

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	RE V	DESCRIPTION	DATE	APPROVED
	MSE	H	Revised per CN 429-4367, Code C Chg: S. Brown Chk: M. Fortin	02/04/24	P. Peterson

TC stranding

SPECIFICATION CONTROL DRAWING

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ALL SHEETS OF THIS DRAWING MAINTAINED AT SAME REVISION	CONTRACT NO. DAAB07-86-C-K022		GENERAL DYNAMICS C4 Systems Taunton, MA 02780-1069		
	DWN R. Hudson	DATE 11 Aug	WIRE, ELECTRICAL, HOOK-UP, EXTRA FLEXIBLE, 1000 VOLT		
	CHK J.P. C.B. G.I.	DATE 8/12/86			
	APVD P. Wallace	DATE 8/12/86			
	APVD R. Roth	DATE 86-8-13	SIZE A	CAGE 67032	DWG NO. 19-2733543
	DATE 21 Aug. 86	SCALE NONE	SOURCE MS WORD 7.0	SHEET 1 OF 6	

NOTES

1. Item: Wire, electrical, hook-up, extra flexible, 1000 volts
2. Description: The wire shall meet the requirements of MIL-W-16878/8 with the additions and exceptions specified herein.
3. Construction and Material
 - 3.1 Conductor: The conductor shall be rope stranded with strands of either tin or silver plated, soft annealed copper wire per QQ-W-343.
 - 3.1.1 Plating Thickness: 40 microinches minimum
 - 3.1.2 Number/Size of Strands: Table I
 - 3.1.3 Stranding Construction: Table I
 - 3.1.4 Strand Diameter: Table I
 - 3.1.5 Member Outside Diameter: Table I
 - 3.1.6 Length of Lay: Table I
 - 3.1.7 Overall Diameter: Table I
 - 3.1.8 Conductor Size: Table I
 - 3.1.9 Barrier Tape: The conductor (10 AWG - 0 AWG) may be optionally wrapped lengthwise with .005 inch thick silicone coated fiber-glass tape directly over the conductor as a barrier tape. Extruded silicone rubber over barrier tape to prevent silicone from being imbedded into conductor stranding.
 - 3.2 Insulation: Extruded silicone rubber
 - 3.2.1 Color: Table II
 - 3.2.2 Concentricity: At any cross section along the length of the completed wire, the minimum thickness of the insulation shall be not less than 41 percent of the difference between the measured diameter over the insulation and the measured diameter over the conductor, or not less than 70 percent of the maximum thickness at that cross section.
4. Maximum Operating Temperature: $\pm 200^{\circ}\text{C}$

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5. Marking: The shipping containers and/or reels shall be legibly marked with the following information:
- a) Manufacturer's Identification
 - b) Procuring Activity Part Number (See 7.1)
 - c) Procuring Activity CAGE Number (67032)
 - d) Wire Size
6. Quality Assurance Provisions: Quality assurance provisions shall be in accordance with MIL-W-16878 as applicable to the requirements specified herein. Generic test data will be acceptable in lieu of actual test data for heat resistance, cold bend, soldering and surface resistance tests of MIL-W-16878/8.
- 6.1 Insulation Strippability shall be tested for conformance to the values given in Table A per FED-STD-228, method 2231 or equivalent:

TABLE A

Wire Gage	Insulation Strippability Value (minimum)
0-10	12 lbs.

7. Suggested Source(s) of Supply
- a) BICC General
Willimantic, CT 06226
CAGE No.: 71124
 - b) D&B Industrial Group/Rowe Industries
24 Cedar Creek Avenue
Georgetown, DE 19947
CAGE No.: None
 - c) Radix Wire Co.
Euclid, OH 44132
CAGE No.: 86696

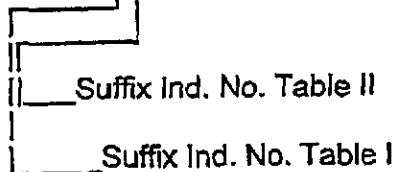
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7.1 Procuring Activity Part Number: The procuring activity part number consists of this drawing number (19-2733543) plus a two digit suffix. The first digit in the suffix is taken from Table I to indicate the conductor size. The second digit is taken from Table II to indicate the insulation color.

Example: The procuring activity part number for wire with a size 12 AWG conductor and green insulation is:

19-2733543-75



8. Identification of the Suggested Source(s) of Supply hereon is not to be construed as a guarantee of present or continued availability as a source of supply for the item.

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TABLE I

P/N Suffix Indicator	Wire Size AWG	Number of Strands	Construction	Strand Diameter Inch + .0003 - .0001	Member OD (Nom) Inch	Length of Lay Max. Inches	Overall Diameter Nominal Inch (Conductor)	Insulation Diameter	
								Wall in. ** (min)	OD over Insulation
-1	0	4655/36	7x7x95/36	.005	.056	8.25	.500	.0595	.525/.650
-2	2	2646/36	7x7x54/36	.005	.044	6.25	.379	.0595	.465/.530
-3	4	1666/36	7x7x34/36	.005	.030	4.30	.300	.0565	.403/.434
-4	6	1050/36	10 ¹⁵ 19x55/36*	.005	.068	3.26	.210	.0595	.323/.354
-5	8	665/36	19x35/36*	.005	.055	2.65	.167	.057	.280/.306
-6	10	413/36	7x59/36	.005	.043	2.08	.132	.0445	.219/.231
-7	12	259/36	7x37/36	.005	.034	1.63	.104	.0445	.191/.201
-8	14	168/36	7x24/36	.005	.028	1.38	.084	.0445	.173/.185
-9	16	105/36	7x15/36	.005	.022	1.07	.067	.0295	.126/.134

WIRE SIZE *OPTIONAL STRAND CONSTRUCTION

6 AWG 7x150/36
8 AWG 7x95/36

** Optional Barrier Tape Will Reduce Wall By Approx. .0075"

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TABLE II

P/N Suffix Indicator	Insulation Color
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Violet
8	Gray
9	White

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