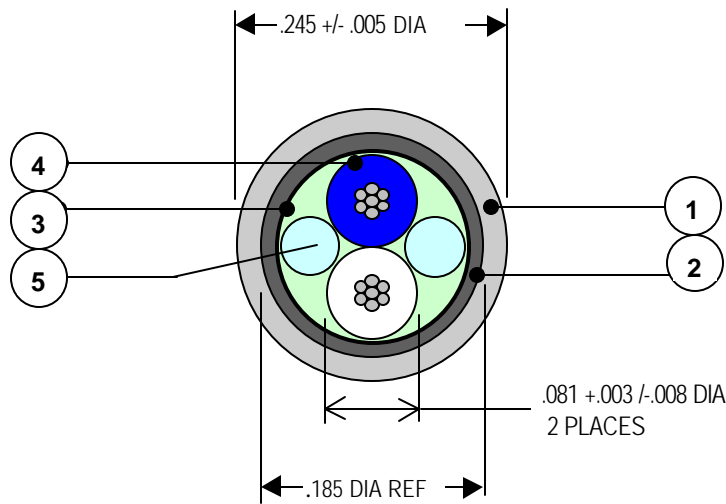


REVISION RECORD			
Rev	Date	Description	Auth
-	09/13/04	Initial release.	FM



D-2672 TWINAX

The D2672 twinax is a flexible balanced 98-ohm transmission line cable, consisting of two polyethylene-insulated stranded tinned copper conductors, twisted, with an overall braided shield, and PVC outer jacket.

SPECIFICATION

Approvals		Date	NATIONAL WIRE & CABLE CORPORATION	
Prep:	F. Motley	09/13/04	136 San Fernando Road,	Los Angeles, CA 90031
Engr:	S. Audish	09/13/04	Tel: 323-225-5611	Fax: 323-225-4630
Mfg:	J. Wiley	09/13/04	Web: www.nationalwire.com	email: info@nationalwire.com
QA	R. Delacanal	09/13/04		
Dimensions are in inches				
NATIONAL WIRE & CABLE CORPORATION			Cable, Electronic, Twinaxial, 98-ohm	
FEDERAL MFGR CAGE NO. 04569			D-2672	Rev: -
Copyright 2004 National Wire & Cable Corporation All Rights Reserved				Pg. 1 of 3

1	Jacket	The overall jacket shall be an extruded layer of flexible black non-contaminating polyvinylchloride compound, having a nominal wall thickness of .03 inch. Jacket shall be applied to be as round as possible, however very slight visual evidence of the underlying twists is acceptable. Diameter of jacket shall be 0.245-inch +/- .005 inch. Jacket shall be white ink-marked with mfr CAGE code number "04569" and "D2672". Marking shall repeat at intervals of approximately 1 foot. This marking complies with MIL-STD 130.
2	Outer conductor	The outer conductor shall be tinned copper braid of #36 AWG wires. Coverage shall be greater than 90%.
3	Barrier	A barrier wrap of 1/2 mil clear polyester tape shall be applied over the twisted bundle of insulated wires and filler, under the braided shield layer.
4	Conductors	The cable shall contain two (2) conductors of AWG 22(7x30) stranded tinned copper meeting the requirements of ASTM-B-286. Conductors shall be individually insulated with a solid dielectric of polyethylene compound. The diameter of the insulation shall be .081 inch, +.003 / -.008 inch. Color code per Table A. The two insulated wires shall be twisted to form a flexible balanced pair transmission line.
5	Filler	Filler, used to round the cable, shall be polyethylene.
6	Cabling	To ensure consistent flexibility of the cable, all wires shall be given a precision helical twist using planetary cable-forming machines with full back-twist neutralization to form the cable. There shall be no evidence of residual twist in the components.
7	HV Spark Test	100% of insulated wire shall pass a 3400-volt AC 60 Hz. "spark" test prior to processing.
8	Final Test	Finished cable shall withstand a 1500-volt AC, 60 Hz, High Potential Withstand test applied wire-to-wire, and wire-to-shield. Test potential shall be applied continuously for one minute without arcing or other evidence of failure. All conductors shall be tested to verify continuity.
9	Weight	34 pounds per 1000 feet, estimated.
10	Temp.	Operating temperature: -55C to +80C.

NATIONAL WIRE & CABLE CORPORATION		Cable, Electronic, Twinaxial, 98-ohm	
FEDERAL MFR CAGE NO. 04569		D-2672	Rev: -
Copyright 2004 National Wire & Cable Corporation All Rights Reserved			Pg. 2 of 3

11	Electrical	<p>The balanced (differential) characteristic impedance of the line shall be 98. ohms +/- 15. (note: impedance tolerance is typical for 100-ohm Cat 5 digital signal pairs)</p> <p>Maximum operating voltage: 1000 volts RMS.</p> <p>Conductor loop resistance: 34.5 ohms per 1000 feet.</p> <p>Loss: Attenuation per 100 feet of cable shall not be more than 20 percent above the following values: 0.2 dB at 100 kilohertz, 0.61 dB at 1 megahertz 1.9 dB at 10 megahertz 2.3 dB at 14 megahertz 6.0 dB at 100 megahertz</p> <p>NOTES: The nominal wire-to-wire capacitance shall be 15.6 picofarads per foot.</p> <p>The nominal velocity of propagation shall be 65.9 % of velocity in air.</p> <p>This cable is similar to cable 77C714807 rev B.</p>
----	------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

TABLE A

Wire No.	Color
1	BLUE
2	NATURAL TRANS

NATIONAL WIRE & CABLE CORPORATION	Cable, Electronic, Twinaxial, 98-ohm	
FEDERAL MFGR CAGE NO. 04569	D-2672	Rev: -
Copyright 2004 National Wire & Cable Corporation All Rights Reserved	Pg. 3 of 3	