

SPECIFICATION CONTROL DRAWING

44A7029TITLE WIRE, ELECTRIC, RADIATION-CROSSLINKED POLYALKENE INSULATED,
TIN-COATED COPPER, LIGHTWEIGHT, GENERAL PURPOSE, 600 VOLT

Date 07-14-00

Revision D

This specification sheet forms a part of the latest issue of Raychem Specification 44 and MIL-W-81044 as applicable.

CONDUCTOR - TIN-COATED COPPER

PRIMARY INSULATION - RADIATION-CROSSLINKED,
EXTRUDED POLYALKENEJACKET - RADIATION-CROSSLINKED,
MODIFIED PVF₂
Thickness: .003 ± .001

TABLE I. CONSTRUCTION DETAILS

PARTNUMBER	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	NOMINAL DIAMETER OF STRANDED CONDUCTOR (in.)	FINISHED WIRE		
				MAXIMUM RESISTANCE AT 20°C (ohms/1000ft)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft)
44A7029-26-*	26	7 x 34	.020	42.5	.034 ± .002	1.4
44A7029-24-*	24	7 x 32	.025	26.6	.040 ± .002	2.2
44A7029-22-*	22	7 x 30	.031	17.0	.047 ± .002	3.2
44A7029-20-*	20	7 x 28	.039	10.6	.055 ± .002	4.7
44A7029-18-*	18	7 x 26	.049	6.66	.065 ± .002	7.1
44A7029-16-*	16	7 x 24	.061	4.09	.075 ± .003	9.2

TABLE II. PERFORMANCE DETAILS

PARTNUMBER	BEND TESTING				
	MANDREL DIAMETER (inch) (± 3%)			WEIGHT (lb) (± 3%)	
	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND	WRAP	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND
44A7029-26-*	.500	.500	.250	.125	.500
44A7029-24-*	.500	.500	.250	.188	.500
44A7029-22-*	.750	.750	.250	.188	1.00
44A7029-20-*	.750	.750	.250	.188	1.00
44A7029-18-*	1.00	1.00	.375	.250	1.00
44A7029-16-*	1.00	1.00	.375	.250	1.00

ADDITIONAL REQUIREMENTS

INSULATION FLAWS:

Primary Insulation, Spark Test, 1.5 kv, 60 Hz (rms), 100% test

INSULATION RESISTANCE: 5000 megohms for 1000 ft. (minimum)

BLOCKING: 225 ± 2°C, no sticking of adjacent layers

SMOKE TEST: 200 ± 2°C, no visible smoke

PART NUMBER: The "*" in the part numbers above shall be replaced by a color code designator.

Example: AWG 26, white: 44A7029-26-9

Except as specified above, this construction shall meet all requirements of Raychem Specification Sheet 44A0111.

COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681.

DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL.

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