

INCH-POUND
MIL-DTL-49055/1E
w/ AMENDMENT 1
9 June 2017
SUPERSEDING
MIL-DTL-49055/1E
20 April 2011

DETAIL SPECIFICATION SHEET

CABLES, ELECTRICAL,
(FLEXIBLE, FLAT, UNSHIELDED), (ROUND CONDUCTOR),
(WIRE SIZE 26, 7/34 OR 28, 7/36 STRANDING)

Inactive for new design after 16 June 1997.

This specification is approved for use by all Departments
and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet
and MIL-DTL-49055.

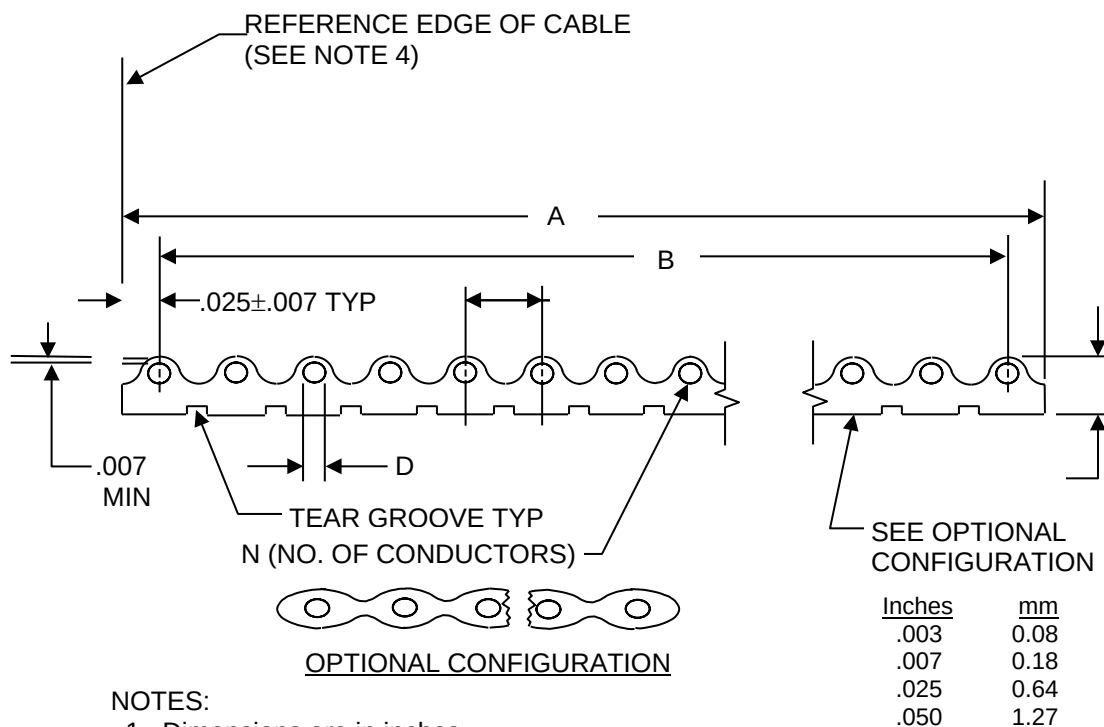


FIGURE 1. Round conductor flat cable.



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TABLE I. Dash numbers and characteristics.

