

INCH-POUND

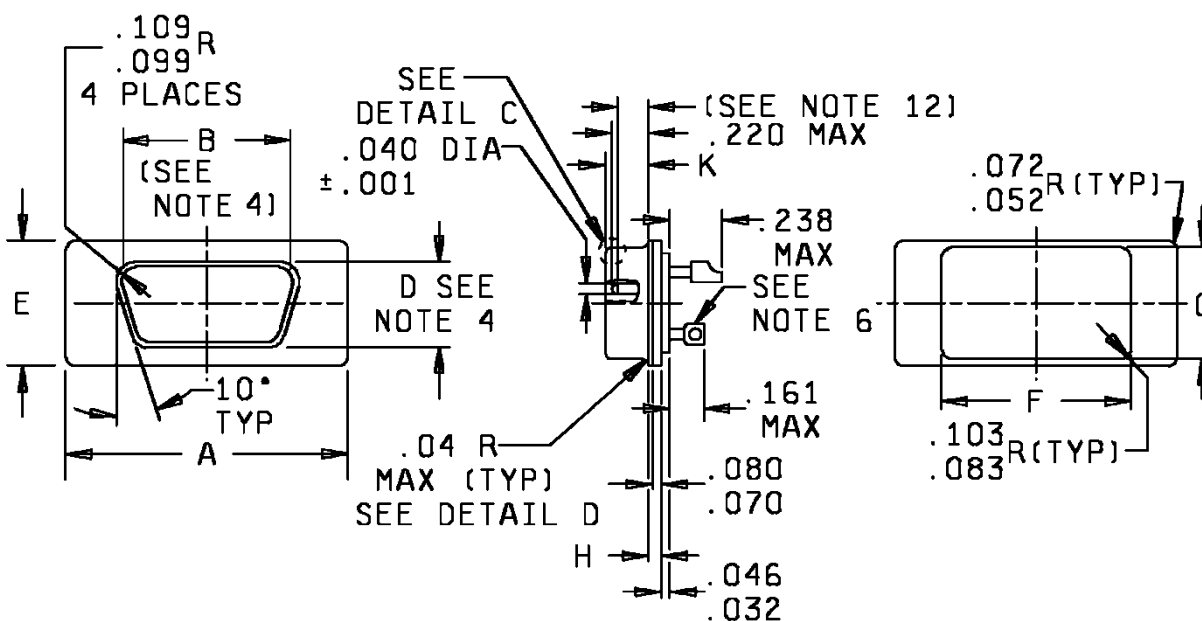
MIL-DTL-24308/9H
w/AMENDMENT 1
16 September 2014
SUPERSEDING
MIL-DTL-24308/9H
25 June 2007

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRIC, RECTANGULAR, MINIATURE,
POLARIZED SHELL, RACK AND PANEL,
PLUG, PIN CONTACTS, HERMETIC, CLASSES H AND K

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

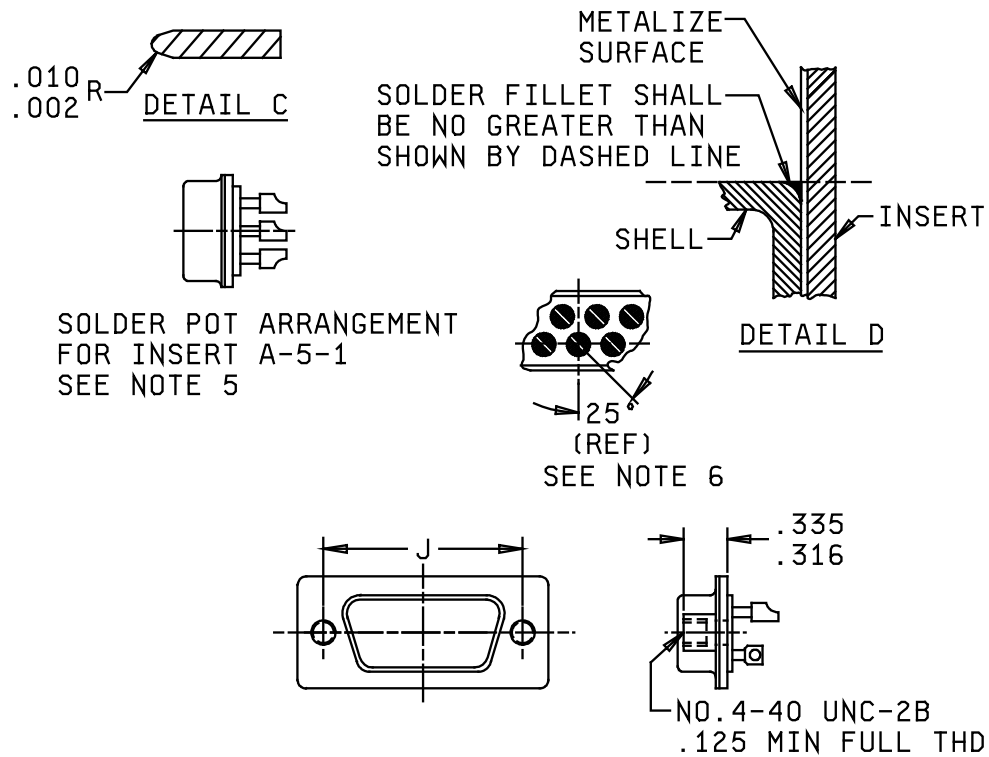
The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-24308.



