

INCH-POUND

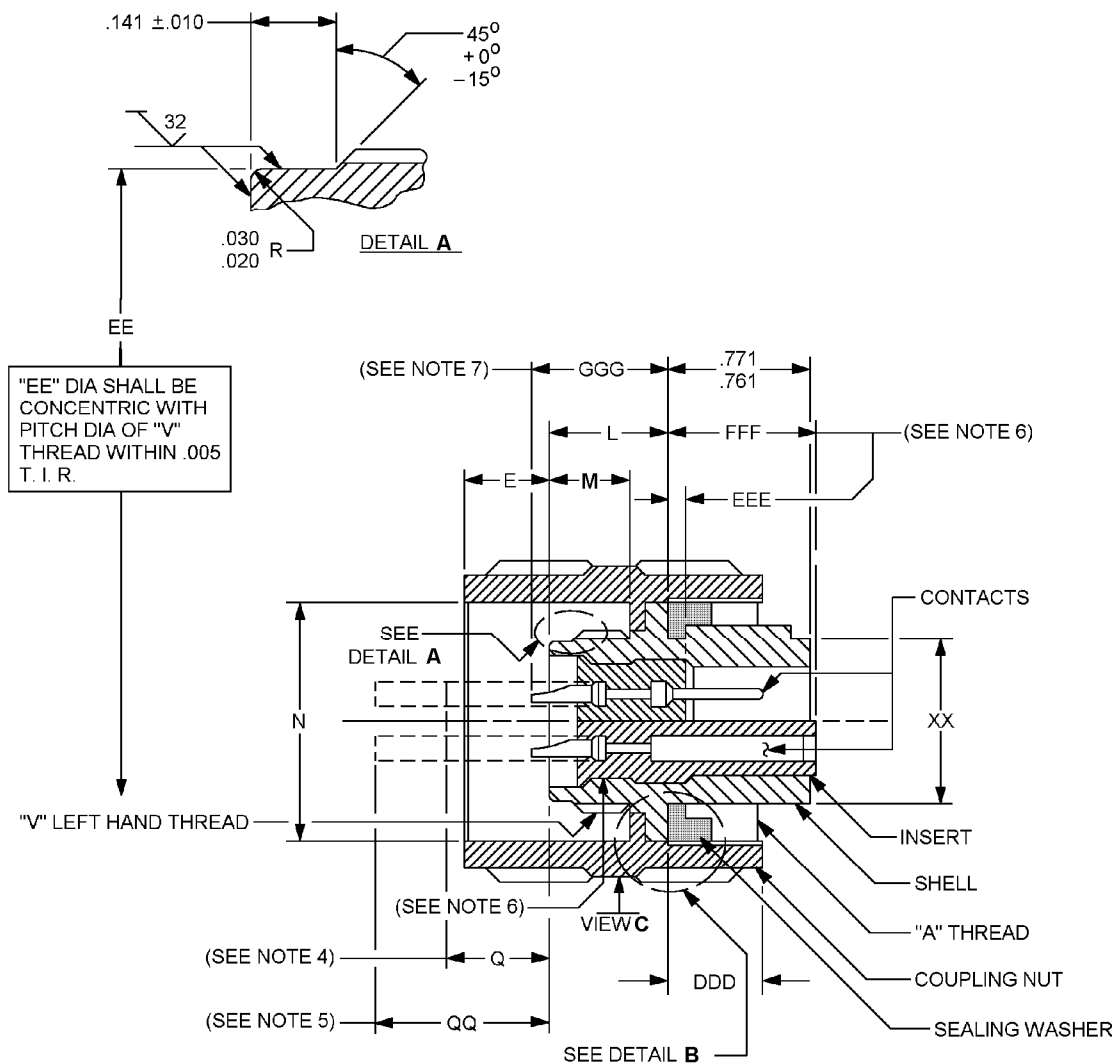
MS17344F
w/AMENDMENT 2
8 September 2010
SUPERSEDING
MS17344F
w/AMENDMENT 1
15 April 2009

DETAIL SPECIFICATION SHEET

CONNECTOR, PLUG, ELECTRICAL, STRAIGHT

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-22992.

FIGURE 1. Dimensions and configuration.

