

INCH-POUND

MIL-STD-1531B
23 May 2014
SUPERSEDING
MIL-STD-1531A
25 March 1988

DEPARTMENT OF DEFENSE
INTERFACE STANDARD
INSERT ARANGMENTS
FOR
MIL-DTL-83733 RACK AND PANEL CONNECTORS
SHELL SIZE A



MIL-STD-1531B

FOREWORD

Insert arrangements for MIL-DTL-83733 Rack and panel connectors.

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/>.

MIL-STD-1531B

<u>Paragraph</u>	CONTENTS	PAGE
	Forward	ii
1	SCOPE -----	1
1.1	Scope -----	1
2	APPLICABLE DOCUMENTS -----	1
2.1	General -----	1
2.2	Government Documents -----	1
2.2.1	Specifications, standards and handbooks -----	1
2.3	Order of precedence -----	1
3	DEFINITIONS -----	1
3.1	Solderless wrapped, electrical connection -----	1
4	GENERAL REQUIREMENTS -----	1
4.1	Description -----	1
5	DETAIL REQUIREMENTS -----	1
5.1	Dimensions -----	1
5.2	Marking -----	1
5.3	Drawing note -----	1
6.	NOTES -----	2
6.1	Subject term (key word) -----	2
6.2	Changes from previous issue -----	2
	FIGURE	
1	Dimensions and configurations -----	3

MIL-STD-1531B

1. SCOPE

1.1 Scope. This standard covers insert arrangements for use with MIL-DTL-83733 rack and panel connectors, shell size A. 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-83733 - Connectors, Electrical, Miniature, Rectangular Type, Rack to Panel, Environment Resisting, 200 °C Total Continuous Operating Temperature, General Specification For.

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

2.3 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.

5. DETAIL REQUIREMENTS

5.1 Dimensions. Dimensions shall be in accordance with figure 1.

5.2 Marking. Marking shall be in accordance with MIL-DTL-83733 and as shown on figure 1.

MIL-STD-1531B

5.3 Drawing notes. Unless otherwise specified, the following information is applicable to all figures of this military standard.

- a. Dimensions are in inches.
- b. Metric equivalents are given for information only.
- c. Unless otherwise specified, tolerances are $\pm.005$.

6. NOTES

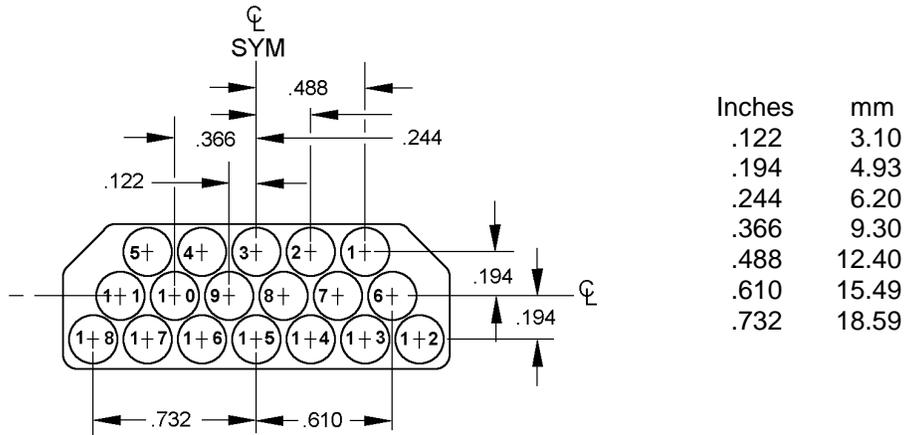
(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Subject term (key word) listing.

Contact sizes
Insert pattern

6.4 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.

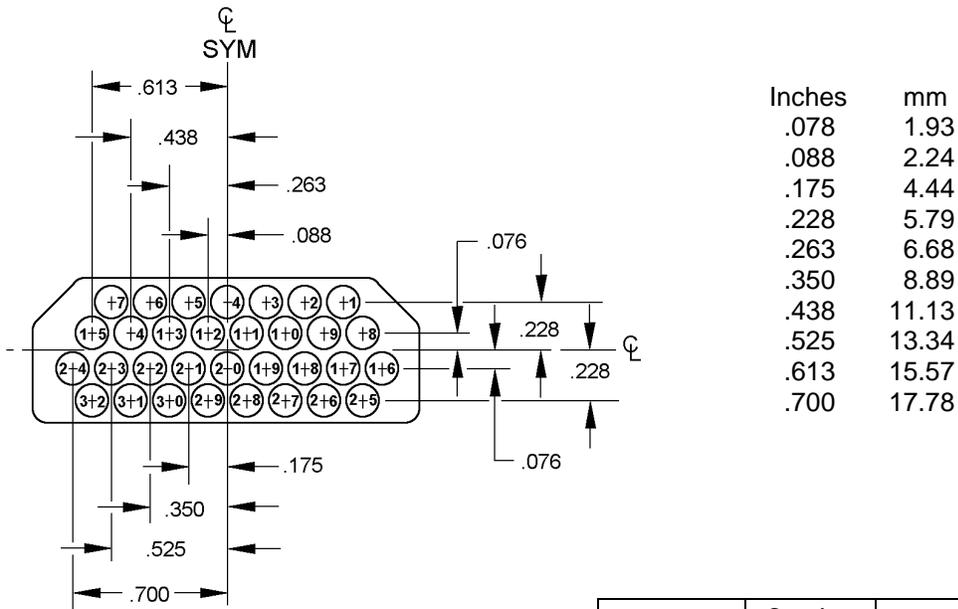
MIL-STD-1531B



Inches	mm
.122	3.10
.194	4.93
.244	6.20
.366	9.30
.488	12.40
.610	15.49
.732	18.59

