

SPECIFICATION CONTROL DRAWING

44/142XTITLE TWO CONDUCTOR CABLE, SHIELDED, JACKETED,
LIGHTWEIGHT, OUTER SPACE, 600 VOLT

Date 04-02-04

Revision F

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

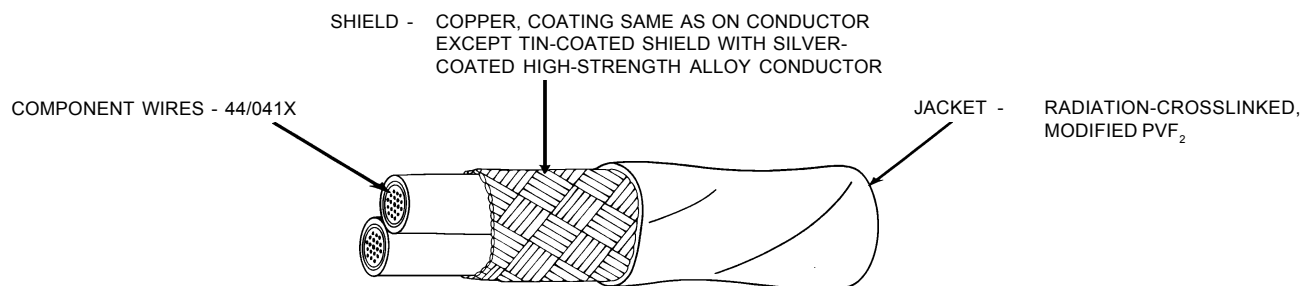


TABLE I. CABLE CONSTRUCTION DETAILS

PART NUMBER 1/	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
44/142X-26-*	26	38	.006	.008	.101	.106	8.1
44/142X-24-*	24	38	.006	.008	.113	.119	10.0
44/142X-22-*	22	38	.006	.008	.127	.133	13.1
44/142X-20-*	20	38	.006	.008	.143	.149	17.2
44/142X-18-*	18	38	.006	.008	.163	.170	23.5
44/142X-16-*	16	38	.007	.009	.179	.186	28.1
44/142X-14-*	14	36	.007	.009	.213	.221	42.3
44/142X-12-*	12	36	.007	.009	.257	.267	62.1

TABLE II. CABLE PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING				
	MANDREL DIAMETER (inch) (± 3%)			WEIGHT (lb) (± 3%)	
	RADIATION RESISTANCE	ACCELERATED AGING IMMERSION AND LIFE CYCLE	COLD BEND	ACCELERATED AGING IMMERSION AND LIFE CYCLE	COLD BEND
44/142X-26-*	2.75	3.00	3.00	.125	1.50
44/142X-24-*	3.00	3.00	3.00	.185	1.50
44/142X-22-*	3.50	6.00	6.00	.185	3.00
44/142X-20-*	4.00	6.00	6.00	.185	3.00
44/142X-18-*	4.50	6.00	6.00	.250	3.00
44/142X-16-*	5.00	6.00	6.00	.250	3.00
44/142X-14-*	6.00	6.00	6.00	.500	9.00
44/142X-12-*	7.00	10.0	10.0	.500	9.00

CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 135°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

ACCELERATED AGING: 225 ± 3°C for 6 hours

BLOCKING: 150 ± 2°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

JACKET COLOR: White preferred

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 200% (minimum)

Tensile Strength, 4000 lbf/in² (minimum)

JACKET FLAWS:

Spark Test, 1.5 kV (rms)

Impulse Dielectric Test, 6.0 kV (peak)

LIFE CYCLE: 200 ± 3°C for 120 hours

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

RADIATION RESISTANCE: 500 megarads

SHIELD COVERAGE: 85% (minimum)

VACUUM STABILITY: Total Mass Loss, 1.0% (maximum),

Volatile Condensable Material, 0.1% (maximum)

VOLTAGE WITHSTAND TEST (Post Environmental):

1000 volts (rms), 60 Hz, 1 minute

PART NUMBER:

The "X" in the part numbers above shall be replaced with a conductor material designator as follows:

1 = Tin-coated copper

2 = Silver-coated copper

3 = Nickel-coated copper

4 = Silver-coated high strength copper alloy (AWG 26 - 20 only)

6 = Nickel-coated high strength copper alloy (AWG 26 - 20 only)

The "*" in the part numbers above shall be replaced by color code designators with a slash separating the component wire colors and a dash separating the component wire colors from the jacket color.

1/ Example: AWG 20, tin-coated conductor, black and brown component wires; white jacket; 44/1421-20-0/1-9

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.

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.**tyco**
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Authorized Distributor

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