

DATE: 06-28-06

PRODUCT SPECIFICATION 13419 C

TYPE: Multi-Conductor, Rubber Insulated,

Rubber Jacketed, Communication and Control Cables

300 Volts, -40°C to 80°C Rated

SIZE: 20 AWG: 5 to 16 Conductors

I. SCOPE:

This specification covers the construction requirements for multiconductor cable consisting of extra-flexible stranded, tin coated copper conductors, individually rubber insulated. The conductors are twisted together, and jacketed overall with black rubber.

II. CONSTRUCTION:

A. CONDUCTORS:

20 AWG (26/.0063") tin coated annealed copper conforming to ASTM B-33 and B-174, bunch stranded with a 3/4" nominal lay length.

B. SEPARATOR:

A paper tape separator shall be applied over each conductor.

C. INSULATION:

Ethylene propylene rubber (EPR) compound conforming to UL Standard 62 for Class 28 EPDM (Table 50.52). The wall thickness is 20 mils average, 15 mils minimum at any point. A heavy layer of talc or slipper compound shall be applied to each conductor prior to cable assembly.

D. COLOR CODE:

ICEA Method 1, Appendix K-1 (colored insulation and spiral stripes) per Section H.





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E. ASSEMBLY:

The insulated conductors are cabled together as shown on page 2, with wax paper fillers (as necessary), and with lay lengths selected for extra flexibility. An open spaced cotton yarn binder shall be helically applied over the twisted assembly.

F. SEPARATOR:

A separator tape shall not be applied over the assembly.

G. OVERALL JACKET:

An 80°C rated, black, chlorinated polyethylene (CPE) rubber jacket is applied concentrically over the assembly.

H. COLOR CODE:

CONDUCTOR NO.	BASE COLOR	STRIPE	
1 BLACK		NONE	
2	WHITE		
3	RED		
4	4 GREEN 5 ORANGE		
5			
6	BLUE		
7	WHITE	BLACK	
8	8 RED 9 GREEN		
9			
10 ORANGE			
11	BLUE		
12	BLACK	WHITE	
13 RED			
14	GREEN		
15	BLUE		
16	BLACK	RED	



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III. TABLE OF CONSTRUCTION DETAILS:

SIZE (AWG)	NO. OF COND.	CABLE ASSEMBLY	OVERALL JACKET		
			MIN. AVG. THICKNESS	DIAMETERS	
				(NOM.)	(MAX.)
20	5	5 AROUND 0	.040"	.310"	.320"
	6	6 AROUND 0		.330"	.340"
	8	8 AROUND 0		.380"	390"
	10	8 AROUND 2		.405"	.415"
	12	9 AROUND 3		.415"	.425"
	16	11 AROUND 5		.470"	.480"