

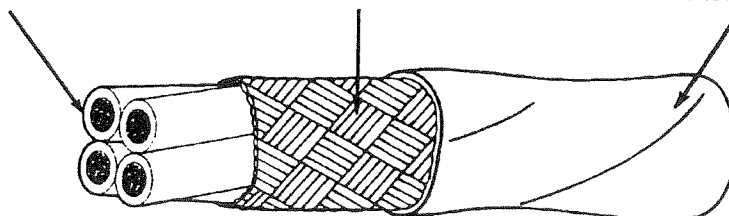
SPECIFICATION CONTROL DRAWING

82A1141TITLE
RADIATION-CROSSLINKED, MODIFIED, FLUOROPOLYMER-INSULATED,
FOUR CONDUCTOR CABLE, SHIELDED, JACKETED, LIGHTWEIGHT, FLEXIBLEDate
12-2-91Revision
C

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

COMPONENT WIRES - 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	
82A1141-28-*	28	38	.005	.008	.103	.118	10.1
82A1141-26-*	26	38	.006	.009	.115	.132	12.8
82A1141-24-*	24	38	.006	.009	.125	.144	16.4
82A1141-22-*	22	38	.007	.010	.141	.163	21.1
82A1141-20-*	20	38	.007	.011	.167	.194	28.8
82A1141-18-*	18	38	.008	.012	.196	.228	41.8
82A1141-16-*	16	38	.009	.013	.234	.273	59.8
82A1141-14-*	14	38	.010	.015	.287	.335	91.4
82A1141-12-*	12	36	.012	.018	.350	.409	137.
82A1141-10-*	10	36	.014	.021	.443	.519	222.
82A1141- 8-*	8	34	.017	.025	.548	.643	347.
82A1141- 6-*	6	34	.019	.029	.655	.770	515.
82A1141- 4-*	4	34	.024	.037	.870	1.02	842.
82A1141- 2-*	2	34	.028	.043	1.04	1.23	1229.
82A1141- 1-*	1	32	.032	.049	1.21	1.42	1569.
82A1141- 0-*	0	32	.037	.056	1.39	1.64	2007.
82A1141-00-*	00	32	.040	.061	1.53	1.80	2449.

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 slash separating the component wire colors and a dash separating the component wire colors from the jacket color.

Example: AWG 20, white, red, orange and yellow component wires; white jacket:
82A1141-20-9/2/3/4-9

* Qualification Test

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

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.

Raychem

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