

# SPECIFICATION CONTROL DRAWING

**55PC0711**

TITLE WIRE, RADIATION-CROSSLINKED, MODIFIED, ETFE-INSULATED,  
TIN-COATED COPPER, HEAVY DUTY, 1000 VOLT

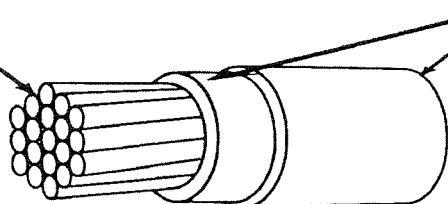
Date 4-16-93

Revision C

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

CONDUCTOR - TIN-COATED COPPER

INSULATION - RADIATION-CROSSLINKED,  
MODIFIED ETFE



### CONSTRUCTION DETAILS

PART NUMBER	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	CONDUCTOR DIAMETER (in.)			FINISHED WIRE					
			LOWER SPEC LIMIT	TARGET VALUE	UPPER SPEC LIMIT	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (in.)			WEIGHT (lbs/1000 ft.)	
							LOWER SPEC LIMIT	TARGET VALUE	UPPER SPEC LIMIT	TARGET VALUE	UPPER SPEC LIMIT
55PC0711-26*	26	19 x 38	.0175	.0183	.0191	41.3	.0482	.0505	.0528	2.18	2.28
55PC0711-24*	24	19 x 36	.0225	.0233	.0241	26.2	.0532	.0555	.0578	2.87	3.08
55PC0711-22*	22	19 x 34	.0285	.0293	.0301	16.2	.0592	.0615	.0638	3.89	4.13
55PC0711-20*	20	19 x 32	.0365	.0375	.0385	9.88	.0671	.0695	.0719	5.49	5.78
55PC0711-18*	18	19 x 30	.0452	.0464	.0476	6.23	.0769	.0795	.0821	7.93	8.34
55PC0711-16*	16	19 x 29	.0514	.0527	.0538	4.81	.0844	.0870	.0896	9.84	10.28
55PC0711-14*	14	19 x 27	.0644	.0659	.0674	3.06	.0991	.1020	.1049	14.63	15.21
55PC0711-12*	12	37 x 28	.0825	.0845	.0865	2.02	.1170	.1205	.1240	21.80	22.54
55PC0711-10*	10	37 x 26	.1050	.1070	.1090	1.26	.1390	.1435	.1480	33.42	34.61

### WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C  
 Maximum continuous conductor temperature  
 VOLTAGE RATING: 1000 volts (rms)  
 COLOR: White preferred  
 CROSSLINKING PROOF TEST: 300 ± 3°C for 1 hour  
 IDENTIFICATION AND COLOR STRIPING DURABILITY:  
 125 cycles (250 strokes) (minimum), 500 g weight  
 INSULATION ELONGATION AND TENSILE STRENGTH:  
 Total Insulation,  
 Elongation, 50% (minimum)  
 Tensile Strength, 5000 lbf/in<sup>2</sup> (minimum)

INSULATION FLAWS:  
 Spark Test, 3.0 kV (rms), 60 Hz  
 Impulse Dielectric Test, 8.0 kV (peak)  
 INSULATION THICKNESS: .015 in. (nominal) total insulation  
 SHRINKAGE: 230 ± 3°C for 1 hour, 0.125 in. (maximum) in 12 in.  
 VOLTAGE WITHSTAND TEST (POST ENVIRONMENTAL):  
 2500 volts (rms)

PART NUMBER:  
 The \*\*\* in the part numbers above shall be replaced by color code designators.  
 Example: AWG 22, white: 55PC0711-22-9  
 AWG 22, white with black stripe: 55PC0711-22-90

COLOR AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681.