DETAIL A
Part or Identifying Number (PIN)
M24308/9-1 through 10

FIGURE 1. Shell, plug, hermetic.

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DETAIL B
WITH LOCKPOST
PINS
M24308/9-11 through -20

ALL OTHER DETAILS AND DIMENSIONS
THE SAME AS FOR DETAIL A

FIGURE 1. Shell, plug, hermetic - Continued.

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Detail	Shell size	Dimensions								
		A	B	D	E	F	G	H	J	K
A	1	1.228 (31.19)	.672 (17.07)	.335 (8.51)	.508 (12.90)	.735 (18.67)	.379 (9.63)	.104 (2.64)		.241 (6.12)
		1.198 (30.43)	.662 (16.81)	.325 (8.26)	.488 (12.40)	.715 (18.16)	.359 (9.12)	.084 (2.13)		.229 (5.82)
		1.556 (39.52)	.998 (25.35)	.335 (8.51)	.508 (12.90)	.942 (23.93)	.379 (9.63)	.104 (2.64)		.241 (6.12)
	2	1.526 (38.76)	.988 (25.10)	.325 (8.26)	.488 (12.40)	.922 (23.42)	.359 (9.12)	.084 (2.13)		.229 (5.82)
		2.103 (53.42)	1.540 (39.12)	.335 (8.51)	.508 (12.90)	1.489 (37.82)	.379 (9.63)	.113 (2.87)		.236 (5.99)
		2.073 (52.65)	1.530 (38.86)	.325 (8.26)	.488 (12.40)	1.469 (37.31)	.359 (9.12)	.093 (2.36)		.224 (5.69)
	3	2.744 (69.70)	2.188 (55.58)	.335 (8.51)	.508 (12.90)	2.135 (54.23)	.379 (9.63)	.113 (2.87)		.236 (5.99)
		2.714 (68.94)	2.178 (55.32)	.325 (8.26)	.488 (12.40)	2.115 (53.72)	.359 (9.12)	.093 (2.36)		.224 (5.69)
		2.650 (67.31)	2.084 (52.93)	.446 (11.33)	.620 (15.75)	2.010 (51.05)	.510 (12.95)	.113 (2.87)		.236 (5.99)
	5	2.620 (66.55)	2.074 (52.68)	.436 (11.07)	.600 (15.24)	1.990 (50.55)	.490 (12.45)	.093 (2.36)		.224 (5.69)
B	1	1.228 (31.19)	.672 (17.07)	.335 (8.51)	.508 (12.90)	.735 (18.67)	.379 (9.63)	.104 (2.64)	.989 (25.12)	.241 (6.12)
		1.198 (30.43)	.662 (16.81)	.325 (8.26)	.488 (12.40)	.715 (18.16)	.359 (9.12)	.084 (2.13)	.979 (24.87)	.229 (5.82)
		1.556 (39.52)	.998 (25.35)	.335 (8.51)	.508 (12.90)	.942 (23.93)	.379 (9.63)	.104 (2.64)	1.317 (33.45)	.241 (6.12)
	2	1.526 (38.76)	.988 (25.10)	.325 (8.26)	.488 (12.40)	.922 (23.42)	.359 (9.12)	.084 (2.13)	1.307 (33.20)	.229 (5.82)
		2.103 (53.42)	1.540 (39.12)	.335 (8.51)	.508 (12.90)	1.489 (37.82)	.379 (9.63)	.113 (2.87)	1.857 (47.17)	.236 (5.99)
		2.073 (52.65)	1.530 (38.86)	.325 (8.26)	.488 (12.40)	1.469 (37.31)	.359 (9.12)	.093 (2.36)	1.847 (46.91)	.224 (5.69)
	3	2.744 (69.70)	2.188 (55.58)	.335 (8.51)	.508 (12.90)	2.135 (54.23)	.379 (9.63)	.113 (2.87)	2.505 (63.63)	.236 (5.99)
		2.714 (68.94)	2.178 (55.32)	.325 (8.26)	.488 (12.40)	2.115 (53.72)	.359 (9.12)	.093 (2.36)	2.495 (63.37)	.224 (5.69)
		2.650 (67.31)	2.084 (52.93)	.441 (11.20)	.620 (15.75)	2.010 (51.05)	.510 (12.95)	.113 (2.87)	2.411 (61.24)	.236 (5.99)
	5	2.620 (66.55)	2.074 (52.68)	.431 (10.95)	.600 (15.24)	1.990 (50.55)	.490 (12.45)	.093 (2.36)	2.401 (60.99)	.224 (5.69)

FIGURE 1. Shell, plug, hermetic - Continued.

