

# SPECIFICATION CONTROL DRAWING

**55A1821**

TITLE TWO CONDUCTOR CABLE, RADIATION-CROSSLINKED, MODIFIED ETFE  
INSULATED, SHIELDED, JACKETED, NORMAL WEIGHT, 600 VOLT

Date 4-27-93

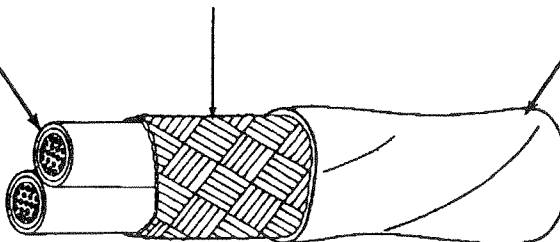
Revision E

This specification sheet forms a part of the latest issue of Raychem Specification 55A.

COMPONENT WIRES - 55A0811

SHIELD - TIN-COATED COPPER

JACKET - RADIATION-CROSSLINKED,  
MODIFIED ETFE



## CABLE CONSTRUCTION DETAILS

| PART NUMBER  | CONDUCTOR<br>SIZE<br>(AWG) | SHIELD<br>SIZE<br>(AWG) | JACKET THICKNESS<br>(inches) |         | OUTSIDE DIAMETER<br>(inches) |         | MAXIMUM<br>WEIGHT<br>(lbs/1000 ft.) |
|--------------|----------------------------|-------------------------|------------------------------|---------|------------------------------|---------|-------------------------------------|
|              |                            |                         | MINIMUM                      | NOMINAL | NOMINAL                      | MAXIMUM |                                     |
| 55A1821-26-* | 26                         | 38                      | .006                         | .008    | .113                         | .119    | 9.6                                 |
| 55A1821-24-* | 24                         | 38                      | .006                         | .008    | .123                         | .129    | 11.0                                |
| 55A1821-22-* | 22                         | 38                      | .006                         | .008    | .135                         | .141    | 13.9                                |
| 55A1821-20-* | 20                         | 38                      | .006                         | .008    | .151                         | .158    | 18.2                                |
| 55A1821-18-* | 18                         | 38                      | .006                         | .008    | .173                         | .180    | 24.5                                |
| 55A1821-16-* | 16                         | 38                      | .006                         | .008    | .189                         | .196    | 28.8                                |
| 55A1821-14-* | 14                         | 38                      | .007                         | .009    | .225                         | .233    | 41.4                                |
| 55A1821-12-* | 12                         | 38                      | .007                         | .009    | .259                         | .269    | 57.4                                |
| 55A1821-10-* | 10                         | 38                      | .008                         | .010    | .308                         | .323    | 85.7                                |
| 55A1821- 8-* | 8                          | 36                      | .009                         | .011    | .432                         | .454    | 163.                                |
| 55A1821- 6-* | 6                          | 34                      | .010                         | .012    | .532                         | .559    | 251.                                |
| 55A1821- 4-* | 4                          | 34                      | .011                         | .015    | .677                         | .711    | 385.                                |
| 55A1821- 2-* | 2                          | 34                      | .012                         | .018    | .879                         | .923    | 619.                                |

## CABLE 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 6 hours

DIELECTRIC WITHSTAND: 1500 volts (rms), 60 Hz

FLAMMABILITY: Procedure 1, 3 seconds (maximum);

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

JACKET COLOR: White preferred

JACKET ELONGATION AND TENSILE STRENGTH:

Elongation, 50% (minimum)

Tensile Strength, 5000 lbf/in<sup>2</sup> (minimum)

JACKET FLAWS:

Spark Test, 1000 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 for 4 hours

SHIELD COVERAGE: 85% (minimum)

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):

1000 volts (rms), 60 Hz, 1 minute

### PART NUMBER:

The \*\*\* in the part numbers above shall be replaced by color code designators with a slash separating the component wire colors and a dash separating the component wire colors from the jacket color.

Example: AWG 20, red and orange component wires; white jacket: 55A1821-20-2/3-9

\* Qualification Test

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  
415) 361 3333 TWX 910 373 1728