

# SPECIFICATION CONTROL DRAWING

55A1812

TITLE

ONE CONDUCTOR CABLE, SHIELDED, JACKETED, NORMAL WEIGHT

Date

03-12-60

Revision

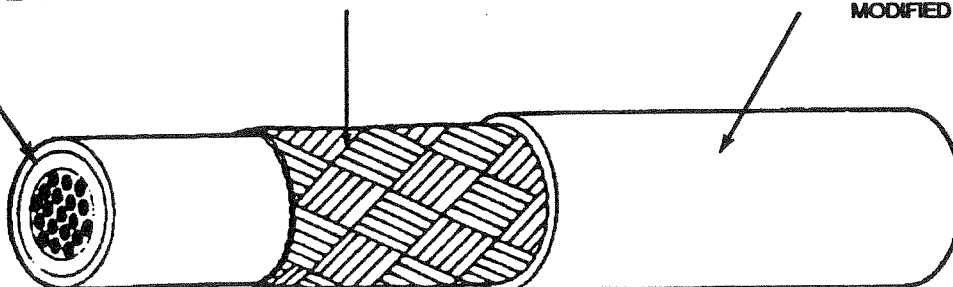
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The complete requirements for procuring the cable described herein shall consist of this document and the issue in effect of Raychem Specification 55A.

COMPONENT WIRE - 55A0812

SHIELD - SILVER-COATED COPPER

JACKET - RADIATION-CROSSLINKED,  
MODIFIED 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 |                              |
| 55A1812-26-* | 26                   | 38                | .006                      | .008    | .073                      | .078    | 5.6                          |
| 55A1812-24-* | 24                   | 38                | .006                      | .008    | .078                      | .083    | 6.5                          |
| 55A1812-22-* | 22                   | 38                | .006                      | .008    | .083                      | .088    | 7.8                          |
| 55A1812-20-* | 20                   | 38                | .006                      | .008    | .091                      | .096    | 9.9                          |
| 55A1812-18-* | 18                   | 38                | .006                      | .008    | .103                      | .108    | 13.3                         |
| 55A1812-16-* | 16                   | 38                | .006                      | .008    | .110                      | .116    | 15.6                         |
| 55A1812-14-* | 14                   | 38                | .006                      | .008    | .127                      | .133    | 21.7                         |
| 55A1812-12-* | 12                   | 38                | .006                      | .008    | .144                      | .151    | 29.6                         |
| 55A1812-10-* | 10                   | 38                | .006                      | .008    | .167                      | .175    | 43.2                         |
| 55A1812-8-*  | 8                    | 38                | .007                      | .009    | .230                      | .242    | 77.8                         |

## CABLE RATINGS AND ADDITIONAL REQUIREMENTS

### TEMPERATURE RATING: 200°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, 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 lb/in<sup>2</sup> (minimum)

JACKET FLAWS:

Spark Test, 1000 volts, 60 Hz (rms), 100% test

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

LIFE CYCLE: 230 ± 3°C for 500 hours

LOW TEMPERATURE-COLD BEND: -65 ± 3°C for 4 hours

SHIELD COVERAGE: 85% (minimum)

THERMAL SHOCK: 300 ± 3°C for 6 hours

VOLTAGE WITHSTAND TEST: (After Accelerated Aging,  
Immersion, Life Cycle, Low Temperature-Cold Bend  
and Thermal Shock) 1000 volts, 60 Hz, 1 minute

### PART NUMBER:

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

Example: AWG 20, white component wire; white jacket:  
55A1812-20-0-0

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**

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