

# SPECIFICATION CONTROL DRAWING

SCD

TR300

Title WIRE, RADIATION-CROSSLINKED, MODIFIED FLEXIBLE ETFE-INSULATED,  
POWER CABLE, 600 VOLT

Date 4-25-17

Revision H

This specification sheet forms a part of the latest issue of Raychem Specification 80 for test procedures only.

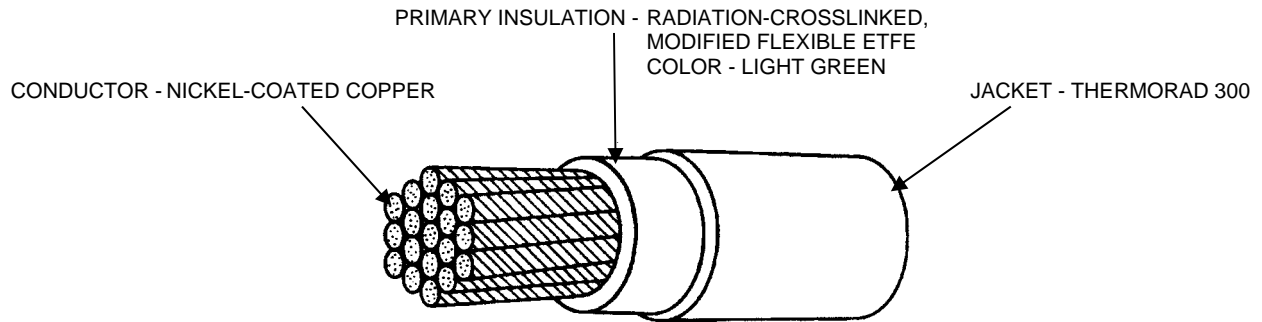


TABLE I. CONSTRUCTION DETAILS

PART NUMBER <sup>1/</sup>	WIRE SIZE (AWG)	CONDUCTOR STRANDING (number x AWG)	DIAMETER OF STRANDED CONDUCTOR (inch)		FINISHED WIRE		
			MINIMUM	MAXIMUM	MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	DIAMETER (inch)	MAXIMUM WEIGHT (lbs/1000 ft.)
TR300-4-*	4	133 x 25	.250	.274	.275	.320 ± .010	157.
TR300-2-*	2	665 x 30	.320	.340	.177	.402 ± .016	252.
TR300-0-*	0	1045 x 30	.395	.425	.113	.500 ± .016	390.
TR300-00-*	00	1330 x 30	.440	.475	.089	.548 ± .016	482.
TR300-000-*	000	1665 x 30	.500	.540	.071	.615 ± .016	597.
TR300-0000-*	0000	2109 x 30	.565	.605	.056	.671 ± .016	738.

TABLE II. PERFORMANCE DETAILS

PART NUMBER <sup>1/</sup>	CROSSLINKING PROOF TEST - BEND TESTING	
	MANDREL DIAMETER (inch) (± 3%)	WEIGHT (lb) (± 3%)
TR300-4-*	5.00	4.00
TR300-2-*	6.00	6.00
TR300-0-*	8.00	6.00
TR300-00-*	10.0	8.00
TR300-000-*	10.0	8.00
TR300-0000-*	10.0	8.00

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

<sup>1/</sup> 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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DIMENSIONS ARE IN INCHES AND, UNLESS OTHERWISE DESIGNATED, ARE NOMINAL.

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



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## WIRE RATINGS AND ADDITIONAL REQUIREMENTS

## TEMPERATURE RATING: 200°C

Maximum continuous conductor temperature

VOLTAGE RATING: 600 volts (rms) at sea level

CONCENTRICITY: 70% (minimum)

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

IDENTIFICATION AND COLOR STRIPING DURABILITY:

125 cycles (250 strokes) (minimum), 500 g weight

INSULATION ELONGATION AND TENSILE STRENGTH:

Elongation, 125% (minimum)

Tensile Strength, 3000 lbf/in<sup>2</sup> (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:

AWG 4, .008 in. (minimum) for primary insulation

.012 in. (minimum) for outer jacket

AWG 2-0000, .010 in. (minimum) for primary insulation

.015 in. (minimum) for outer jacket

JACKET COLOR: Black preferred

SHRINKAGE: 200 ± 3°C for 6 hours, 0.250 inch (maximum) in 12 inches

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

1/ PART NUMBER:

The "\*" in the part numbers in Tables I and II shall be replaced by a color code designator.

Example: AWG 00, black: TR300-00-0

AWG 00, black with a white stripe: TR300-00-09

## PRODUCT IDENTIFICATION:

Outer jacket shall be marked in contrasting color at 12 inch (nominal) intervals as follows: "TR300-AWG-06090"