



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SPECIFICATION CONTROL DRAWING

WXA-0059

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

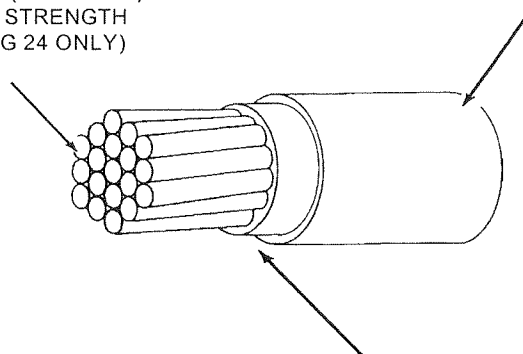
Date 08-15-01

Revision E

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

CONDUCTOR - TIN-COATED COPPER (AWG 22-10)
SILVER-COATED HIGH STRENGTH
COPPER ALLOY (AWG 24 ONLY)

JACKET - RADIATION-CROSSLINKED, MODIFIED ETFE
20 - 24 AWG THICKNESS: .007 ± .001 in.
10 - 18 AWG THICKNESS: .005 ± .001 in.



PRIMARY INSULATION - RADIATION-CROSSLINKED,
EXTRUDED POLYALKENE
COLOR - LIGHT ORANGE

TABLE I. CONSTRUCTION DETAILS

PART NUMBER	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000ft)	DIAMETER (in.)	MAXIMUM WEIGHT (lb/1000 ft)
WXA-0059-24-*	24	19 x 36	.023	.025	28.4	.045 ± .002	2.3
WXA-0059-22-*	22	19 x 34	.029	.032	16.2	.052 ± .002	3.3
WXA-0059-20-*	20	19 x 32	.037	.041	9.88	.060 ± .002	4.9
WXA-0059-18-*	18	19 x 30	.046	.051	6.23	.071 ± .002	7.3
WXA-0059-16-*	16	19 x 29	.052	.058	4.81	.079 ± .002	9.2
WXA-0059-14-*	14	19 x 27	.065	.073	3.06	.093 ± .002	13.6
WXA-0059-12-*	12	37 x 28	.084	.090	2.02	.114 ± .003	20.7
WXA-0059-10-*	10	37 x 26	.106	.114	1.26	.139 ± .003	32.5

TABLE II. PERFORMANCE DETAILS

PART NUMBER	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND
WXA-0059-24-*	.500	1.00	.500	3.00
WXA-0059-22-*	.750	1.00	1.50	3.00
WXA-0059-20-*	.750	1.00	2.00	4.00
WXA-0059-18-*	1.00	1.25	2.00	4.00
WXA-0059-16-*	1.00	1.25	2.00	5.00
WXA-0059-14-*	1.25	2.00	2.00	5.00
WXA-0059-12-*	2.00	2.00	2.00	5.00
WXA-0059-10-*	3.00	3.00	2.00	5.00

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

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

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

Raychem

Raychem Corporation
300 Constitution Drive, Menlo Park, California 94025
1-800-2 Raychem Fax: 1-415-361-6297

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)

ACCELERATED AGING: 300 ± 3°C for 7 hours

BLOCKING: 200 ± 3°C for 24 hours, per Raychem Spec 55A

COLOR: White preferred

FLAMMABILITY: 30 seconds (maximum); 3 inch (maximum);
no flaming of facial tissue

HUMIDITY RESISTANCE: After humidity exposure, wire shall
meet the requirements for initial Insulation Resistance

IDENTIFICATION AND COLOR STRIPING DURABILITY: 125 cycles
(250 strokes) (minimum), 500 g weight

IMMERSION: Diameter increase 5% (maximum);
no cracking, no dielectric breakdown

INSULATION RESISTANCE: 5000 megohms for 1000 ft. (minimum) AWG 24-14,
3000 megohms for 1000 ft. (minimum) AWG 12-10

INSULATION ELONGATION AND TENSILE STRENGTH:
(Primary insulation and jacket pulled together at 2 inches/minute)
Tensile Strength, 3000 lbf/in² (minimum)

Elongation, 75% (minimum)

INSULATION FLAWS:

Primary Insulation,

Spark Test, 1.5 kV, 60 Hz (rms), 100% test

Impulse Dielectric Test, 6.0 kV (peak), 100% test

Finished Wire,

Impulse Dielectric Test, 8.0 kV (peak), 100% test

LIFE CYCLE: 200 ± 2°C for 168 hours

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

SHRINKAGE: 230 ± 2°C, 0.125 inch (maximum) in 12 inches

SMOKE TEST: 200 ± 5°C

SURFACE RESISTANCE: 500 megohms-inch (minimum), both readings

THERMAL SHOCK RESISTANCE: 150 ± 2°C, 0.060 inch (maximum)

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):

2500 volts (rms), 60 Hz, 5 minutes

PART NUMBER:

The "*" in the part numbers on page 1 shall be replaced by color code designators.

Example: AWG 20, white: WXA-0059-20-9