |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|----------------------------|----------------------------|
| 0.772 MHz | 2.2 dB/100m | 47.0 dB | 43.0 dB | 50.1 dB | 46.1 dB | | 100 +/- 15 |
| 1.0 MHz | 2.6 dB/100m | 45.0 dB | 41.0 dB | 47.8 dB | 43.8 dB | 12.0 dB | 100 +/- 15 |
| 4.0 MHz | 5.6 dB/100m | 36.0 dB | 32.0 dB | 36.0 dB | 32.0 dB | 12.0 dB | 100 +/- 15 |
| 8.0 MHz | 8.5 dB/100m | 31.0 dB | 27.0 dB | 28.3 dB | 24.3 dB | 12.0 dB | 100 +/- 15 |
| 10.0 MHz | 9.7 dB/100m | 30.0 dB | 26.0 dB | 26.2 dB | 22.2 dB | 12.0 dB | 100 +/- 15 |
| 16.0 MHz | 13.1 dB/100m | 27.0 dB | 23.0 dB | 20.1 dB | 16.1 dB | 10.0 dB | 100 +/- 15 |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V RMS |

Temperature Range

| | |
|---------------------------------|----------------|
| Installation Temperature Range: | -20°C To +60°C |
| UL Temp Rating: | 60°C |
| Storage Temperature Range: | -30°C To +60°C |
| Operating Temperature Range: | -30°C To +60°C |

Mechanical Characteristics

| | |
|---------------------------------------|----------------|
| Bulk Cable Weight: | 414 lbs/1000ft |
| Max. Pull Tension: | 600 lbs |
| Min. Bend Radius During Installation: | 17.0 in |
| Min. Bend Radius/Minor Axis: | 8.5 in |

Standards

| | |
|-----------------------|--|
| NEC/(UL) Compliance: | CMR |
| CEC/C(UL) Compliance: | CMR |
| CPR Euroclass: | Eca |
| Data Category: | Category 3 |
| ANSI Compliance: | S-90-661-2012 Category 3, ANSI/NEMA WC-63.1 Category 3 |
| TIA/EIA Compliance: | ANSI/TIA-568-C.2 Category 3 |

Applicable Environmental and Other Programs

| | |
|--|------------|
| Environmental Space: | Riser |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (RoHS 2): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes |
| EU Directive Compliance: | Yes |
| EU CE Mark: | Yes |
| EU REACH SVHC Compliance (yyyy-mm-dd): | 2017-07-10 |
| MII Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------------------|-----|
| Suitability - Aerial: | No |
| Suitability - Burial: | No |
| Suitability - Hazardous Locations: | No |
| Suitability - Indoor: | Yes |
| Suitability - Non-Halogenated: | No |
| Suitability - Oil Resistance: | No |
| Suitability - Outdoor: | No |
| Suitability - Sunlight Resistance: | No |

Flammability, LSOH, Toxicity Testing

| | |
|-------------------------|---------------|
| CSA/C(UL) Flammability: | FT4 |
| UL Flammability: | UL 1666 Riser |
| IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating: | 300 V RMS |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Related Part Numbers

Variants

| Item # | Color | Put-Up Type | Length | UPC |
|----------------|-------|---------------|--------|--------------|
| ATMM100 008CUT | Gray | Cut to Length | | 612825062004 |
| ATMM100 008CUT | Gray | Cut to Length | 1 ft | 612825062004 |

Product Notes

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|--------|--|
| Notes: | Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Print Includes Descending Footage/Meter Markings. Corrugated Aluminum Armor Bonded to the Jacket. |
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History

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| Update and Revision: | Revision Number: 0.411 Revision Date: 12-19-2022 |
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