

SPECIFICATION CONTROL DRAWING

CMC-0588

TITLE WIRE, RADIATION-CROSSLINKED, MODIFIED FLEXIBLE ETFE-INSULATED, NORMAL WEIGHT, GENERAL PURPOSE, 600 VOLT

Date **1-24-07**

Revision **H**

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

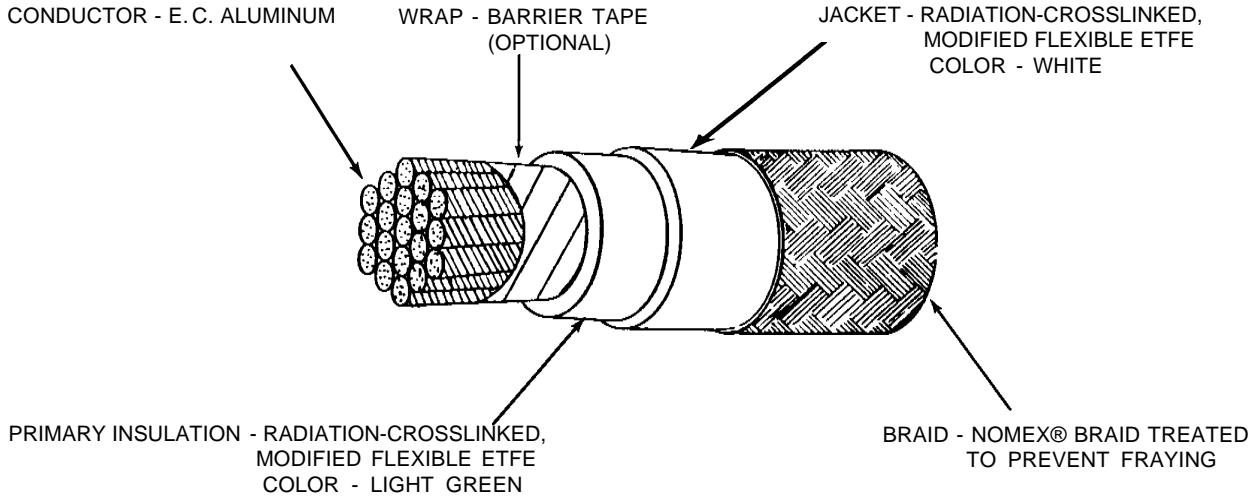


TABLE I. CONSTRUCTION DETAILS

PART NUMBER <u>1/</u>	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (in.)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (in.)	MAXIMUM WEIGHT (lbs/1000 ft.)
CMC-0588-8-*	8	41 x 24	.150	.160	1.09	.231 ± .008	35.3
CMC-0588-6-*	6	70 x 24	.201	.211	.641	.282 ± .010	52.4
CMC-0588-4-*	4	107 x 24	.248	.262	.427	.340 ± .010	76.3
CMC-0588-2-*	2	168 x 24	.310	.330	.268	.422 ± .016	120.
CMC-0588-1-*	1	219 x 24	.348	.368	.214	.486 ± .016	149.
CMC-0588-0-*	0	259 x 24	.396	.420	.169	.519 ± .016	177.
CMC-0588-00-*	00	334 x 24	.454	.478	.133	.568 ± .016	209.
CMC-0588-000-*	000	427 x 24	.511	.535	.109	.645 ± .016	265.
CMC-0588-0000-*	0000	523 x 24	.563	.587	.089	.700 ± .016	313.

TABLE II. PERFORMANCE DETAILS

PART NUMBER <u>1/</u>	BEND TESTING	
	MANDREL DIAMETER (in.) (±3%)	WEIGHT (lb) (±3%)
	CROSSLINKING PROOF TEST	CROSSLINKING PROOF TEST
CMC-0588-8-*	3.00	3.00
CMC-0588-6-*	4.00	3.00
CMC-0588-4-*	5.00	3.00
CMC-0588-2-*	6.00	4.00
CMC-0588-1-*	7.00	4.00
CMC-0588-0-*	8.00	4.00
CMC-0588-00-*	9.00	4.00
CMC-0588-000-*	10.0	4.00
CMC-0588-0000-*	12.0	4.00

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.



Raychem Wire & Cable
501 Oakside Avenue
Redwood City, CA 94063-3800
Phone: 1-800-227-8816
Fax: 1-650-361-6297

WIRE RATINGS AND ADDITIONAL REQUIREMENTS

TEMPERATURE RATING: 150°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

BRAID COLOR: Dark green preferred

CONCENTRICITY: 70% (minimum)

CROSSLINKING PROOF TEST: 300 ± 3°C for 7 hours

INSULATION ELONGATION AND TENSILE STRENGTH:

Elongation, 125% (minimum)

Tensile Strength, 3000 lbf/in² (minimum)

INSULATION FLAWS:

Primary Insulation,

Spark Test, 1.5 kV (rms) at 3 kHz

Impulse Dielectric Test, 6.0 kV (peak)

Finished Wire,

Spark Test, 3.0 kV (rms) at 3 kHz

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION THICKNESS:

For AWG 8 - 4: 0.008 in. (minimum) for primary insulation

0.012 in. (minimum) for outer jacket

For AWG 2 and larger : 0.010 in. (minimum) for primary insulation

0.015 in. (minimum) for outer jacket

SECANT MODULUS: (Test per ASTM D 882)

4.0 x 10⁴ lbf/in² (maximum), 2% strain, 2 inch jaw separation, 0.2 inch/minute

SHRINKAGE: 150 ± 3°C for 6 hours, 0.25 in. (maximum) in 12 in.

VOLTAGE WITHSTAND (Post Environmental): 2500 volts (rms), 60 Hz

PART NUMBER:

The “*” in the part numbers on page 1 shall be replaced by a color code designator, except that green shall be dark green and the designator shall be 5D.

1/ Example: AWG 2, dark green braid: CMC-0588-2-5D

PRODUCT IDENTIFICATION: Mark outer braid in a contrasting color at 12 inch (nominal) intervals with the following: “CMC-0588-AWG-06090”

NOMEX® is a registered trademark of E.I. du Pont de Nemours and Company.

1/ See footer section on page 1