

INCH-POUND

MIL-STD-1632B
11 June 2014
SUPERSEDING
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27 March 1978

DEPARTMENT OF DEFENSE
INTERFACE STANDARD
INSERT ARANGMENTS
FOR
MIL-DTL-28804 HIGH DENSITY,
RECTANGULAR, ELECTRICAL CONNECTORS



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FOREWORD

Insert arrangements for MIL-DTL-28804 High Density, Rectangular Connectors.

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1. This standard is approved for use by all Departments and Agencies of the Department of Defense.
2. Comments, suggestions, or questions on this document should be addressed to: DLA Land and Maritime, ATTN: VAI, PO Box 3990, Columbus, OH 43218-3990, or emailed to rectangularconnector@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <https://assist.dla.mil/>.

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1. SCOPE

1.1 Scope. This standard covers insert arrangements for use with MIL-DTL-28804 high density rectangular electric connectors. It is used to control the dimensions and configuration of insert patterns and the contact sizes.

2 APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 of this standard. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3, 4, or 5 of this standard, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-DTL-28804 - Connectors, Electric, Rectangular, High Density, Polarized Center Screwlock

(Copies of these documents are available online at <http://quicksearch.dla.mil/> .

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

ASME INTERNATIONAL

ASME-Y14.5 - Dimensioning and Tolerancing

(Copies of these documents are available online at <http://www.asme.org>.

2.4 Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained

3. DEFINITIONS

3.1 Definitions. The terms used in this standard are generally accepted by the electrical and electronics industries and commonly used in electrical connector engineering practice.

4. GENERAL REQUIREMENTS: Not applicable.

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5. DETAIL REQUIREMENTS

5.1 Dimensions. Dimensions shall be in accordance with the applicable section of this standard and the following dimensional data:

- a. Dimensioning and tolerancing in accordance with ASME-Y14.5. Dimensions are true position and are inches.
- b. Metric equivalents are given for information only and are based on 1 inch equals 25.4 mm.
- c. Dimensions and markings shown are for engaging face of pin insert; socket inserts are mirror image.
- d. Contact holes in insert shall be located on TP (true position) within .005 inch (0.13 mm) diameter circle.
- e. Tolerances are ± 0.010 for three place decimals, ± 0.030 for two place decimals and $\pm 0^\circ 30'$ for angles.
- f. Polarization shall be in accordance with MIL-DTL-28804.

5.2. Contacts. Contacts shall be in accordance with MIL-DTL-28804/9 and MIL-DTL-28804/10 or the applicable connector specification sheet.

5.3 Marking. Marking shall be in accordance with MIL-DTL-28804 and as shown in the applicable section of the standard.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

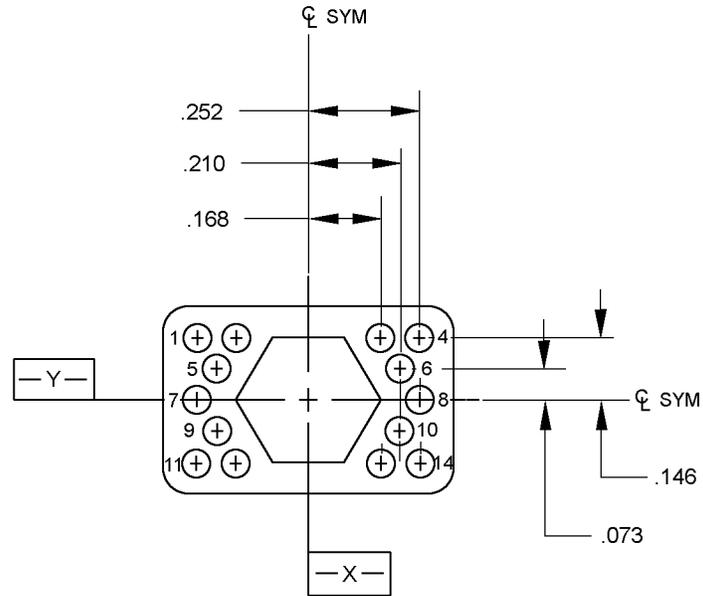
6.1 Subject term (key word) listing.

Contact sizes
Insert pattern

6.2 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.

