

# SPECIFICATION CONTROL DRAWING

**82/1112**

Title **ONE CONDUCTOR CABLE, SHIELDED, JACKETED, OUTER SPACE, FLEXIBLE, 600 VOLT**

Date: 1-4-13

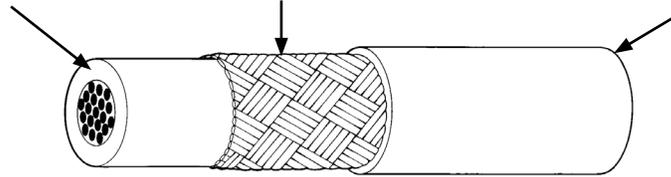
Revision: D

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

COMPONENT WIRE - 82/0112

SHIELD - SILVER-COATED COPPER

JACKET - LOW OUTGASSING  
RADIATION-CROSSLINKED,  
MODIFIED FLEXIBLE ETFE



### CABLE CONSTRUCTION DETAILS

PART NUMBER <small>1/</small>	CONDUCTOR SIZE (AWG)	SHIELD SIZE (AWG)	JACKET THICKNESS (in.)		OUTSIDE DIAMETER (in.)		MAXIMUM WEIGHT (lbs/1000 ft.)
			MINIMUM	NOMINAL	NOMINAL	MAXIMUM	
82/1112-28-*	28	38	.005	.007	.060	.065	4.2
82/1112-26-*	26	38	.005	.007	.064	.069	4.7
82/1112-24-*	24	38	.005	.007	.068	.073	5.7
82/1112-22-*	22	38	.005	.007	.074	.079	6.9
82/1112-20-*	20	38	.005	.007	.084	.089	8.9
82/1112-18-*	18	38	.006	.008	.097	.102	12.5
82/1112-16-*	16	38	.006	.008	.112	.118	17.1
82/1112-14-*	14	38	.007	.009	.134	.141	25.3
82/1112-12-*	12	38	.008	.010	.158	.166	35.8
82/1112-10-*	10	38	.008	.011	.196	.206	56.7

### CABLE RATINGS AND ADDITIONAL REQUIREMENTS

**TEMPERATURE RATING: 150°C**

Maximum continuous conductor temperature  
**VOLTAGE RATING: 600 volts (rms) at sea level**  
**CROSSLINKING PROOF TEST: 300 ± 3°C for 1 hour**  
**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)  
 Impulse Dielectric Test, 6.0 kV (peak)  
**RADIATION RESISTANCE (Test per Raychem Spec 55/):**  
 500 megarads

**SECANT MODULUS (Test per ASTM D 882):**  
 4.0 x 10<sup>4</sup> lbf/in<sup>2</sup> (maximum),  
 2% strain, 2 inch jaw separation, 0.2 inch/minute  
**SHIELD COVERAGE: 85% (minimum)**  
**VACUUM STABILITY (Test per ASTM E 595):**  
 Total Mass Loss (TML), 1.00% (maximum)  
 Volatile Condensable Material (VCM), 0.10% (maximum)  
**VOLTAGE WITHSTAND (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 dash separating the component wire color from the jacket color.

1/ Example: AWG 22, white component wire; white jacket:  
 82/1112-22-9-9

**NOTE:** Nominal values are for information only.  
 Nominal values are not requirements.

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.  
 Tyco Electronics Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. HOWEVER, DUE TO LENGTH LIMITATIONS OF THE RAYCHEM PART NUMBER, AN ALTERNATIVE COLOR CODE MAY REPLACE MIL-STD-681 COLOR CODE DESIGNATORS. (EXAMPLE: "901/902.." MAY BE REPLACED BY "Axxx".) OTHER CODES AND SUFFIXES MAY BE ADDED TO THE PART NUMBER AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

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	THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.		