

INCH-POUND

MS17348F  
 3 January 2003  
 SUPERSEDING  
 MS17348E  
 18 April 1994

## MILITARY SPECIFICATION SHEET

## CONNECTOR, RECEPTACLE, ELECTRICAL, JAMNUT (BOX)

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 and MIL-C-22992.

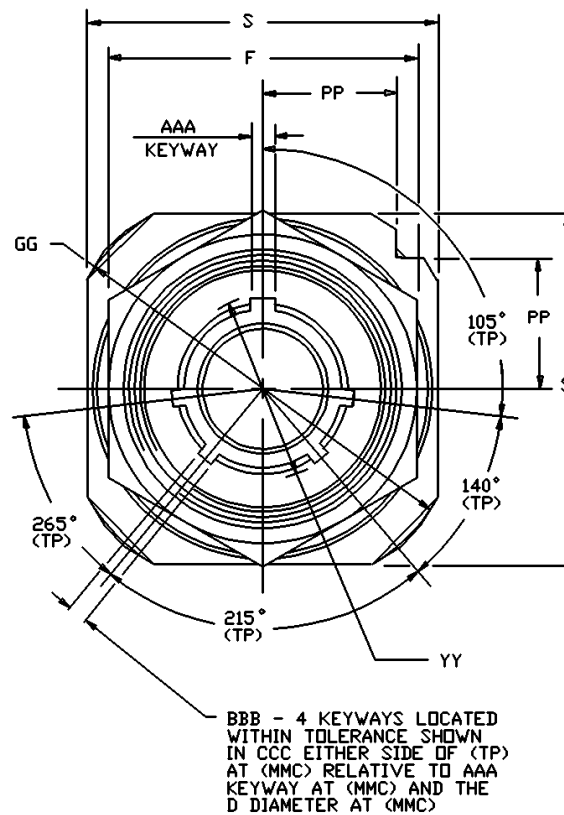


FIGURE 1. Configuration and dimensions.

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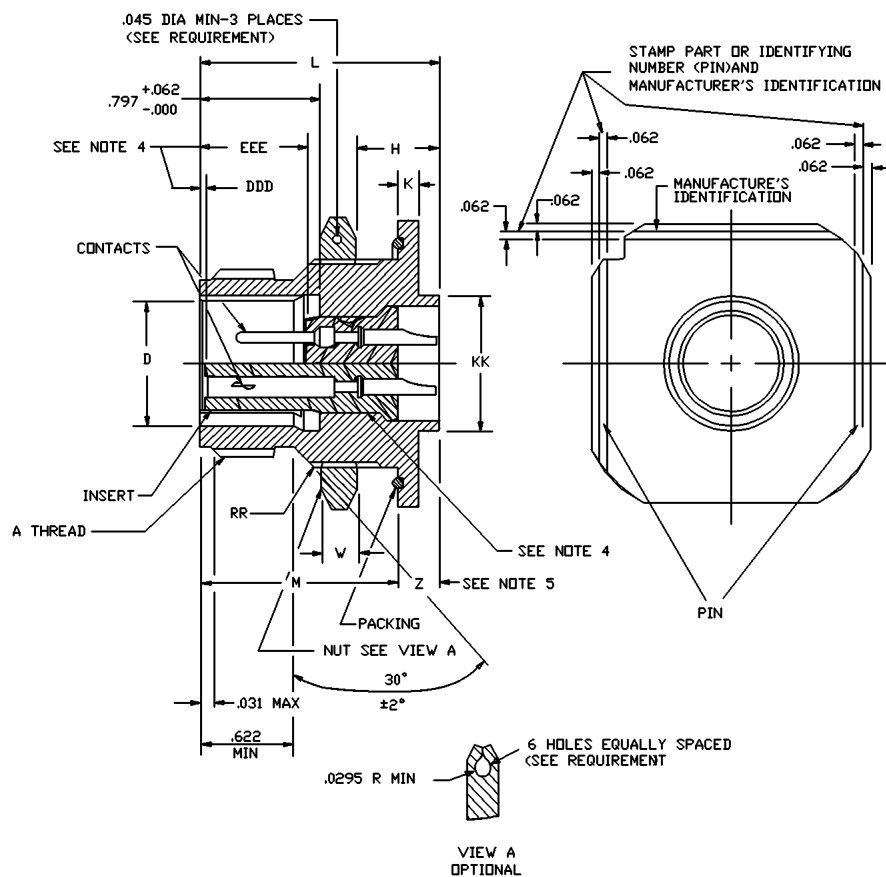


FIGURE 1. Configuration and dimensions – Continued.