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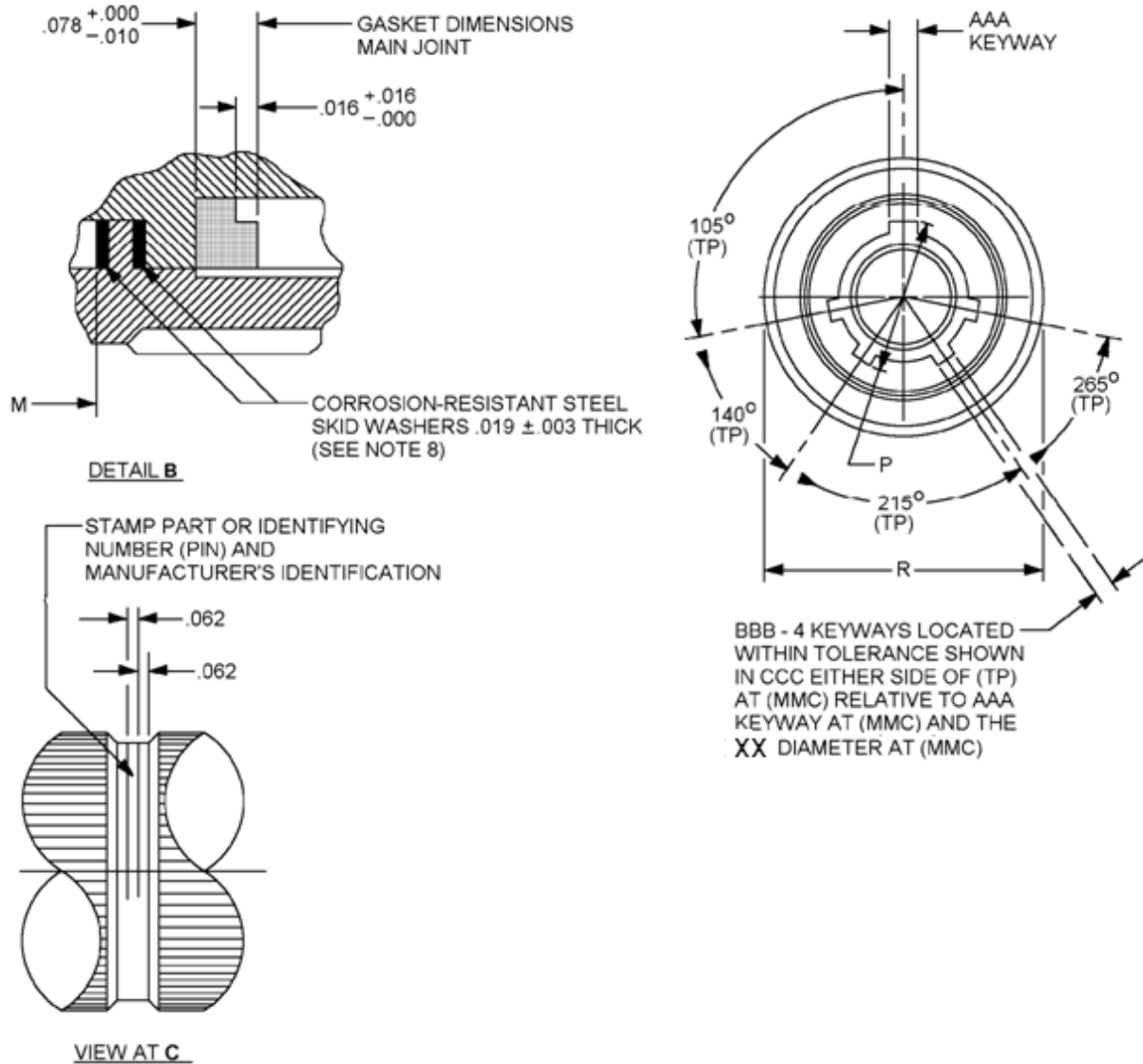


FIGURE 1. Dimensions and configuration - Continued.

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Shell size	A thread (plated) class 2B	E max	L + .011 - .010	M ± .031
12	0.8750-0.1P-0.2L-DS	.100	.738	.529
14	1.0000-0.1P-0.2L-DS			
16	1.1250-0.1P-0.2L-DS	.150		
18	1.2500-0.1P-0.2L-DS	.275		
20	1.3750-0.1P-0.2L-DS			
22	1.5000-0.1P-0.2L-DS			
24	1.7500-0.1P-0.2L-DS		.800	
28	2.0000-0.1P-0.2L-DS			
32	2.2500-0.1P-0.2L-DS		.875	
36	2.5000-0.1P-0.2L-DS	.300		
40	2.7500-0.1P-0.2L-DS	.100	1.041	.717
44	3.0000-0.1P-0.2L-DS	.109		

Shell size	N + .010 - .001	P + .010 - .005	Q max	QQ max	R dia max
12	.985	.627	.477	---	1.156
14	1.109	.752		1.027	1.281
16	1.235	.877			1.469
18	1.359	1.002			1.563
20	1.485	1.128			1.688
22	1.609	1.252			1.844
24	1.859	1.453		.967	2.094
28	2.109	1.672			2.344
32	2.359	1.922	.342	.892	2.594
36	2.609	2.141			2.844
40	2.922	2.391			3.156
44	3.172	2.672	NA	NA	3.406

FIGURE 1. Dimensions and configuration - Continued.

