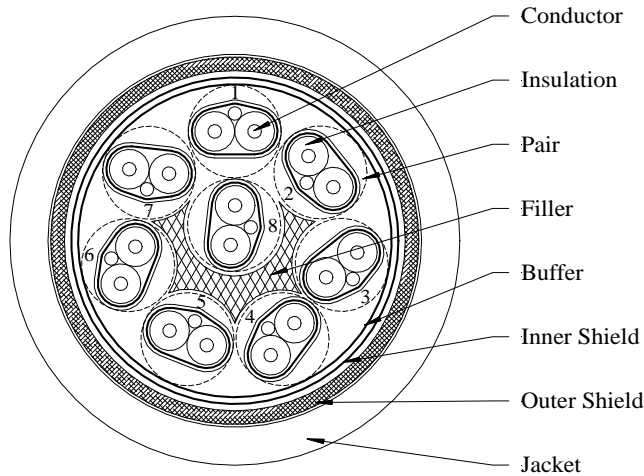


# 8 PAIR 30 AWG 14G INFINITWIST™ CABLE

## PROPRIETARY DESIGN

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 TE CONNECTIVITY / MADISON CABLE



Note: Drain wire orientation (relative to outside of cable) will vary due to pair twisting.

### CONSTRUCTION

#### Pair Component

**Conductor:** 30 AWG Solid Silver Plated Copper, 0.010 Inch Diameter  
**Insulation:** 0.0095 Inches of Foam Polyolefin, 0.029 Inch Diameter, Color – Natural  
**Pair:** 2 Singles Twisted Together  
**Drain Wire:** 30 AWG Solid Tin Plated Copper, 0.010 Inch Diameter  
**Pair Shield:** Aluminum/Polyester Tape, Aluminum Side Facing In, 25% Overlap, Color – See Color Code Table  
**Pair Jacket:** Polyester Tape  
**Pair Diameter:** 0.064 Inches Nominal

#### Final Assembly

**Core:** 1 Pair (#8) and Fibrillated Polypropylene Filler  
**Layer 1:** 7 Pairs (#1-7) Cabled Around Core  
**Buffer:** Foam Polypropylene Tape, 50% Overlap  
**Inner Shield:** Aluminum/Polyester Tape, Aluminum Side Facing Out, 25% Overlap  
**Outer Shield:** 38 AWG Tin Plated Copper Braid, 85% Coverage  
**Jacket:** 0.025 Inches of Flexible PVC, Color – Black  
**Diameter:** 0.275 Inches Nominal  
**Print Legend (White Ink):** "MADISON CABLE (UL) TYPE CL2 75°C 30 AWG CSA AWM II A/B 75°C 30V FT4 InfiniTwist™ 14G 101-9583 SUBSTANCE COMPLIANT 2011/65/EU {Date Code}"<sup>1</sup>

<sup>1</sup> 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 TABLE

Pair #	Pair Shield Color
1	Yellow
2	Blue
3	Green
4	Orange
5	Red
6	White
7	Brown
8	Violet

### ELECTRICAL CHARACTERISTICS

**Differential Impedance:** 100 ± 5 Ohms @ TDR  
**Mutual Capacitance:** 14 pF/ft Nominal  
**Time Delay:** 1.39 ns/ft Nominal  
**Time Delay Skew (Within Pair):** 50 ps/5.5 m Maximum  
**Attenuation (SDD21)<sup>2</sup>:**

Frequency (GHz)	Attenuation (dB/5.5 m Nom.)
1.25	8.4
5.00	20.2
7.00	25.8
9.00	33.0
10.00	35.0
12.00	TBD
14.00	TBD

**Differential to Common Mode Conversion (SCD21):** 30 dB Nominal  
**Conductor DC Resistance:** 0.10 Ohms/ft Nominal @ 20°C

<sup>2</sup> Tested/Functional to 14 GHz over a 5.5-meter length.

### MECHANICAL CHARACTERISTICS

**Bend Radius (2.5 X OD):** 0.69 Inches Minimum

### SAFETY CERTIFICATION

**UL Listing:** Type CL2 as specified in Article 725 of the National Electrical Code  
**CSA Certification:** AWM II A/B 75°C 30V FT4  
**RoHS II Material Compliance:** In accordance with EU Directive 2011/65/EU for the Restriction of Hazardous Substances



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### REVISION HISTORY

#	Date	By	Description
1	03/10/10	DM	Initial Release
2	11/02/10	HA	Revised to 14G Construction
3	11/09/10	HA	Revised Attenuation Test Length & Bend Radius
4	02/11/11	HA	Revised Drain Wire to STC
5	03/04/13	HA	Revised Print Legend
6	03/27/13	DC	Removed TDS (Between Pairs)

**Spec Number:** 101-9583

**Part Number:** 16KB3LF002

**Customer:**

**Customer #:**

**Prepared By:** D.M. Card

**Reviewed By:** T. Grzysiewicz

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