

INCH-POUND

MIL-DTL-83413/12A
 09 October 2015
 SUPERSEDING
 MIL-DTL-83413/12
 w/Amendment 1
 22 October 2014

DETAIL SPECIFICATION SHEET

CONNECTORS AND ASSEMBLIES, ELECTRICAL, AIRCRAFT
 GROUNDING: GROUNDING CLAMP CONNECTOR FOR TYPES I AND III
 GROUNDING ASSEMBLIES, STAINLESS STEEL 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.

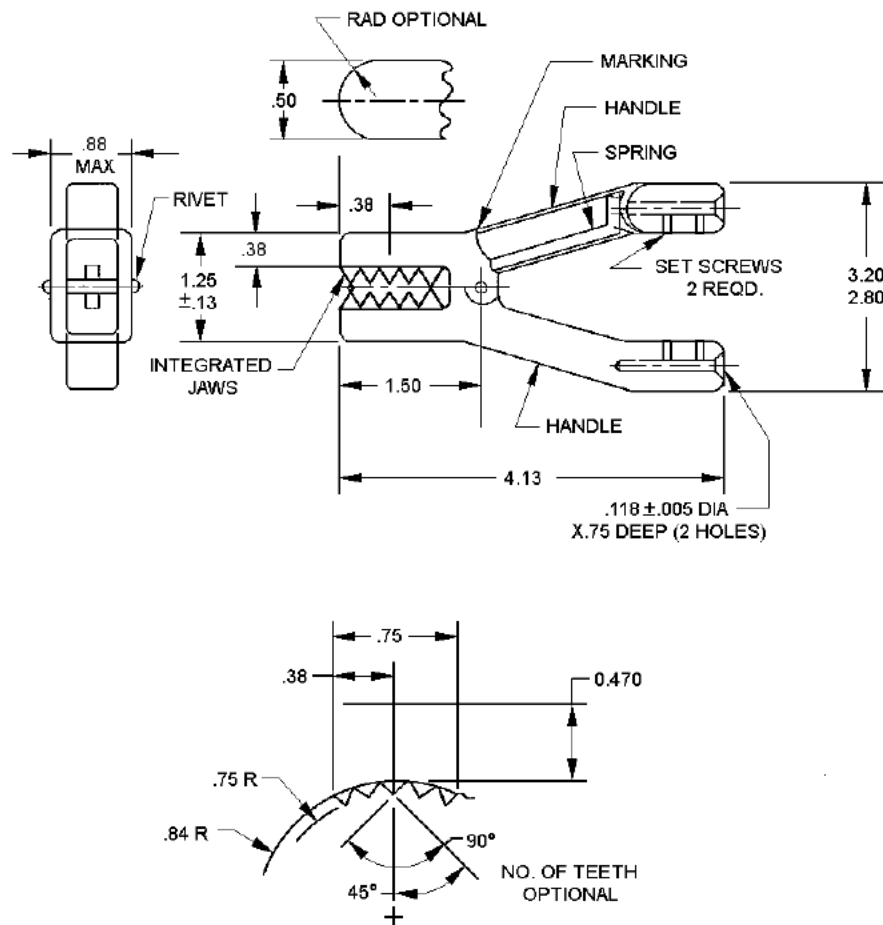


FIGURE 1. Grounding clamp, for types I and III grounding assemblies.



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Inches	mm	Inches	mm	Inches	mm
.003	0.08	.113	2.87	.84	21.3
.004	0.10	.125	3.18	.88	22.4
.010	0.25	.130	3.30	1.25	31.8
.031	0.79	.203	5.16	1.50	38.1
.062	1.57	.205	5.21	2.80	71.1
.078	1.98	.380	9.65	3.20	81.3
.080	2.03	.500	12.70	4.13	104.9
.090	2.29	.750	19.1		

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.

REQUIREMENTS:

Material:

Handle: The handle material shall be stainless steel in accordance with SAE-AMS-5355, or SAE-AMS-5343, grade 17-4PH, with optional passivation.

Spring: The spring material shall be .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.

Set screw: The set screw shall meet the requirements of AIA/NASM51021, and shall be passivated in accordance with SAE-AMS 2700.

Salt spray: 500 hours in accordance with test procedure EIA/ECA-364-26 test condition C.

Clamp connector resistance: Shall not exceed 500 milliohms when tested in accordance with MIL-DTL-83413. Test to be performed after the salt spray test.

Part or Identifying Number (PIN): M83413/12-1.

QUALIFICATION:

Qualification is not required.

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FIRST ARTICLE TEST:

First article inspection shall consist of a visual and mechanical inspection in accordance with MIL-DTL-83413 and the requirements stated in this specification sheet.

Samples for first article inspection shall be representative of the products proposed to be furnished to this specification. Test samples, consisting of 12 grounding clamps shall be examined and tested in accordance with this specification. Test results shall be submitted to the acquiring activity.

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 previous issue.

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

AIA/NASM51021
ASTM-A228/A228M
ASTM-B633
ASTM-B733
EIA/ECA-364-26
SAE-AMS 2700
SAE-AMS-5343
SAE-AMS-5355

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5999-2015-007)

Review activities:

Army - AR, CR, CR4, MI
Navy - MC
Air Force - 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.dla.mil>.