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SHELL SIZE 8



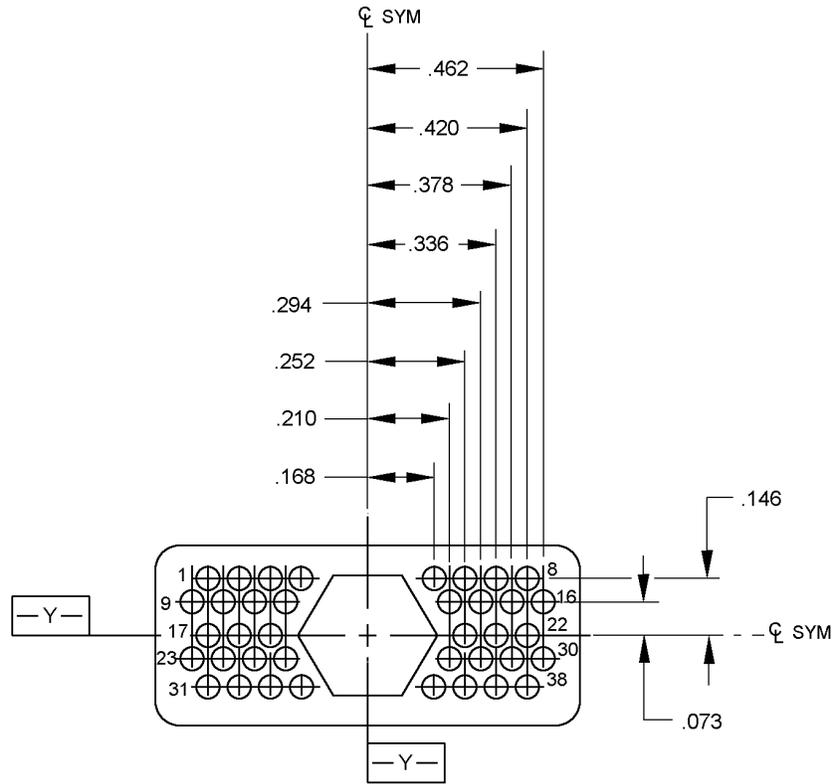
Inches	mm
.073	1.85
.146	3.71
.168	4.27
.210	5.33
.252	6.40

Arrangement number	Number of contacts	Size contact
1	14	22

FIGURE 1. Dimensions and configurations.

