

INCH POUND

MIL-DTL-83413/7D

30 January 2011

SUPERSEDING

MIL-DTL-83413/7C

24 November 2003

DETAIL SPECIFICATION SHEET

CONNECTORS AND ASSEMBLIES, ELECTRICAL, AIRCRAFT
 GROUNDING: GROUNDING CLAMP CONNECTOR FOR TYPES I AND III
 GROUNDING ASSEMBLIES, CLIP, ELECTRICAL

This specification is approved for used 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-83413.

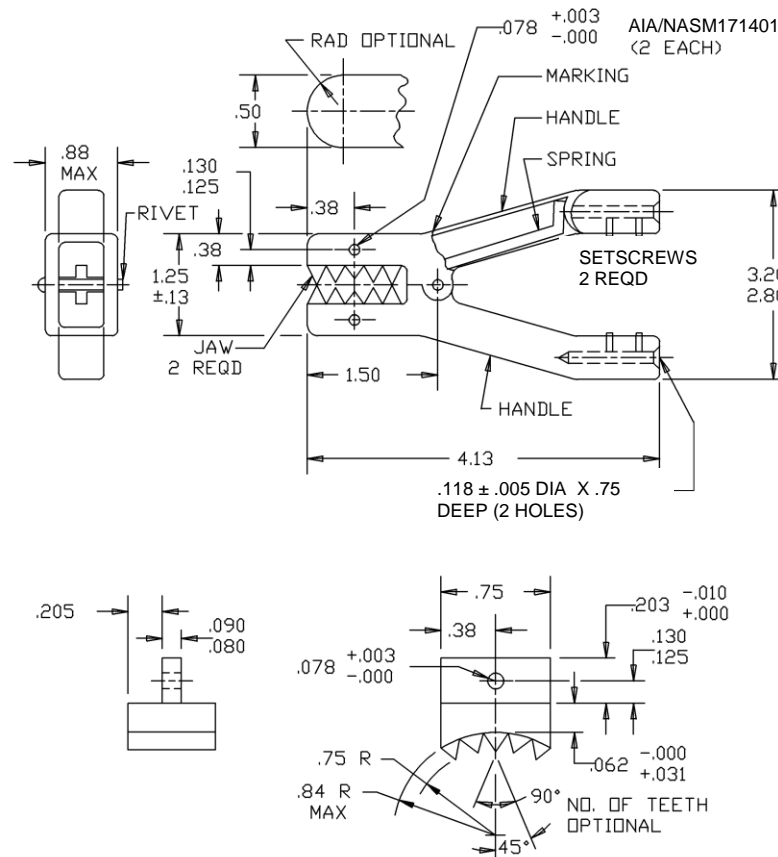


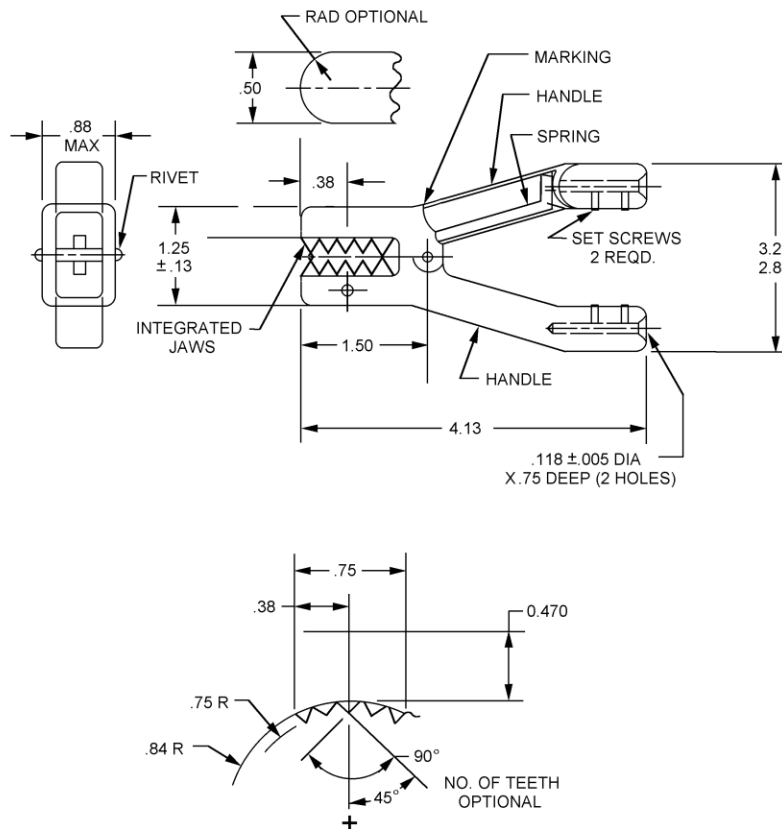
FIGURE 1. Grounding clamp, for types I and III grounding assemblies.

