

SPECIFICATION CONTROL DRAWING

WXA-0085

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

Date 04-26-00

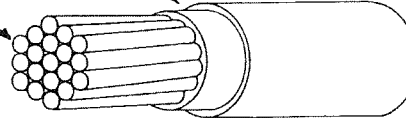
Revision C

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

CONDUCTOR - TIN-COATED COPPER

PRIMARY INSULATION - RADIATION-CROSSLINKED,
EXTRUDED POLYALKENE

JACKET - RADIATION-CROSSLINKED,
MODIFIED PVF₂
Thickness: .005 ± .001 in.



CONSTRUCTION DETAILS								PERFORMANCE DETAILS	
PART NUMBER	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	TARGET CONDUCTOR DIAMETER (in.)	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	FINISHED WIRE DIAMETER (in.)		WEIGHT (lbs/1000 ft.)	MANDREL DIAMETER (inch) (±3%)	WEIGHT (lb) (±3%)
					TARGET VALUE	TOLERANCE (±)		ACCELERATED AGING AND LIFE CYCLE	ACCELERATED AGING AND LIFE CYCLE
WXA-0085-24-*	24	19 x 36	.0233	26.2	.057	.002	2.68	.500	.63
WXA-0085-22-*	22	19 x 34	.0293	16.2	.069	.003	3.99	.750	2.00
WXA-0085-20-*	20	19 x 32	.0375	9.88	.078	.003	5.64	1.00	2.50
WXA-0085-18-*	18	19 x 30	.0464	6.23	.088	.003	8.04	1.00	2.50
WXA-0085-16-*	16	19 x 29	.0527	4.81	.097	.004	10.04	1.00	2.50
WXA-0085-14-*	14	19 x 27	.0659	3.06	.115	.004	14.94	1.50	2.50
WXA-0085-12-*	12	37 x 28	.0845	2.02	.131	.004	21.94	2.00	3.00
WXA-0085-10-*	10	37 x 26	.1070	1.26	.161	.005	34.27	3.00	3.00
WXA-0085- 8-*	8	133 x 29	.163	.701	.219	.006	57.95	3.00	6.00
WXA-0085- 6-*	6	133 x 27	.205	.445	.269	.007	89.17	4.00	6.00
WXA-0085- 4-*	4	133 x 25	.260	.280	.325	.008	140.83	5.00	6.00
WXA-0085- 2-*	2	665 x 30	.330	.183	.404	.012	223.37	6.00	6.00
WXA-0085- 0-*	0	1045 x 30	.415	.116	.494	.016	345.42	8.00	7.00

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)

ACCELERATED AGING: 300 ± 3°C for 6 hours

COLOR: White preferred

FLAMMABILITY:

AWG: 24 thru 14 and 8 thru 0

30 seconds (maximum);

3 in. (maximum); no flaming of facial tissue

AWG: 10 and 12

Test per requirements of SAE J1128

INSULATION ELONGATION AND TENSILE STRENGTH:

Primary Insulation,

Elongation, 150% (minimum)

Tensile Strength, 2500 lbf/in² (minimum) AWG 24 - 12

2000 lbf/in² (minimum) AWG 10 - 0

INSULATION FLAWS: Finished Wire,

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

INSULATION RESISTANCE: 5000 megohms for

1000 ft. (minimum)

LIFE CYCLE: 200 ± 2°C for 168 hours

LOW TEMPERATURE-COLD BEND: -55 ± 2°C for 4 hours,

mandrel diameter to be 20X target component OD with sufficient weight to hang straight

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):

2500 volts (rms), 60 Hz, 5 minutes

PART NUMBER:

The "*" in the part numbers above shall be replaced by color code designators.

Example: AWG 22, white: WXA-0085-22-9

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

Raychem

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