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Size	A Thread (plated) Class 2A	D dia + .005 - .010	F hex + .017 - .016	H Panel Thickness		K + .006 - .005	L + .011 - .010
				min	max		
12	0.8750-0.1P-0.2L-DS	.567	1.250	.094	.297	.125	1.578
14	1.0000-0.1P-0.2L-DS	.692	1.312	.094	.297	.125	1.578
16	1.1250-0.1P-0.2L-DS	.817	1.500	.094	.297	.188	1.578
118	1.2500-0.1P-0.2L-DS	.942	1.562	.094	.266	.188	1.578
20	1.3750-0.1P-0.2L-DS	1.068	1.750	.094	.266	.188	1.578
22	1.5000-0.1P-0.2L-DS	1.192	1.875	.094	.266	.188	1.578
24	1.7500-0.1P-0.2L-DS	1.317	2.125	.094	.328	.188	1.641
28	2.0000-0.1P-0.2L-DS	1.536	2.375	.094	.328	.219	1.641
32	2.2500-0.1P-0.2L-DS	1.786	2.625	.094	.328	.219	1.641
36	2.5000-0.1P-0.2L-DS	2.005	2.875	.094	.328	.219	1.641
40	2.7500-0.1P-0.2L-DS	2.255	3.125	.094	.328	.219	1.641
44	3.0000-0.1P-0.2L-DS	2.545	3.375	.094	.328	.219	1.641

Size	M	S	W + .017 - .000	Z max <u>5</u> /	Z min (size 0 only)	DDD Socket Insert Location ± .030	EEE Pin Insert Location ± .030
12	1.235	1.375	.188	.429	NA	.020	.729
14	1.235	1.500	.188	.429	NA	.020	.729
16	1.235	1.750	.188	.461	NA	.020	.729
118	1.203	1.875	.188	.461	NA	.020	.729
20	1.203	2.000	.188	.461	.535	.020	.729
22	1.203	2.125	.188	.461	.535	.020	.729
24	1.266	2.375	.188	.398	.472	.020	.729
28	1.329	2.625	.250	.335	.409	.020	.729
32	1.329	2.875	.250	.335	.409	.020	.729
36	1.329	3.125	.250	.335	.409	.020	.729
40	1.329	3.406	.250	.335	.409	.020	.729
44	1.329	3.656	.250	.562	.409	.039	.764

FIGURE 1. Configuration and dimensions – Continued.

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SIZE	GG dia	KK dia + .011 - .010	PP + .011 - .010	RR Thread (plated) class 2A
12	1.562	.640	.486	1.0000-20 UNEF
14	1.750	.765	.530	1.1250-18 NEF
16	2.000	.890	.623	1.2500-18 NEF
18	2.125	1.015	.663	1.3750-18 NEF
20	2.250	1.171	.707	1.5000-18 NEF
22	2.500	1.296	.751	1.6250-18 NEF
24	2.750	1.421	.840	1.8750-16 UN
28	3.000	1.625	.928	2.1250-16 UN
32	3.250	1.891	1.017	2.3750-16 UN
36	3.500	2.078	1.104	2.6250-16 UN
40	3.750	2.312	1.213	2.8750-16 UN
44	4.000	2.562	1.299	3.1250-16 UN

SIZE	YY dia + .010 - .006	AAA	BBB	CCC	Packing Preformed
12	.647	.126 + .007 / - .001	.063 + .007 / - .001	.0035	SAE-AS29513-24
14	.772	.126 + .007 / - .001	.063 + .007 / - .001	.0035	SAE-AS29513-26
16	.897	.182 + .010 / - .001	.108 + .010 / - .001	.007	SAE-AS29513-127
18	1.022	.182 + .010 / - .001	.108 + .010 / - .001	.007	SAE-AS29513-129
20	1.148	.182 + .010 / - .001	.108 + .010 / - .001	.007	SAE-AS29513-131
22	1.272	.182 + .010 / - .001	.108 + .010 / - .001	.007	SAE-AS29513-133
24	1.473	.260 + .010 / - .001	.155 + .010 / - .001	.007	SAE-AS29513-137
28	1.692	.260 + .010 / - .001	.155 + .010 / - .001	.007	SAE-AS29513-141
32	1.942	.260 + .010 / - .001	.155 + .010 / - .001	.007	SAE-AS29513-145
36	2.161	.260 + .010 / - .001	.155 + .010 / - .001	.007	SAE-AS29513-149
40	2.411	.260 + .010 / - .001	.155 + .010 / - .001	.007	SAE-AS29513-234
44	2.692	.260 + .010 / - .001	.155 + .010 / - .001	.007	SAE-AS29513-236

