




**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
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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
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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

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: 0.411 Revision Date: 12-19-2022
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