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Inches	mm	Inches	mm	Inches	mm
.003	0.08	.113	2.87	.75	19.1
.004	0.10	.125	3.18	.84	21.3
.010	0.25	.130	3.30	.88	22.4
.031	0.79	.130	3.30	1.25	31.4
.062	1.57	.203	5.16	1.50	38.1
.078	1.98	.205	6.35	2.80	76.1
.080	2.03	.380	9.70	3.20	81.3
.090	2.29	.500	12.70	4.13	104.9

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Surface toughness: If cast, smooth cast finish 125 or 250 all over, except machine surface 63.
4. Remove all burrs and sharp edges .010 (0.25 mm) to .020 (0.51 mm) radius.
5. Unless otherwise specified, tolerance is $\pm .03$ (0.8 mm) on decimals and $\pm 1^\circ$ on angles.

FIGURE 1. Grounding clamp, for types I and III grounding assemblies - Continued.FIGURE 2. Grounding clamp, for types I and III grounding assemblies with integrated jaw.

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.004	0.10	.125	3.18	.84	21.3
.010	0.25	.130	3.30	.88	22.4
.031	0.79	.130	3.30	1.25	31.4
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NOTES:

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FIGURE 2. Grounding clamp, for types I and III grounding assemblies with integrated jaw - Continued.

REQUIREMENTS:

Material-handle: Stainless steel in accordance with SAE-AMS-5355, grade 17-4PH on figure 2 configuration only, without passivation or aluminum alloy in accordance with ASTM-A385, ASTM-B26/B26M, ASTM-B108/B108M and SAE-J452, SAE-J453, SAE-AMS-4290, SAE-AMS-4291, Alloy 360, A380 or 384.

Material-spring: .125 diameter music wire in accordance with ASTM-A228/A228M, or equal. Heat treatment shall be as required to meet requirements. The spring shall be stress relieved, zinc/clear plated in accordance with ASTM-B633, or Nickel plated in accordance with ASTM-B733.

Material set screw: AIA/NASM51021, passivated in accordance with SAE-AMS 2700

Clamp connector resistance: Shall not exceed 500 milliohms.

Salt spray: 500 hours in accordance with test procedure EIA-364-26.

Part or Identifying Number (PIN): M83413/7-1: standard option without integrated jaw
M83413/7-1A: option with integrated jaw

Alternate jaw material: MPIF FX - 1008-110HT in accordance with Metal Powder Industries Federation, 105 College Road East, Princeton, New Jersey 08540.

QUALIFICATION:

Qualification is not required for this specification sheet. First article inspection shall be a visual and mechanical inspection in accordance with MIL-DTL-83413.

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Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. 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 and relationship to the last previous issue.

Referenced documents. In addition to MIL-DTL-83413, this document references the following:

ASTM-A228/A228M	AIA/NASM171401
ASTM-A385	AIA/NASM 51021
ASTM-B26/B26M	SAE-J452
ASTM-B108/B108M	SAE-J453
ASTM-B633	SAE-AMS 2700
ASTM-B733	SAE-AMS-4290
EIA-364-26	SAE-AMS-4291
MPIF FX-1008-110HT	SAE-AMS-5355

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5999-2010-001)

Review activities:

Army - AR, CR, CR4, MI
Navy - MC
Air Force - 02, 13, 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 above using the ASSIST Online database at <https://assist.daps.dla.mil>.