

# SPECIFICATION CONTROL DRAWING

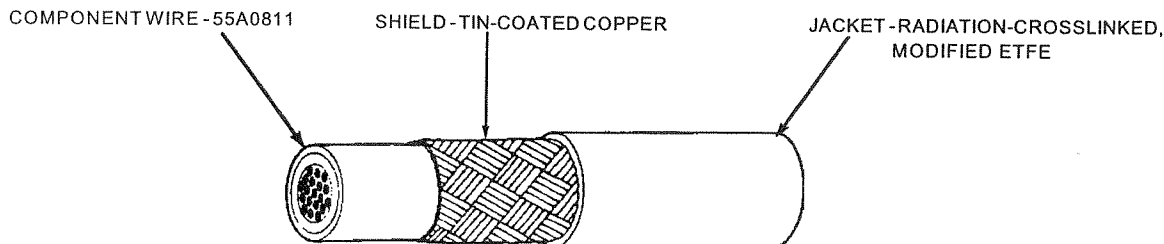
55A1811

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

Date 09-20-01

Revision F

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



## CABLE CONSTRUCTION DETAILS

| PARTNUMBER    | CONDUCTOR SIZE (AWG) | SHIELD SIZE (AWG) | JACKET THICKNESS (inches) |         | OUTSIDE DIAMETER (inches) |         | MAXIMUM WEIGHT (lbs/1000 ft.) |
|---------------|----------------------|-------------------|---------------------------|---------|---------------------------|---------|-------------------------------|
|               |                      |                   | MINIMUM                   | NOMINAL | NOMINAL                   | MAXIMUM |                               |
| 55A1811-30-*  | 30                   | 38                | .006                      | .008    | .065                      | .070    | 4.0                           |
| 55A1811-28-*  | 28                   | 38                | .006                      | .008    | .068                      | .073    | 4.5                           |
| 55A1811-26-*  | 26                   | 38                | .006                      | .008    | .073                      | .078    | 5.3                           |
| 55A1811-24-*  | 24                   | 38                | .006                      | .008    | .078                      | .083    | 6.3                           |
| 55A1811-22-*  | 22                   | 38                | .006                      | .008    | .084                      | .089    | 7.9                           |
| 55A1811-20-*  | 20                   | 38                | .006                      | .008    | .092                      | .097    | 10.0                          |
| 55A1811-18-*  | 18                   | 38                | .006                      | .008    | .103                      | .109    | 13.3                          |
| 55A1811-16-*  | 16                   | 38                | .006                      | .008    | .111                      | .117    | 16.0                          |
| 55A1811-14-*  | 14                   | 38                | .006                      | .008    | .128                      | .134    | 22.2                          |
| 55A1811-12-*  | 12                   | 38                | .006                      | .008    | .145                      | .151    | 30.3                          |
| 55A1811-10-*  | 10                   | 38                | .006                      | .008    | .168                      | .176    | 45.0                          |
| 55A1811- 8-*  | 8                    | 38                | .007                      | .009    | .229                      | .250    | 76.6                          |
| 55A1811- 6-*  | 6                    | 38                | .007                      | .009    | .275                      | .286    | 115.                          |
| 55A1811- 4-*  | 4                    | 36                | .008                      | .010    | .350                      | .368    | 181.                          |
| 55A1811- 2-*  | 2                    | 34                | .009                      | .011    | .456                      | .479    | 297.                          |
| 55A1811- 1-*  | 1                    | 34                | .009                      | .011    | .518                      | .544    | 380.                          |
| 55A1811- 0-*  | 0                    | 34                | .010                      | .012    | .560                      | .588    | 444.                          |
| 55A1811- 00-* | 00                   | 34                | .010                      | .012    | .620                      | .651    | 568.                          |
| 55A1811-000-* | 000                  | 34                | .012                      | .014    | .664                      | .697    | 672.                          |

## 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), 100% test

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

LIFE CYCLE: 200 ± 3°C for 168 hours

LOW TEMPERATURE-COLD BEND: -65 ± 2°C for 4 hours

SHIELD COVERAGE: 85% (minimum)

VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):

1000 volts (rms), 60 Hz, 1 minute

### PARTNUMBER:

The \*\*\* in the part numbers 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:  
55A1811-20-9-9

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**