FIGURE 1. Configuration and dimensions – Continued.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.328	8.33	.897	22.78	1.473	37.42	2.312	58.78
.0035	0.089	.335	8.51	.928	23.57	1.5000	38.100	2.317	58.975
.005	0.13	.398	10.11	.942	23.93	1.500	38.105	2.3750	60.525
.006	0.15	.409	10.34	1.0000	25.400	1.536	39.01	2.375	60.33
.007	0.18	.429	10.89	1.015	25.78	1.562	39.67	2.411	60.24
.010	0.25	.461	11.71	1.017	25.83	1.578	40.08	2.5000	63.500
.011	0.28	.472	11.99	1.022	25.96	1.6250	41.275	2.500	63.50
.016	0.41	.486	12.34	1.068	27.13	1.625	41.25	2.562	65.07
.017	0.43	.530	13.46	1.104	28.04	1.641	41.68	2.6250	66.675
.020	0.51	.535	13.59	1.1250	28.575	1.692	42.98	2.625	66.68
.030	0.76	.562	14.27	1.148	29.16	1.7500	44.450	2.692	68.38
.031	0.79	.567	14.40	1.171	29.74	1.750	44.45	2.7500	69.850
.039	0.99	.623	15.82	1.192	30.28	1.786	45.36	2.750	69.85
.045	1.14	.640	16.26	1.203	30.56	1.8750	47.625	2.8750	73.025
.062	1.57	.647	16.43	1.213	30.81	1.875	47.63	2.875	73.03
.063	1.60	.663	16.84	1.235	31.37	1.891	48.03	3.0000	76.200
.094	2.39	.692	17.58	1.2500	31.750	1.942	49.33	3.000	76.20
.108	2.74	.707	17.96	1.250	31.75	2.0000	50.800	3.1250	79.375
.125	3.18	.729	18.52	1.266	32.16	2.000	50.80	3.125	79.38
.126	3.20	.751	19.08	1.272	32.31	2.005	50.93	3.258	82.75
.155	3.94	.764	19.41	1.296	32.92	2.078	52.78	3.375	85.73
.182	4.62	.765	19.43	1.299	32.99	2.1250	53.975	3.406	86.51
.188	4.78	.722	19.61	1.312	33.32	2.125	53.98	3.500	88.90
.219	5.56	.797	20.24	1.317	33.45	2.161	54.89	3.656	92.86
.250	5.78	.817	20.75	1.329	33.75	2.2500	57.150	3.750	95.25
.260	6.60	.840	21.34	1.3750	34.925	2.25	57.15	4.000	101.30
.266	6.76	.8750	22.225	1.375	34.93	2.255	57.28		

## NOTES:

1. All dimensions are in inches.
2. Unless otherwise specified, tolerances are  $\pm .016$  (0.41mm).
3. Metric equivalents are given for information only.
4. Dimensions shall be maintained when inserts are pressed firmly against indicated shoulder.
5. For size 0 contacts only, increase Z dimension by .312 (7.92mm) for shell sizes 12 through 40 and by .062 (1.57 mm) for shell size 44.

FIGURE 1. Configuration and dimensions – Continued.

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## REQUIREMENTS:

Mates with plugs shown on MS17344 and covers shown on MS17349.

Part or Identifying Number (PIN) example.

	<u>MS17348</u>	<u>R</u>	<u>20</u>	<u>C</u>	<u>27</u>	<u>P</u>	<u>W</u>
MS number							
Class							
Shell size							
Finish							
Insert arrangement							
Contact style							
Alternate position							

Class shall be designated by the letter C (pressurized), J (pressurized with grommet) or R (environmental resisting).

For shell size, insert arrangement, alternate position, contact size, spacing and service rating, See MIL-STD-1651.

Shell finish shall be designated by the letter C (conductive) or N (nonconductive).

Safety wire holes shall not pull out when safety wire NI-CU alloy (monel) (UNSn04400) or NI-CR alloy (INCONEL) (UNS N06600) .020 diameter in accordance with NASM20995 is threaded through a hole and a pull of 30 pounds minimum is applied. Two pulls shall be made, one parallel with axis of nut and one perpendicular to axis of nut.

## CONCLUDING MATERIAL

## Custodians:

Army – CR  
Navy – EC  
Air Force – 11  
DLA – CC

## Preparing activity:

DLA – CC

## Review activities:

Army – AR, MI  
Navy – AS, CG, MC, OS, SH, YD  
Air Force – 19, 99  
NASA – NA

(Project 5935–4419–004)

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<p align="center"><b>INSTRUCTIONS</b></p> <p><b>1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.</b></p> <p><b>2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send to preparing activity.</b></p> <p><b>3 The preparing activity must provide a reply within 30 days from receipt of the form.</b></p> <p>NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.</p>			
I RECOMMEND A CHANGE:		1. DOCUMENT NUMBER <b>MS17348F</b>	2. DOCUMENT DATE (YYYYMMDD) <b>2003/01/03</b>
3. DOCUMENT TITLE <b>Connector, Receptacle, Electrical, Jamnut (Box)</b>			
4. NATURE OF CHANGE <i>(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)</i>			
5. REASON FOR RECOMMENDATION			
6. SUBMITTER			
a. NAME <i>(Last, First, Middle Initial)</i>		b. ORGANIZATION	
c. ADDRESS <i>(Include zip code)</i>	d. TELEPHONE <i>(Include Area Code)</i> (1) Commercial (2) DSN <i>(if applicable)</i>		7. DATE SUBMITTED (YYYYMMDD)
8. PREPARING ACTIVITY			
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