## **SPECIFICATION CONTROL DRAWING**

44A9748

TITLE

ONE CONDUCTOR CABLE, FLAT BRAID SHIELDED, JACKETED, 600 VOLT

12-18-07

Revision

В

This specification sheet forms a part of the latest issue of Raychem Specification 44.

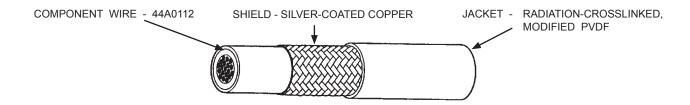


TABLE I. CABLE CONSTRUCTION DETAILS									
PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD STRAND THICKNESS (± .0004 inch)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT		
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	(lbs/1000 ft.)		
44A9748-26-*	26	.0015	.006	.008	.057	.062	3.6		
44A9748-24-*	24	.0015	.006	.008	.063	.068	4.6		
44A9748-22-*	22	.0015	.006	.008	.070	.076	6.0		
44A9748-20-*	20	.0015	.006	.008	.078	.084	7.9		
44A9748-18-*	18	.0015	.006	.008	.088	.095	10.8		
44A9748-16-*	16	.0015	.006	.008	.095	.103	13.1		
44A9748-14-*	14	.0015	.006	.008	.112	.122	18.9		
44A9748-12-*	12	.0015	.006	.008	.131	.142	27.7		

TABLE II. CABLE PERFORMANCE DETAILS								
PART NUMBER 1/	BEND TESTING							
	MANDREL DIAMETE (inch) (±3%)	R	WEIGHT (lb) (±3%)					
	LIFE CYCLE, IMMERSION AND ACCELERATED AGING	COLD BEND	LIFE CYCLE, IMMERSION AND ACCELERATED AGING	COLD BEND				
44A9748-26-*	3.00	3.00	.125	.750				
44A9748-24-*	3.00	3.00	.188	.750				
44A9748-22-*	3.00	3.00	.188	1.50				
44A9748-20-*	3.00	3.00	.188	1.50				
44A9748-18-*	3.00	3.00	.250	1.50				
44A9748-16-*	3.00	3.00	.250	1.50				
44A9748-14-*	3.00	3.00	.500	4.50				
44A9748-12-*	6.00	6.00	.500	4.50				

NOTE: Nominal values are for information only. Nominal values are not requirements.

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.

Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. HOWEVER, DUE TO LENGTH LIMITATIONS OF THE RAYCHEM PART NUMBER, AN ALTERNATIVE COLOR CODE MAY REPLACE MIL-STD-681 COLOR CODE DESIGNATORS. (EXAMPLE: "901/902..." MAY BE REPLACED BY "AXXX".) OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

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DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

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## SPECIFICATION CONTROL DRAWING

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Revision SCD

44A9748

## CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature VOLTAGE RATING: 600 volts (rms) at sea level ACCELERATED AGING: 300 ± 3°C for 6 hours

BLOCKING: 150 ± 3°C for 6 hours

DIELECTRIC WITHSTAND: 2500 volts (rms), 60 Hz, 1 minute

FLAMMABILITY: 30 seconds (maximum); 3 in. (maximum); no flaming of facial tissue IMMERSION: Diameter increase 5% (maximum), no cracking, no dielectric breakdown

JACKET COLOR: White preferred

JACKET CONCENTRICITY: 70% (minimum)

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 200% (minimum)

Tensile Strength, 4000 lbf/in<sup>2</sup> (minimum)

JACKET FLAWS:

Spark Test, 1.5 kV (rms)

Impulse Dielectric Test, 6.0 kV (peak) LIFE CYCLE: 200 ± 3°C for 168 hours

LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours

SHIELD COVERAGE: 90% (minimum)

VOLTAGE WITHSTAND TEST (Post Environmental): 1000 volts (rms), 60 Hz, 1 minute

## PART NUMBER:

The "\*" in the part numbers on page 1 shall be replaced by color code designators with a dash separating the component wire color from the jacket color.

1/ Example: AWG 20, black component wire; white jacket: 44A9748-20-0-9

1/ See footer section on page 1