

INCH-POUND

MIL-DTL-9177/2D  
4 September 2018  
SUPERSEDING  
MIL-DTL-9177/2C(USAF)  
25 November 2002

DETAIL SPECIFICATION SHEET

CONNECTOR, AUDIO, AIRBORNE, PLUG, MINIATURE, 4 CONTACT

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

The requirements for acquiring the product described  
herein shall consist of this specification and MIL-DTL-9177.

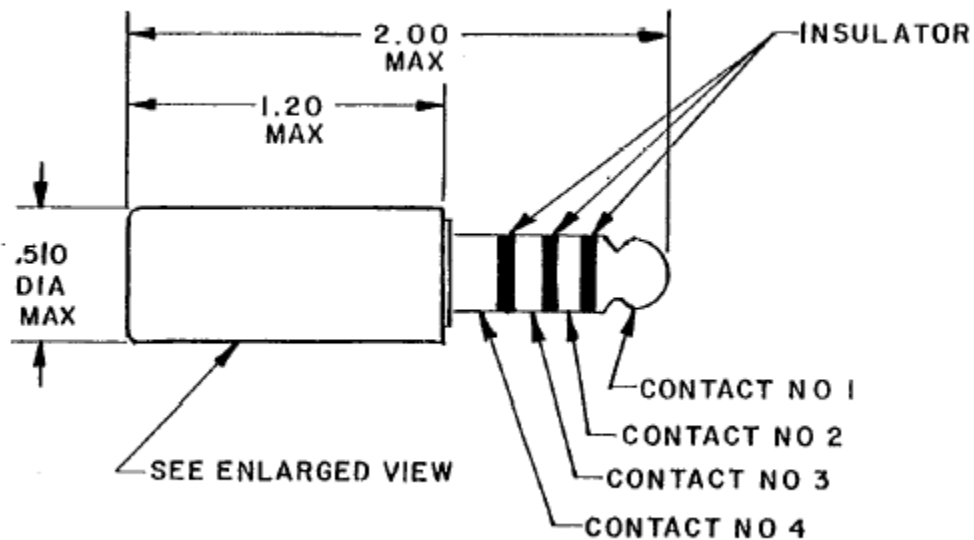


FIGURE 1. Dimensions and configurations.



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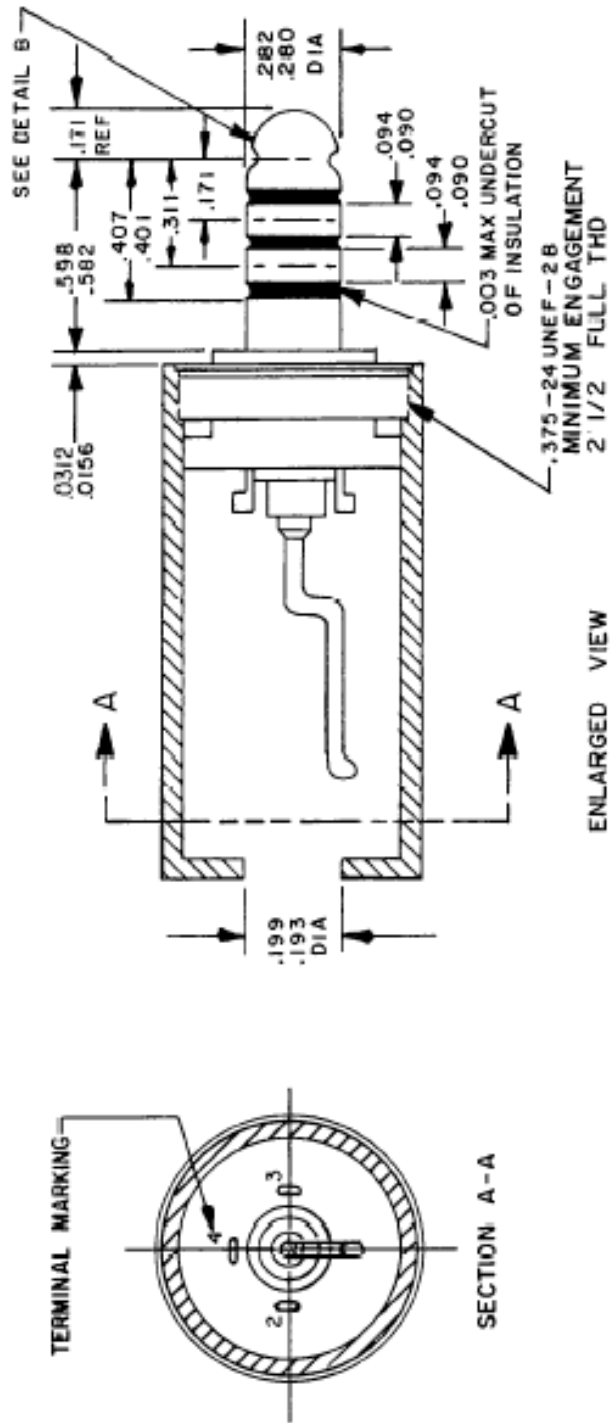
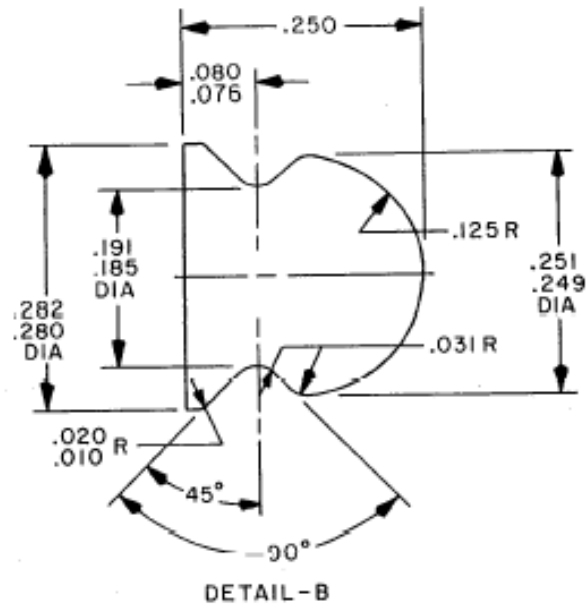