018 LAYOUT
FACE VIEW PIN INSULATOR

Quantity	Service rating	Contact	Size	Shell size
18	I	All	#12	A



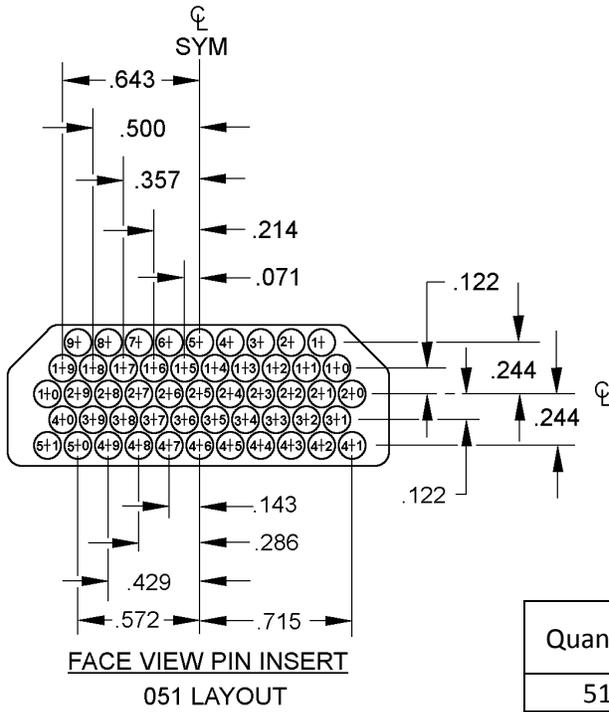
Inches	mm
.078	1.93
.088	2.24
.175	4.44
.228	5.79
.263	6.68
.350	8.89
.438	11.13
.525	13.34
.613	15.57
.700	17.78

032 LAYOUT
FACE VIEW PIN INSULATOR

Quantity	Service rating	Contact	Size	Shell size
32	I	All	#16	A

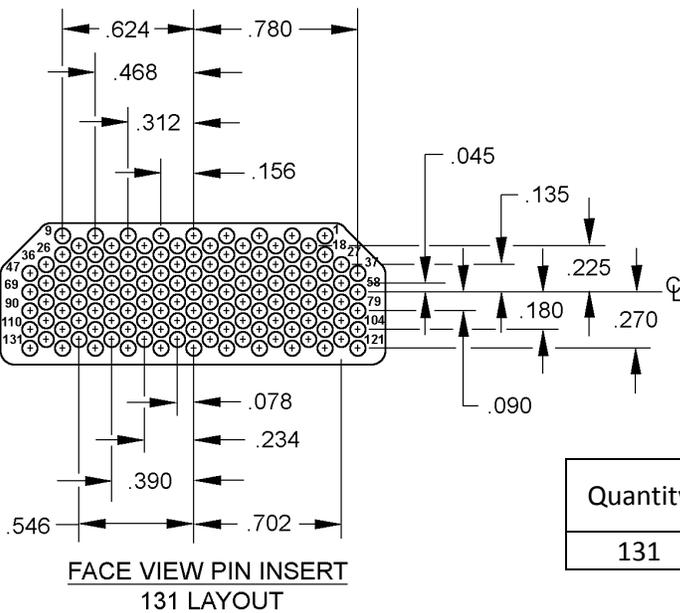
FIGURE 1. Dimensions and configurations.

MIL-STD-1531B



Inches	mm	Inches	mm
.071	1.80	.357	9.07
.122	2.24	.429	10.90
.143	4.44	.500	12.70
.214	5.79	.572	14.53
.244	6.68	.643	16.33
.286	8.89	.715	18.16

Quantity	Service rating	Contact	Size	Shell size
51	I	All	#20	A



Inches	mm	Inches	mm
.045	1.14	.270	6.86
.078	1.98	.312	7.92
.090	2.29	.390	9/91
.135	3.43	.468	11.89
.156	3.96	.546	13.87
.180	4.57	.624	15.85
.225	5.72	.702	17.83
.235	5.97	.780	19.81

Quantity	Service rating	Contact	Size	Shell size
131	M	All	#22D	A

FIGURE 1. Dimensions and configurations - Continued.

MIL-STD-1531B

CONCLUDING MATERIAL

Custodians:
Air Force – 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2014-005)

Review activities:
Air Force – 19, 99

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