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Shell size	V Thread (plated) class 2A LH	EE dia + .001 - .007	XX dia + .010 - .006	AAA	BBB
12	.7500-20 UNEF	.672	.647	.115 +.001, -.007	.047 +.001, -.007
14	.8750-20 UNEF	.797	.674		
16	1.0000-20 UNEF	.922	.897	.172 +.001, -.010	.078 +.001, -.010
18	1.1250-18 UNEF	1.040	.929		
20	1.2500-18 UNEF	1.164	1.052		
22	1.3750-18 UNEF	1.289	1.177		
24	1.6250-18 UNEF	1.539	1.302		
28	1.8750-16 UN	1.780	1.522	.250 +.001, -.010	.125 +.001, -.010
32	2.0625-16 UN	1.967	1.772		
36	2.3125-16 UN	2.217	1.982		
40	2.6250-16 UN	2.530	2.232		
44	2.8750-16 UN	2.780	2.522		

FIGURE 1. Dimensions and configuration - Continued.

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Shell size	CCC	DDD	EEE pin insert location ± .030	FFF socket insert location ± .030	GGG max	
12	.0035	.655 .593	.084	.793	.898	
14						
16	.007					
18						
20						
22						
24						
28						
32						.677 .610
36						.701 .634
40						.679 .618
44		.049	.774	1.062		

FIGURE 1. Dimensions and configuration - Continued.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.300	7.62	.875	22.22	1.302	33.07	2.141	54.38
.003	0.08	.342	8.69	.877	22.28	1.359	34.52	2.217	56.31
.0035	0.09	.417	10.59	.892	22.66	1.375	34.93	2.232	56.70
.005	0.13	.477	15.49	.898	22.81	1.453	33.91	2.250	57.05
.006	0.15	.529	13.44	.922	23.42	1.469	37.31	2.3125	58.74
.007	0.18	.554	14.07	.929	23.60	1.485	37.72	2.344	59.54
.010	0.25	.593	15.06	.967	24.56	1.500	38.10	2.359	59.92
.011	0.28	.610	15.49	.985	25.02	1.522	38.66	2.391	60.73
.016	0.41	.618	15.70	1.000	25.40	1.539	39.09	2.500	63.50
.019	0.48	.627	15.98	1.002	25.45	1.563	39.70	2.522	64.06
.020	0.51	.655	16.64	1.027	26.09	1.609	40.87	2.530	64.26
.030	0.76	.672	17.07	1.040	26.42	1.625	41.75	2.594	65.89
.031	0.79	.674	17.12	1.041	26.44	1.672	42.47	2.625	66.70
.047	1.19	.677	17.12	1.052	26.72	1.688	42.88	2.629	66.78
.049	1.24	.679	17.25	1.062	26.97	1.750	44.46	2.672	67.87
.062	1.57	.701	17.81	1.109	28.17	1.772	45.01	2.750	69.85
.078	1.98	.717	18.21	1.125	28.60	1.780	45.21	2.844	72.24
.084	2.13	.738	18.75	1.128	28.65	1.844	46.84	2.875	73.04
.100	2.54	.750	19.05	1.156	29.36	1.859	48.22	2.922	74.22
.109	2.77	.752	19.10	1.164	29.57	1.8750	47.625	3.000	76.20
.115	2.92	.761	19.33	1.177	29.90	1.9225	48.832	2.156	80.16
.125	3.18	.771	19.58	1.235	31.37	1.967	49.96	3.172	80.57
.141	3.58	.774	19.66	1.250	31.75	1.982	50.34	3.406	86.51
.150	3.81	.793	20.14	1.252	31.80	2.000	50.80		
.172	4.37	.797	20.24	1.281	31.54	2.0625	52.40		
.250	6.35	.800	20.32	1.289	32.74	2.096	53.19		
.275	6.99	.804	20.42			2.109	53.57		

NOTES:

1. All dimensions are in inches.
2. Unless otherwise specified tolerances are $\pm .016$ inch (0.41 mm).
3. Metric equivalents are given for information only.
4. Maximum termination of grommet extension for sizes 12 and 16 contacts for class J.
5. Maximum termination of grommet extension for sizes 0, 4, and 8 contacts for class J.
6. Dimensions shall be maintained when inserts are pressed firmly against indicated shoulder.
7. Dimensions shall be 1.210 (30.73 mm) maximum to .920 (23.37 mm) minimum for size 0 contacts only.
8. Front and rear washers for sizes 32 and 36 only. Rear washers only for sizes 40 and 44 only.

FIGURE 1. Dimensions and configuration - Continued.

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REQUIREMENTS:

Design and construction, see figure 1.

Mates with receptacles shown on MS17343, MS17345 through MS17348, MS18062 and covers shown on MS17350.

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).

PIN example:

	<u>MS17344</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							

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.

Referenced documents. In addition to MIL-DTL-22992, this document references the following:

MS17343	MS17346	MS17348	MS18062
MS17345	MS17347	MS17350	MIL-STD-1651

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CONCLUDING MATERIAL

Custodians:

Army – CR
Navy – EC
Air Force – 85
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 5935–2010-061)

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.daps.dla.mil>.