

SPECIFICATION CONTROL DRAWING

82A1111TITLE RADIATION-CROSSLINKED, MODIFIED, FLUOROPOLYMER-INSULATED,
ONE CONDUCTOR CABLE, SHIELDED, JACKETED, LIGHTWEIGHT, FLEXIBLE

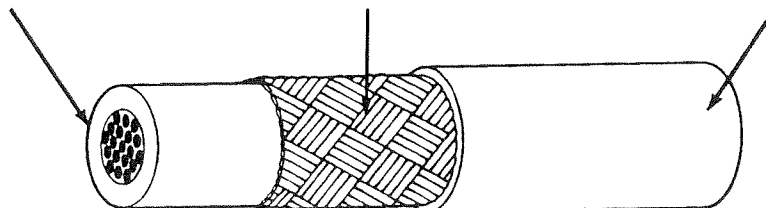
Date 12-2-91

Revision C

This specification sheet forms a part of the latest issue of Raychem Specification 80.

COMPONENT WIRE - 82A0111

SHIELD - TIN-COATED COPPER

JACKET - RADIATION-CROSSLINKED,
MODIFIED FLEXIBLE ETFE

CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (inches)		OUTSIDE DIAMETER (inches)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
82A1111-28-*	28	38	.005	.007	.060	.065	4.0
82A1111-26-*	26	38	.005	.007	.064	.069	4.7
82A1111-24-*	24	38	.005	.007	.068	.073	5.7
82A1111-22-*	22	38	.005	.007	.074	.079	6.9
82A1111-20-*	20	38	.005	.007	.084	.089	8.9
82A1111-18-*	18	38	.006	.008	.097	.102	12.5
82A1111-16-*	16	38	.006	.008	.112	.118	17.1
82A1111-14-*	14	38	.007	.009	.134	.141	25.3
82A1111-12-*	12	38	.008	.010	.158	.166	35.8
82A1111-10-*	10	38	.008	.011	.196	.206	56.7
82A1111- 8-*	8	38	.009	.012	.236	.248	84.7
82A1111- 6-*	6	38	.011	.014	.281	.295	126.
82A1111- 4-*	4	36	.013	.017	.373	.392	208.
82A1111- 2-*	2	36	.014	.019	.444	.466	302.
82A1111- 1-*	1	34	.016	.021	.513	.539	385.
82A1111- 0-*	0	34	.018	.024	.590	.620	491.
82A1111-00-*	00	34	.020	.026	.644	.676	597.

CABLE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)

* BLOCKING: 150 ± 3°C

CROSSLINKING PROOF TEST: 300 ± 3°C for 7 hours

15 in. specimen with sufficient weight to keep straight

DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz

* FLAMMABILITY: Procedure 1, 3 seconds (maximum);
3 in. (maximum)

JACKET COLOR: White preferred

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 100% (minimum)

Tensile Strength, 3000 lbf/in² (minimum)

JACKET FLAWS:

Spark Test, 1500 volts (rms), 60 Hz, 100% test

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

* LIFE CYCLE: 200 ± 3°C for 168 hours

* LOW TEMPERATURE-COLD BEND: -65 ± 3°C

* SECANT MODULUS: 4.0 X 10⁴ lbf/in² (maximum),
2 % strain, 2 in. Jaw separation, 0.2 in. / minute,
procedural reference ASTM D 882

SHIELD COVERAGE: 85% (minimum)

VOLTAGE WITHSTAND (POST ENVIRONMENTAL):
1000 volts (rms), 60 Hz, 1 minute

PART NUMBER

The *** in the part number above shall be
replaced by a color code designator with a dash
separating the component wire color from the
jacket color.Example: AWG 20, white component wire;
white jacket: 82A1111-20-9-9

* Qualification Test

COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-881.

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

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