FIGURE 1. Dimensions and configurations - Continued.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm
.010	0.25	.080	2.03	.250	6.35	.875	22.22
.0156	0.396	.112	2.84	.251	6.38	.999	25.37
.020	0.51	.125	3.18	.280	7.11	1.531	38.89
.031	0.79	.185	4.70	.282	7.16	1.70	43.2
.0312	0.792	.191	4.85	.312	7.92	1.719	43.66
.076	1.93	.249	6.32	.562	14.27	1.80	45.7

## NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is  $\pm .005$  (0.13 mm).
4. All undimensioned pictorial representations are for reference purposes only.

FIGURE 1. Dimensions and configurations – Continued.

## REQUIREMENTS:

Dimensions and configuration: See figure 1.

Torque: The torque test is applicable.

Controlled drop: The controlled drop test is applicable.

Stack assembly: The stack assembly test is applicable.

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Static load: The static load test is applicable.

Insertion and withdrawal forces: The insertion and withdrawal forces shall be as specified:

Insertion force: 13 pounds maximum.

Withdrawal force 6 pounds minimum, 10 pounds maximum.

Cable retention: The cable retention test is applicable. The test cable shall be CX4707C/A1C in accordance with USAF Drawing no. 60C12501 and MIL-DTL-22442. The force shall be 30 pounds minimum.

Specified mating connector: For testing, the specified mating connector shall be M9177/3-1.

Body, insulation and shell: Materials shall have electrical and non-electrical properties appropriate for their intended use in electrical components. Optional materials are as follows:

Body and insulation:

- a. Polyvinylidene fluoride.
- b. Glass-filled polycarbonates in accordance with ASTM-D3935.
- c. Glass-filled nylon in accordance with ASTM-D4066.

Shell:

- a. Glass-filled nylon in accordance with ASTM-D4066.
- b. Nylon Zytel; DuPont part number ST801.

Marking: Identification marking shall include both U-174A/U and the M9177/2-1 numbers.

Contact construction: Contact to terminal shall be one piece construction. Material shall be Monel in accordance with QQ-N-281.

Solder lug terminals: The solder terminals for each contact shall be shaped and located so that terminals nos. 2, 3, and 4 will accept two 0.030-inch (0.76 mm) diameter wires; terminal no. 1 will accept one 0.030 - inch (0.76 mm) diameter wire.

Mating connectors: M9177/3-1, M9177/4-1, and M9177/5-1.

Part or Identifying Number (PIN): M9177/2-1.

Supersession data: M9177/2-1 supersedes U-174A/U.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-DTL-9177, this document references the following:

ASTM-D3935  
ASTM-D4066  
MIL-DTL-22442  
QQ-N-281

MIL-DTL-9177/2D

CONCLUDING MATERIAL

Custodians:  
Air Force – 85  
DLA - CC

Preparing Activity:  
DLA - CC

Review activities:  
Air Force – 19

(Project 5935-2018-118)

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 above using the ASSIST Online database at <https://assist.dla.mil/>.