



**SPECIFICATION CONTROL DRAWING**

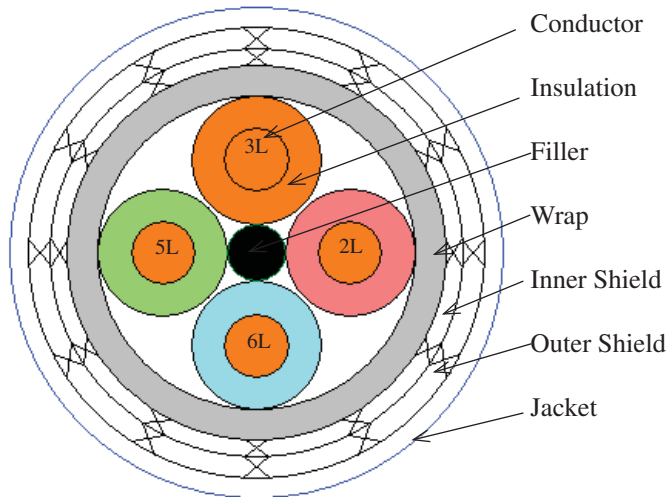
**3EQ-22C222-32M**

**IEEE 1394B QUAD CABLE, AWG 22**

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Revision: B  
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THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200.

**CONSTRUCTION DETAILS**



**ELECTRICAL CHARACTERISTICS**

TABLE II

Frequency MHz	Attenuation dB/100 ft (max)
100	5.5
250	8.8
500	12.8
1000	18.2

Impedance (Differential): 110 +6/-4 ohms TDR rise time <80 ps  
 Impedance (Common Mode): 33 ± 6 ohms TDR rise time <80 ps  
 Crosstalk: 26 dB (minimum) 1-500 MHz  
 Capacitance: 13 pF/ft. (maximum) at 1 kHz.  
 Conductor DC Resistance: 14.4 ohms/1000 ft (nominal)  
 Time Delay: 1.31 ns/ft (maximum)  
 Time Delay Skew: 200 ps/50 ft (maximum), within pairs  
 Time Delay Skew Between Pairs: 400 ps/4.5 m (maximum)  
 Velocity of Propagation: 82% (nominal)  
 Eye Pattern: Eye pattern to have zero violations on eye mask of 450 mVp-p X 1000 ps for 81 ft sample.

Single Component		Dimensions
Conductor:	AWG 22, 19/34, silver-coated copper	.0315
Insulation:	Foamed FEP	.061 (.070 max)
<b>Cable Assembly</b>		
Core:	Solid FEP filler	.025
Layer 1:	4 singles	.144
Wrap:	ePTFE .003" Tape 80% overlap (nom)	.168
Inner Shield:	AWG 40, silver-coated copper	.181
Outer Shield:	AWG 38, silver-coated copper	.198
	92% coverage (minimum)(each)	
Jacket:	FEP .008 inch thickness	.222 (max)
Weight:	43.1 lbs/kft (max)	

(Dimensions are in inches and unless otherwise specified are nominal.)

TABLE I

Single Wire	Pair	Wire Insulation color
1	1	3L (light orange)
2	2	2L (light red)
3	1	6L (light blue)
4	2	5L (light green)

Designate outer jacket color with a dash number appended to the part number.  
 Example: White jacket; 3EQ-22C222-32M-9.

Color code designators shall be in accordance with MIL-STD-681. An "L" after the number indicates a light color and a "D" dark color.

**ADDITIONAL REQUIREMENTS & RATINGS**

Temperature Rating: -65°C to 200°C  
 Voltage Withstand: 1500 V (rms), conductor to conductor; 1000 V (rms) conductor to shield.  
 Cold Bend: -55° C; 6 inch Mandrel; 4 hours  
 Blocking: 200° C; 6 inch Mandrel; 6 hours  
 Flammability: Spec 1200 Method B  
 Thermal Shock: 230° C; 2.25 inch Mandrel; 4 hours per NEMA WC 27500  
 Jacket Flaws: Spark Test 1.5 kV (rms)  
 Impulse Dielectric Test: 6.0 kV (peak)  
 Jacket Elongation: 200% minimum  
 Jacket Tensile Strength: 2000 psi minimum

Cable will be supplied in 50 ft minimum lengths unless otherwise specified

Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order. Users should evaluate the suitability of this product for their application. TE Connectivity Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer. This specification sheet takes precedence over documents referenced herein. Referenced documents shall be of the issue in effect on date of invitation for bid.