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SHELL SIZE 10

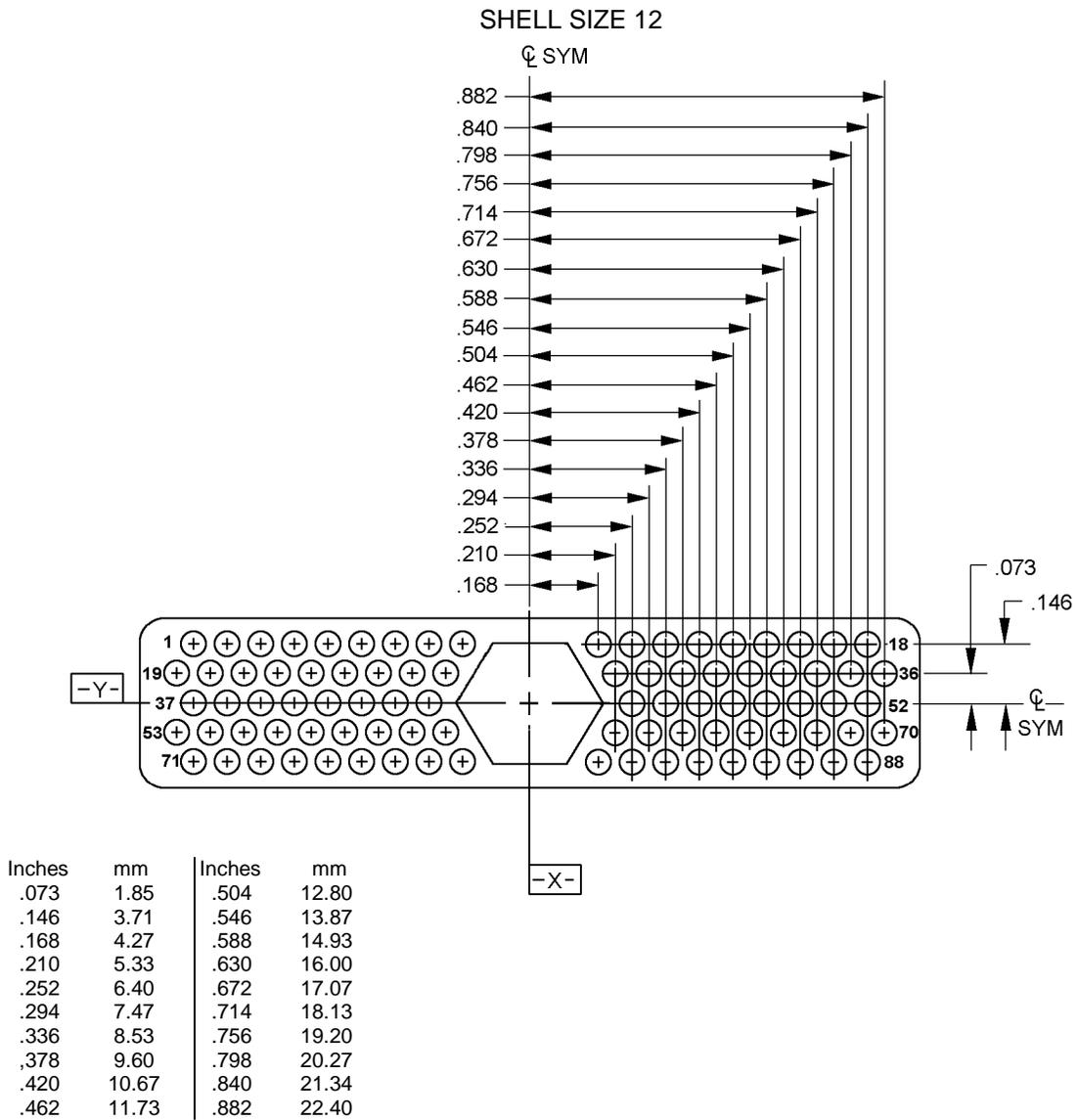


Inches	mm
.073	1.85
.146	3.71
.168	4.27
.210	5.33
.252	6.40
.294	7.47
.336	8.53
.378	9.60
.420	10.67
.462	11.73

Arrangement number	Number of contacts	Size contact
1	38	22

FIGURE 2. Dimensions and configurations - Continued.

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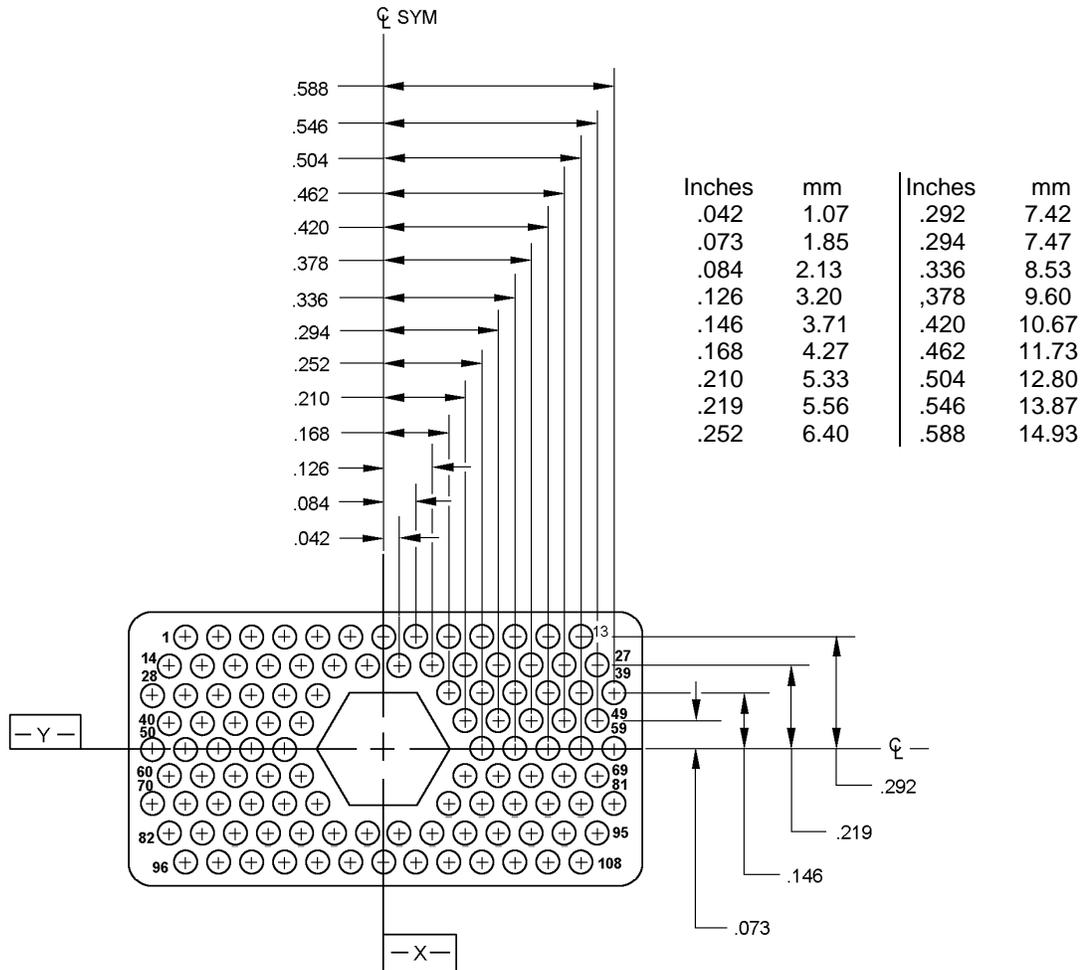


