

# SPECIFICATION CONTROL DRAWING

**82A1821**

TITLE

TWO CONDUCTOR CABLE,  
SHIELDED, JACKETED, FLEXIBLE

Date

01-25-01

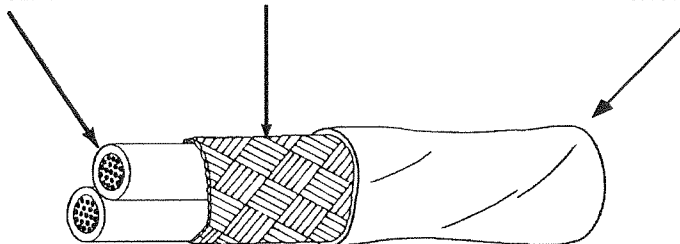
Revision

B

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

COMPONENT WIRES - 82A0811

SHIELD - TIN-COATED COPPER

JACKET - RADIATION-CROSSLINKED,  
MODIFIED FLEXIBLE ETFE

## CABLE CONSTRUCTION DETAILS

PART NUMBER	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (inch)		OUTSIDE DIAMETER (inch)		MAXIMUM WEIGHT (lb/1000 ft)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
82A1821-24-*	24	38	.006	.010	.125	.131	12.5
82A1821-22-*	22	38	.007	.011	.147	.154	16.8
82A1821-20-*	20	38	.008	.012	.169	.177	21.8
82A1821-18-*	18	38	.009	.013	.195	.205	29.9
82A1821-16-*	16	38	.009	.014	.229	.240	41.1
82A1821-14-*	14	38	.011	.016	.281	.295	61.8
82A1821-12-*	12	38	.012	.018	.327	.343	84.9
82A1821-10-*	10	36	.015	.023	.441	.463	150.

## CABLE RATINGS AND ADDITIONAL REQUIREMENTS

### TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms)

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

DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz

JACKET COLOR: White preferred

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 100% (minimum)

Tensile Strength, 3000 lbf/in<sup>2</sup> (minimum)

JACKET FLAWS:

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

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

SHIELD COVERAGE: 85% (minimum)

VOLTAGE WITHSTAND (POST ENVIRONMENTAL):

1000 volts (rms), 60 Hz, 1 minute

### PART NUMBER

The "\*" in the part numbers 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 and red component wires;  
white jacket: 82A1821-20-9/2-9

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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