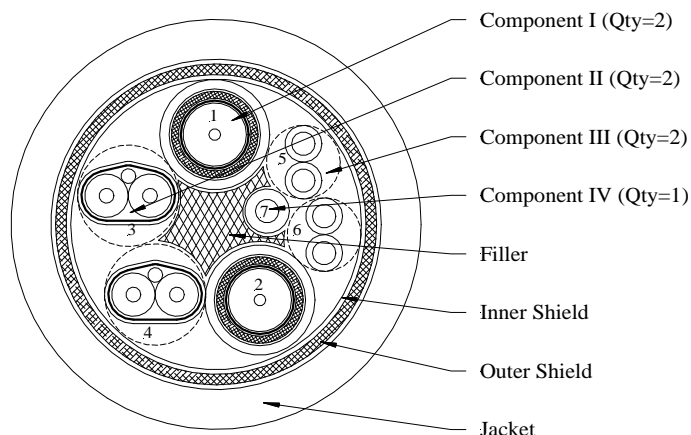


2 COAX 30 AWG + 2 PAIR 28 AWG + 2 PAIR 24 AWG + 1 CONDUCTOR 24 AWG COMPOSITE CABLE

CUSTOMER PROPRIETARY

THIS CONFIDENTIAL DOCUMENT HAS BEEN RELEASED WITH THE UNDERSTANDING THAT IT SHALL NOT BE SENT TO ANYONE OTHER THAN THE ORIGINAL INTENDED RECIPIENT WITHOUT PRIOR AUTHORIZATION FROM TYCO ELECTRONICS/MADISON CABLE



CONSTRUCTION

Component I – 30 AWG Coaxes

Conductor: 30 AWG 7/38 Tin Plated Copper, 0.012 Inch Diameter
Insulation: 0.021 Inches of Foam Polyethylene, 0.054 Inch Diameter
Coax Inner Shield: Aluminum/Polyester Tape, Aluminum Side Facing Out, 25% Overlap
Coax Outer Shield: 38 AWG Tin Plated Copper Braid, 85% Coverage
Coax Jacket: 0.010 Inches of PVC
Coax Diameter: 0.094 Inches Nominal

Component II – 28 AWG Shielded Pairs

Conductor: 28 AWG 7/36 Tin Plated Copper, 0.015 Inch Diameter
Insulation: 0.0155 Inches of Polyolefin, 0.046 Inch Diameter
Pair: 2 Insulated Conductor Twisted Together
Drain Wire: 28 AWG 7/36 Tin Plated Copper, 0.015 Inch Diameter
Pair Shield: Aluminum/Polyester Tape, Aluminum Side Facing In, 25% Overlap, Color – Yellow
Pair Jacket: Polyester Tape
Pair Diameter: 0.098 Inches Nominal

Component III – 24 AWG Unshielded Pairs

Conductor: 24 AWG 7/32 Tin Plated Copper, 0.024 Inch Diameter
Insulation: 0.007 Inches of PVC, 0.038 Inch Diameter
Pair: 2 Insulated Conductors Twisted Together

Component IV – 24 AWG Single

Conductor: 24 AWG 7/32 Tin Plated Copper, 0.024 Inch Diameter
Insulation: 0.007 Inches of PVC, 0.038 Inch Diameter

Final Assembly

Core: 1 Component IV (#7) and Fibrillated Polypropylene Filler

Layer 1: 2 Component I (#1-2), 2 Component II (#3-4), and 2 Component III (#5-6) Cabled Around Core

Inner Shield: Aluminum/Polyester Tape, Aluminum Side Facing Out, 25% Overlap

Outer Shield: 36 AWG Tin Plated Copper Braid, 85% Coverage

Jacket: 0.038 Inches of Flexible PVC, Color – Black

Diameter: 0.350 ± 0.010 Inches

Print Legend (White Ink): “MADISON CABLE (UL) TYPE CL2 75°C 2C/30 AWG AND 2PR/28 AWG AND 5C/24 AWG GV 176-0517-01 RoHS COMPLIANT {Date Code}”¹

¹ Date code is a 4-digit code with the first 2 digits identifying the calendar week and the last 2 digits identifying the calendar year of manufacture. Example - 0206 for cable manufactured the second week of 2006.

COLOR CODE

Comp #	Comp	Conductor #1	Conductor #2	Coax Jkt Color
1	I	Natural		Brown
2	I	Natural		Yellow
3	II	White/Blue	White/Red	
4	II	White/Green	White/Orange	
5	III	White	Green	
6	III	White	Blue	
7	IV	Black		

ELECTRICAL CHARACTERISTICS

Component I – 30 AWG Coaxes

Impedance: 75 Ohms Nominal @ TDR
Capacitance: 18 pF/ft Nominal
Velocity of Propagation: 75% Nominal
Time Delay: 1.34 ns/ft Nominal
Conductor DC Resistance: 0.10 Ohms/ft Nominal @ 20°C

Component II – 28 AWG Shielded Pairs

Differential Impedance: 100 Ohms Nominal @ TDR
Mutual Capacitance: 16 pF/ft Nominal
Velocity of Propagation: 64% Nominal
Time Delay: 1.57 ns/ft Nominal
Time Delay Skew (Within Pair): 200 ps/50 ft Maximum
Conductor DC Resistance: 0.061 Ohms/ft Nominal @ 20°C

Components III & IV – 24 AWG Unshielded Pairs and Single

Conductor DC Resistance: 0.024 Ohms/ft Nominal @ 20°C

SAFETY CERTIFICATION

UL Listing: Type CL2 as specified in Article 725 of the National Electrical Code

RoHS Compliance: In Accordance to European Directive 2002/95/EC, Issue 13.2.2003



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Spec Number: 101-7447

Part Number: 11ZZSLF013

Customer: Thompson Grass Valley

Customer #: GV 176-0517-01 (For Reference Only)

REVISION HISTORY

1	04/10/08	HA	Initial Release
2	07/08/08	HA	Revised Jacket Wall
3	10/14/10	DC	Revised Comp II, Color Code, dwg, Elect., et. al.

Prepared By: D.M. Card

Reviewed By: K. Arsenault

B. Morissette

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Users should evaluate the suitability of this product for their application. Contact factory for latest revision of specification. Tyco Electronics reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to the Buyer.