Arrangement number	Number of contacts	Size contact
1	88	22

FIGURE 3. Dimensions and configurations - Continued.

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SHELL SIZE 14

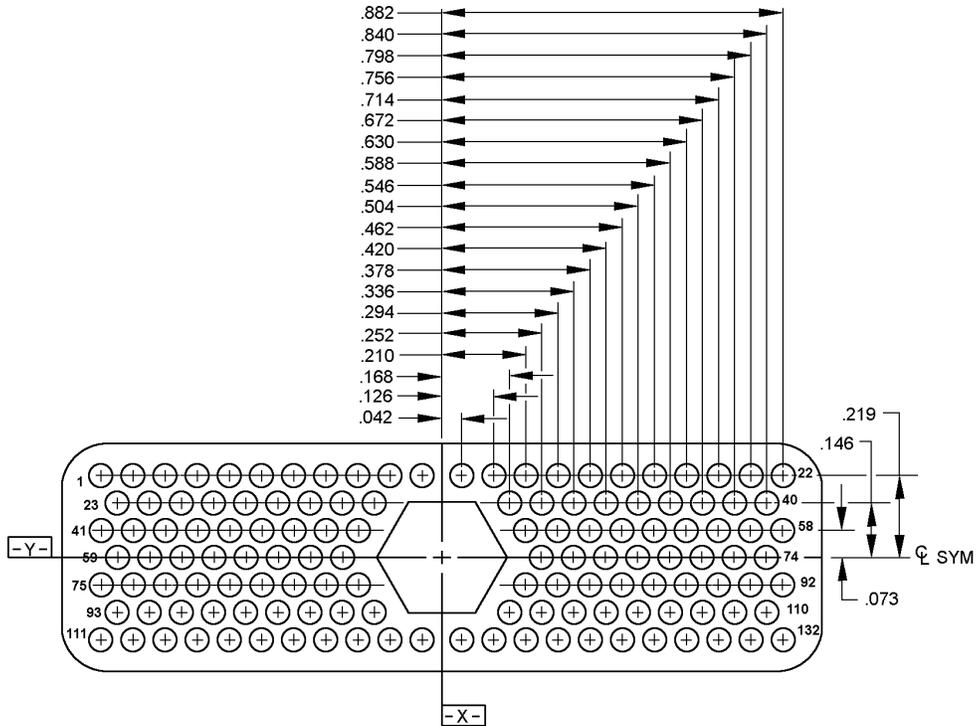


Arrangement number	Number of contacts	Size contact
1	108	22

FIGURE 4. Dimensions and configurations - Continued.