Dash number	Number of conductors "N"	Cable width "A" inches	Weight (lb/1,000 ft)		AWG	Dia. "C" inches $\pm .003$	Dia. "D" inch	Stranding	End conductor to end conductor "B" inches
			Nom. ^{1/}	Max.					
01	9	0.450 $\pm$ 0.010	10.3	11.7	28	0.035	0.015	7/36	0.400 $\pm$ 0.010
02	10	0.500 $\pm$ 0.010	11.4	13.0	28	0.035	0.015	7/36	0.450 $\pm$ 0.010
03	14	0.700 $\pm$ 0.010	16.0	18.2	28	0.035	0.015	7/36	0.650 $\pm$ 0.010
04	15	0.750 $\pm$ 0.010	17.1	19.5	28	0.035	0.015	7/36	0.700 $\pm$ 0.010
05	16	0.800 $\pm$ 0.015	18.3	20.9	28	0.035	0.015	7/36	0.750 $\pm$ 0.011
06	20	1.000 $\pm$ 0.015	22.9	26.1	28	0.035	0.015	7/36	0.950 $\pm$ 0.011
07	24	1.200 $\pm$ 0.015	27.4	31.2	28	0.035	0.015	7/36	1.150 $\pm$ 0.011
08	25	1.250 $\pm$ 0.015	28.5	32.5	28	0.035	0.015	7/36	1.200 $\pm$ 0.011
09	26	1.300 $\pm$ 0.015	29.7	33.9	28	0.035	0.015	7/36	1.250 $\pm$ 0.011
10	34	1.700 $\pm$ 0.020	38.9	44.3	28	0.035	0.015	7/36	1.650 $\pm$ 0.015
11	37	1.850 $\pm$ 0.020	42.2	48.1	28	0.035	0.015	7/36	1.800 $\pm$ 0.015
12	40	2.000 $\pm$ 0.020	45.7	52.1	28	0.035	0.015	7/36	1.950 $\pm$ 0.015
13	50	2.500 $\pm$ 0.020	57.2	65.2	28	0.035	0.015	7/36	2.450 $\pm$ 0.015
14	60	3.000 $\pm$ 0.020	68.6	78.2	28	0.035	0.015	7/36	2.950 $\pm$ 0.015
15	64	3.200 $\pm$ 0.020	73.2	83.4	28	0.035	0.015	7/36	3.150 $\pm$ 0.015
16	9	0.450 $\pm$ 0.010	14.4	16.4	26	0.039	0.019	7/34	0.400 $\pm$ 0.010
17	10	0.500 $\pm$ 0.010	16.0	18.2	26	0.039	0.019	7/34	0.450 $\pm$ 0.010
18	14	0.700 $\pm$ 0.010	22.4	25.5	26	0.039	0.019	7/34	0.650 $\pm$ 0.010
19	15	0.750 $\pm$ 0.010	24.0	27.3	26	0.039	0.019	7/34	0.700 $\pm$ 0.010
20	16	0.800 $\pm$ 0.015	25.6	29.2	26	0.039	0.019	7/34	0.750 $\pm$ 0.011
21	20	1.000 $\pm$ 0.015	32.0	36.5	26	0.039	0.019	7/34	0.950 $\pm$ 0.011
22	24	1.200 $\pm$ 0.015	38.4	43.8	26	0.039	0.019	7/34	1.150 $\pm$ 0.011
23	25	1.250 $\pm$ 0.015	40.0	45.6	26	0.039	0.019	7/34	1.200 $\pm$ 0.011
24	26	1.300 $\pm$ 0.015	41.6	47.4	26	0.039	0.019	7/34	1.250 $\pm$ 0.011
25	34	1.700 $\pm$ 0.020	54.4	62.0	26	0.039	0.019	7/34	1.650 $\pm$ 0.015
26	37	1.850 $\pm$ 0.020	59.2	67.5	26	0.039	0.019	7/34	1.800 $\pm$ 0.015
27	40	2.000 $\pm$ 0.020	64.0	73.0	26	0.039	0.019	7/34	1.950 $\pm$ 0.015
28	50	2.500 $\pm$ 0.020	80.0	91.2	26	0.039	0.019	7/34	2.450 $\pm$ 0.015
29	60	3.000 $\pm$ 0.020	96.0	109.4	26	0.039	0.019	7/34	2.950 $\pm$ 0.015
30	64	3.200 $\pm$ 0.020	102.4	116.7	26	0.039	0.019	7/34	3.150 $\pm$ 0.015

^{1/} Nominal values are for information only.

Dimensions and configuration: See figure 1 and table I.

Insulation material: Polyvinylchloride (PVC, not for aerospace and shipboard applications).

Voltage rating: 300 volts rms at sea level.

Conductor coating: Tin.

Conductor stranding: See table I.

Weight: See table I.

Insulation flaws: 2,500 volts rms.

Dielectric withstanding voltage: 2,000 volts rms.

Insulation resistance: 500 megohms-1,000 feet (minimum).

Conductor resistance: 69.0 ohms maximum/1,000 feet at 23 °C.

Temperature rating: -20 °C to +105 °C.

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Thermal shock: -55 ± 5 °C to $+105\pm 5$ °C, shrinkage 0.0625 inch maximum either end.

Flexing endurance: -20 ± 5 °C to $+105\pm 5$ °C, 50 cycles.

Moisture resistance:

Insulation resistance 50 megohms: 1,000 feet (minimum).

Low pressure (elevated temperature): $+105$ °C (maximum conductor temperature).

Shrinkage: 0.125 inch maximum either end.

Color: Optional.

Part or Identifying Number (PIN): The term Part or Identifying Number (PIN) is equivalent to the term part number which was previously used in this specification. The PIN consists of the letter M, the basic number of the specification sheet, and a dash number from table I. Example PIN construction for a 34 conductor, 28 AWG, 1.700 inch wide cable:

M49055/1-10

Specification sheet no. _____

Dash no. from table I _____

Qualification is not required. When specified in the contract, a sample shall be subjected to first article inspection. First article inspection shall consist of group A and group B testing.

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced document. This document references MIL-DTL-49055.

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - AS
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 6145-2017-011)

Review activities:

Army - AR, AT, AV, CR4, MI
Navy - EC, MC, OS, SH
Air Force - 99

Note: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information using the Assist Online database at <https://assist.dla.mil>.