



Product: [ATMM50](#)

CAT3 Backbone, 50pr, Armor Shield, PVC Jkt, CMR

Product Description

CAT3, ATMM/ARMM, 50-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
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	50

Conductor Count:	100
Total Number of Pairs:	50

Insulation

Material
PO - Polyolefin (Foam)

Bonded-Pair:	N/A
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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
Group One Binder	White/Blue (12 Pr)
Group Two Binder	White/Blue (13 Pr)
Group Three Binder	White/Orange (12 Pr)
Group Four Binder	White/Orange (13 Pr)

Color Chart 2

Number	Color
1	White/Blue (12)
2	White/Blue (13)

3	White/Orange (12)
4	White/Orange (13)

Outer Shield Material

Material
Aluminum

Outer Jacket Material

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.660 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
16 MHz	543 ns/100m	45 ns/100m

High Freq

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

Mechanical Characteristics

Bulk Cable Weight:	234 lbs/1000ft
Max. Pull Tension:	300 lbs
Min Bend Radius During Installation:	13.25 in
Min Bend Radius/Minor Axis:	6.75 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMR
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 II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2005-08-19
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, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL 1666 Riser
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
ATMM50 008CUT	Gray	Cut to Length		612825061991
ATMM50 008CUT	Gray	Cut to Length	1 ft	612825061991

Product Notes

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

Update and Revision:	Revision Number: 0.304 Revision Date: 06-01-2020
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