### INCH-POUND

MS3470E <u>1 March 2007</u> SUPERSEDING MS3470D 12 July 1985

### DETAIL SPECIFICATION SHEET

### CONNECTORS, RECEPTACLE, ELECTRICAL, SERIES II, CRIMP TYPE, NARROW FLANGE MOUNT, BAYONET COUPLING CLASSES A, L and W

Reactivated after 1 March 2007 and may be used for new and existing designs and acquisitions.

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-26482.

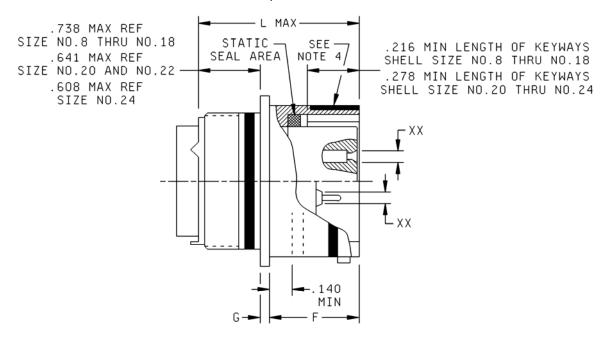




FIGURE 1. Receptacle, classes A, L and W, dimensions and configurations.

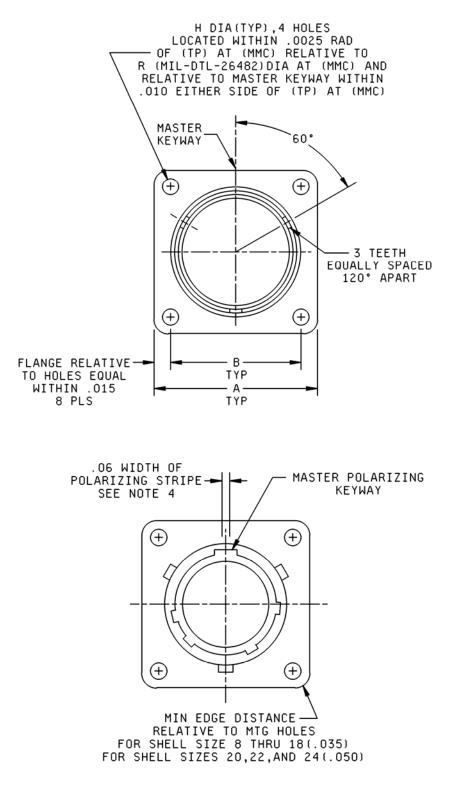
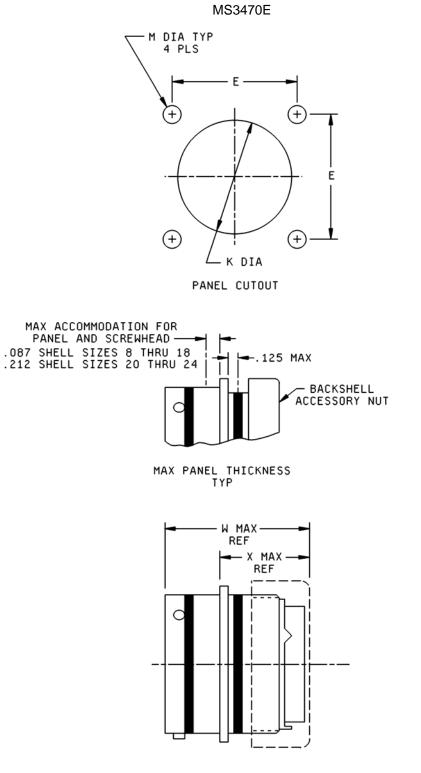
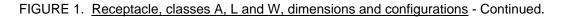
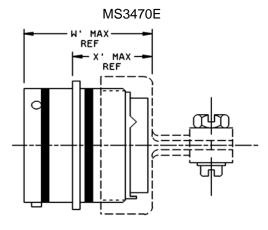


FIGURE 1. Receptacle, classes A, L and W, dimensions and configurations - Continued.

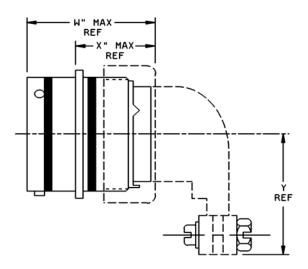


ASSEMBLED TO STRAIGHT BACKSHELL LESS STRAIN RELIEF SEE NOTE 7





ASSEMBLED TO STRAIGHT BACKSHELL WITH STRAIN RELIEF SEE NOTE 7



ASSEMBLED TO 90° BACKSHELL WITH STRAIN RELIEF SEE NOTE 7

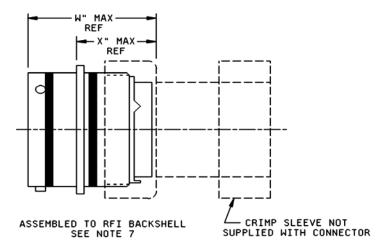


FIGURE 1. Receptacle, classes A, L and W, dimensions and configurations - Continued.