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are in parentheses.
3. Metric equivalents are given for information only and are based upon 1.00 inch = 25.4 mm.
4. Dimensions "B" and "D" are calculated at the start of corner radius. .04 (1.0 mm) maximums apply draft minus.
5. In insert arrangements (See MIL-DTL-24308 APPENDIX A) A-1-1, A-2-1, A-3-1, A-4-1, the contact solder pots open toward the top in the upper row and toward the bottom in the lower row. In insert A-5-1 the two top rows face up and the lower row opens toward the bottom. The angular position may vary $\pm 20^\circ$ from vertical centerline.
6. Size 20 contact eyelet terminal flats are rotated $25^\circ \pm 5^\circ$ as shown.
7. Connector shell is solder mount type.
8. Documents shall be of the issue in effect on date of invitation for bid.
9. For design feature purposes, this standard takes precedence over procurement documents referenced herein.
10. Patent notice. The Government has a royalty free license under the U.S. Patents listed below for the benefit of manufacturers of the items disclosed and described herein, either for the Government or for use in equipment delivered to the Government.

Patent Numbers

2790153 expires April 23, 1974
3110093 expires November 12, 1980
3158424 expires November 24, 1981

11. Copyright notice. All information disclosed in this military standard which is or may be copyrighted by ITT Cannon Electric is reproduced herein with the express permission of the copyright owner.
12. Dimensions are .155 minimum full pin diameter extension (sizes 3 through 6) and .164 minimum full pin diameter extension (sizes 1 and 2).

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.052	1.32	.103	2.62	.220	5.59
.002	0.05	.070	1.78	.109	2.77	.238	6.05
.010	0.25	.072	1.83	.125	3.18	.316	8.03
.032	0.81	.080	2.03	.155	3.94	.335	8.51
.040	1.02	.083	2.11	.161	4.09		
.046	1.17	.090	2.29	.164	4.17		

FIGURE 1. Shell, plug, hermetic - Continued.

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REQUIREMENTS:

The connectors shall conform to the design standards indicated in table I.

TABLE I. Design standards. 1/

Part or Identifying Number (PIN) class H	PIN class K	Shell size	Shell Detail (See figure 1)	Insert Arrangement reference number <u>2/</u>	Contact terminals <u>3/</u>	
					Solder cup	Eyelet
M24308/9-1	M24308/9-21	1	A	A-1-1	B-4	
M24308/9-2	M24308/9-22	2	A	A-2-1	B-4	
M24308/9-3	M24308/9-23	3	A	A-3-1	B-4	
M24308/9-4	M24308/9-24	4	A	A-4-1	B-4	
M24308/9-5	M24308/9-25	5	A	A-5-1	B-4	
M24308/9-6	M24308/9-26	1	A	A-1-1		B-3
M24308/9-7	M24308/9-27	2	A	A-2-1		B-3
M24308/9-8	M24308/9-28	3	A	A-3-1		B-3
M24308/9-9	M24308/9-29	4	A	A-4-1		B-3
M24308/9-10	M24308/9-30	5	A	A-5-1		B-3
M24308/9-11	M24308/9-31	1	B	A-1-1	B-4	
M24308/9-12	M24308/9-32	2	B	A-2-1	B-4	
M24308/9-13	M24308/9-33	3	B	A-3-1	B-4	
M24308/9-14	M24308/9-34	4	B	A-4-1	B-4	
M24308/9-15	M24308/9-35	5	B	A-5-1	B-4	
M24308/9-16	M24308/9-36	1	B	A-1-1		B-3
M24308/9-17	M24308/9-37	2	B	A-2-1		B-3
M24308/9-18	M24308/9-38	3	B	A-3-1		B-3
M24308/9-19	M24308/9-39	4	B	A-4-1		B-3
M24308/9-20	M24308/9-40	5	B	A-5-1		B-3

1/ These connectors mate with connectors specified in MIL-DTL-24308/1, /2, and /23.

2/ For insert arrangement see MIL-DTL-24308 Appendix A.

3/ For contacts see MIL-DTL-24308 Appendix B.

Supersession data: See table II.

TABLE II. Shell supersession data.

Shell detail (see figure 1)	Superseded MS sheet
Detail A	MS18272-1 through -5
Detail B	MS18272-6 through -10

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. 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.

MIL-DTL-24308/1
MIL-DTL-24308/2
MIL-DTL-24308/23

PIN example:

	<u>M24308/9</u>	<u>-10</u>
Specification sheet number	_____	_____
Data sheet number from table I	_____	_____

CONCLUDING MATERIAL

Review activities:
Army - AV, AT, CR4, MI
Navy - AS, CG, MC, SH
Air Force – 99

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