

SPECIFICATION CONTROL DRAWING

EPD5958-AWG-CO1

TITLE	WIRE, RADIATION-CROSSLINKED, MODIFIED, ETFE-INSULATED, LIGHTWEIGHT	Date	07-13-04	Revision	
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This specification sheet forms a part of the latest issue of Raychem Specification 55A

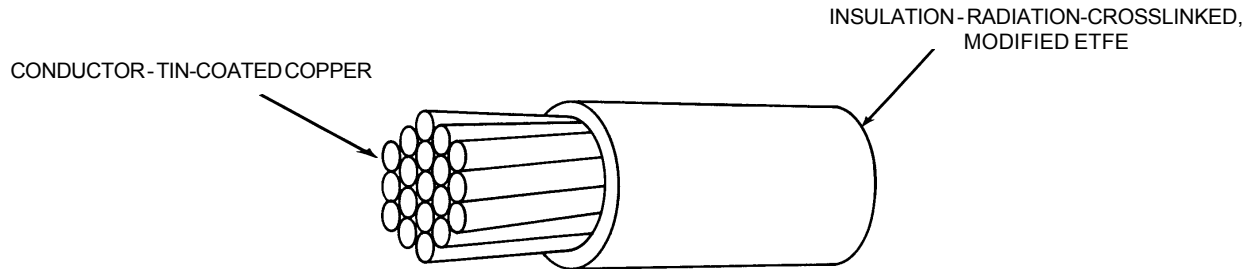


TABLE I. CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	MAXIMUM DIAMETER OF STRANDED CONDUCTOR (in.)	FINISHED WIRE			
				MAXIMUM RESISTANCE AT 20°C (ohm/1000 ft.)	DIAMETER (in.)		MAXIMUM WEIGHT (lbs/1000 ft)
					MINIMUM	MAXIMUM	
EPD5958-22-CO1-*	22	19 x 34	.031	16.2	.041	.044	3.16
EPD5958-20-CO1-*	20	19 x 32	.039	9.88	.049	.052	4.76
EPD5958-18-CO1-*	18	19 x 30	.049	6.23	.059	.062	7.10

TABLE II. PERFORMANCE DETAILS

PART NUMBER 1/	BEND TESTING			
	MANDREL DIAMETER (inch) (± 3%)		WEIGHT (lb) (± 3%)	
	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND	IMMERSION, LIFE CYCLE AND ACCELERATED AGING	COLD BEND
	EPD5958-22-CO1-*	.500	.750	.375
EPD5958-20-CO1-*	.500	.750	.500	1.00
EPD5958-18-CO1-*	.500	1.00	.500	1.00

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C
 Maximum continuous conductor temperature
 VOLTAGE RATING: 600 volts (rms) at sea level
 ACCELERATED AGING (CROSSLINKING PROOF):
 300 ± 3°C for 7 hours
 BLOCKING: 200 ± 3°C for 24 hours
 COLOR: White preferred
 CONCENTRICITY: 70% (minimum)
 FLAMMABILITY: Procedure 1,
 3 seconds (maximum); 3 in. (maximum);
 no flaming of facial tissue
 HUMIDITY RESISTANCE: Insulation Resistance,
 5000 megohms for 1000 ft. (minimum)
 IDENTIFICATION AND COLOR STRIPING DURABILITY:
 125 cycles (250 strokes) (minimum), 500 g weight
 IMMERSION: Diameter increase 5% (maximum);
 no cracking, no dielectric breakdown
 INSULATION ELONGATION AND TENSILE STRENGTH:
 Elongation, 50% (minimum)
 Tensile Strength, 5000 lbf/in² (minimum)

INSULATION FLAWS:
 Spark Test, 3.0 kV (rms) at 3 kHz
 Impulse Dielectric Test, 8.0 kV (peak)
 INSULATION RESISTANCE: 5000 megohms for 1000 ft. (minimum)
 INSULATION THICKNESS: 0.005 in. (minimum)
 LIFE CYCLE: 200 ± 3°C for 500 hours
 LOW TEMPERATURE-COLD BEND: -65 ± 3°C for 4 hours
 SHRINKAGE: 200 ± 3°C for 6 hours, 0.125 in. (maximum) in 12 in.
 SMOKE TEST: 200 ± 2°C, no visible smoke
 SURFACE RESISTANCE: 500 megohms-in. (minimum), both readings
 THERMAL SHOCK RESISTANCE: 150 ± 3°C, 0.060 in. (maximum)
 VOLTAGE WITHSTAND TEST (Post Environmental):
 2500 volts (rms), 60 Hz

PART NUMBER:
 The "*" in the part numbers above shall be replaced by a color code designator.
 1/ Example: AWG 22, white: EPD5958-22-CO1-9
 AWG 22, white with black stripe: EPD5958-22-CO1-90

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics 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. 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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