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SHELL SIZE 16



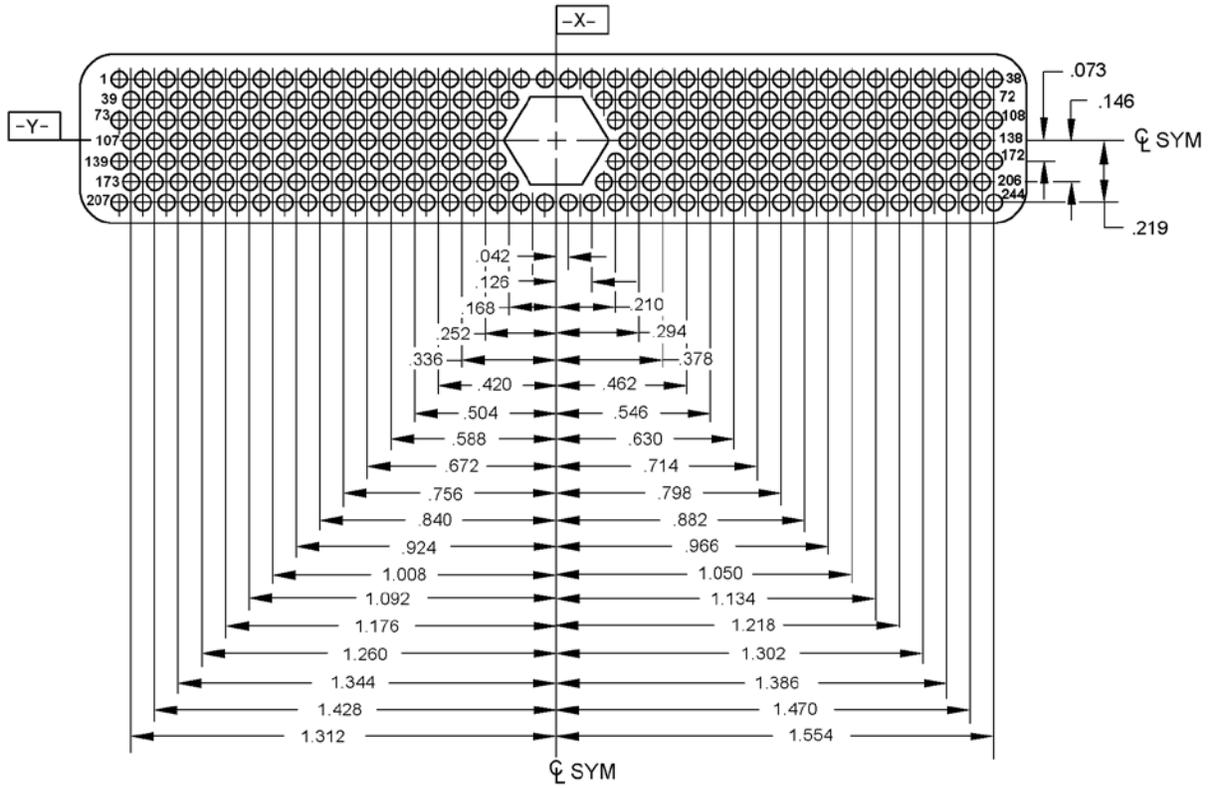
Inches	mm	Inches	mm
.042	1.07	.420	10.67
.073	1.85	.462	11.73
.126	3.20	.504	12.80
.146	3.71	.546	13.87
.168	4.27	.588	14.93
.210	5.33	.630	16.00
.219	5.56	.672	17.07
.252	6.40	.714	18.13
.294	7.47	.756	19.20
.336	8.53	.798	20.27
.378	9.60	.840	21.34
		.882	22.40

Arrangement number	Number of contacts	Size contact
1	132	22

FIGURE 5. Dimensions and configurations - Continued.

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SHELL SIZE 18



Inches	mm	Inches	mm	Inches	mm
.042	1.07	.504	12.80	1.050	26.67
.073	1.85	.546	13.87	1.092	27.74
.126	3.20	.588	14.93	1.134	28.80
.146	3.71	.630	16.00	1.176	29.87
.168	4.27	.672	17.07	1.218	30.94
.210	5.33	.714	18.13	1.260	32.00
.219	5.56	.756	19.20	1.302	33.07
.252	6.40	.798	20.27	1.344	34.14
.294	7.47	.840	21.34	1.386	35.20
.336	8.53	.882	22.40	1.428	36.27
.378	9.60	.924	23.47	1.470	37.34
.420	10.67	.966	24.54	1.512	38.40
.462	11.73	1.008	25.60	1.554	39.47

Arrangement number	Number of contacts	Size contact
1	244	22

FIGURE 6. Dimensions and configurations - Continued.

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force – 85
DLA - CC

Preparing activity:
DLA – CC

(Project 5935-2014-006)

Review activities:

Army – AM, AR, AT, CR4, MI
Navy – AS, MC
Air Force – 99

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