Shell size	A	В	E	F	G	Н	к
8	.828 (21.03)	.594 (15.09)	.589 (14.96) .599 (15.21)			.078 (1.98) .046 (1.17) .120 (3.05)	.563 (14.30) .573 (14.55)
10	.954 (24.23)	.719 (18.26)	.714 (18.14) .724 (18.39)	.462 (11.73) .431 (10.95)			.680 (17.27) .690 (17.53)
12	1.047 (26.59)	.812 (20.62)	.807 (20.50) .817 (20.75)				.859 (21.82) .869 (22.07)
14	1.141 (28.98)	.906 (23.01)	.901 (22.89) .911 (23.14)		. ,		.984 (24.99) .994 (25.25)
16	1.234 (31.34)	.969 (24.61)	.964 (24.49) .974 (24.74)				1.108 (28.14) 1.118 (28.40)
18	1.328 (33.73)	1.062 (26.97)	1.057 (26.85) 1.067 (27.10)				1.233 (31.32) 1.243 (31.57)
20	1.453 (36.91)	1.156 (29.36)	1.151 (29.24) 1.161 (29.49)	.587 (14.91) .556 (14.12)			1.358 (34.49) 1.368 (34.75)
22	1.578 (40.08)	1.250 (31.75)	1.245 (31.62) 1.255 (31.88)		.110 (2.79) .078 (1.98)		1.483 (37.67) 1.493 (37.92)
24	1.703 (43.26)	1.375 (34.93)	1.370 (34.80) 1.380 (35.05)	.620 (15.75) .589 (14.96)		.147 (3.73)	1.610 (40.89) 1.620 (41.15)

FIGURE 1. <u>Receptacle, classes A, L and W, dimensions and configurations</u> - Continued.

Shell size	L	М	W	W'	W"	W' "	Х							
8				1.842	2.115 (53.72)	2.339	1.061							
10	1.215 (30.86)			(46.79)										
12						2.250 (57.15)	(59.41)	(26.95)						
14		.110 (2.79)		2.077 (52.76)	2.340 (59.44)									
16		.130 (3.30)			2.475 (62.87)									
18						2.574 (65.38)								
20	1.275 (32.39)				2.767 (70.28)	_	.996							
22			1.552			1.552 (39.42)					2.137 (54.28)	2.890 (73.41)	2.399 (60.93)	(25.30)
24		.137 (3.48) .157 (3.99)	(00.42)	(07.20)	3.012 (76.50)	(00.90)	.963 (24.46)							

Shell size	Х'	Χ"	X' "	Y	Pin max weight Ibs (grams)	Pin max weight Ibs (grams)
8				.830 (21.08)	.0159 (7.22)	.0167 (7.58)
10	1.411 (35.84)			.880 (22.35)	.0227 (10.30)	.0239 (10.85)
12	( )	1.819 (46.20)	1.920 (48.77)	.950 (24.13)	.0311 (14.12)	.0369 (16.75)
14	4.040	1.909 (48.49)	1.920 (40.77)	1.010 (25.65)	.0392 (17.79)	.0483 (21.93)
16	1.646 (41.81)	2.044 (51.92)		1.070 (27.18)	.0503 (22.83)	.0609 (27.65)
18		2.143 (54.43)		1.130 (28.70)	.0542 (24.60)	.0699 (31.73)
20	1.581	2.211 (56.16)	1.855 (47.12)	1.190 (30.23)	.0698 (31.69)	.0898 (40.77)
22	(40.16)	2.334 (59.28)	1.855 (47.12)	1.260 (32.00)	.0797 (36.18)	.1090 (49.48)
24	1.548 (39.32)	2.423 (61.54)	1.822 (46.28)	1.320 (33.53)	.1048 (47.58)	.1241 (56.34)

FIGURE 1. <u>Receptacle, classes A, L and W, dimensions and configurations</u> - Continued.

Inches	mm	Inches	mm
.010	0.25	.212	5.38
.015	0.38	.216	5.49
.035	0.89	.278	7.06
.050	1.27	.608	15.44
.06	1.5	.641	16.28
.087	2.21	.738	18.74
.125	3.17		

NOTES:

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. Unless otherwise specified, tolerances are  $\pm$  .005 (0.13 mm) for 3 place decimals, and  $\pm$  .01 (0.3 mm) for 2 place decimals, angular tolerances are X°,  $\pm$  1°.
- 3. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
- 4. Polarizing stripes, color optional.
- 5. Color bands:  $0.070 \pm .031$  (1.78 ±0.79 mm) wide, color blue. Band location must be such that it is visible when mounting.
- 6. Insert arrangements requiring reduced diameters for raised seal barrier on outer row of contact cavities as indicated.
- 7. Connector assembly must be used with a backshell. Backshells must be procured separately. See SAE-AS85049 for applicable backshells.

FIGURE 1. <u>Receptacle, classes A, L and W, dimensions and configurations</u> - Continued.

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Shell size	Insert arrangement	Contact cavities		
8	-33 & -98	A, B, C.		
12	-10	C, G.		
14	-12	A, B, C, D, E, F, G, H.		
14	-18	A, C, E, G, J, L.		
14	-19	B, D, F, H, K, M.		
16	-26	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R.		
18	-32	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T.		
22	-41	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, Y.		

TABLE I. Contact cavities requiring reduced	diameters (XX) for pins and sockets
in outer row of contac	<u>t cavities</u> . <u>1</u> /

1/ The reduced diameter "XX" refers to the diameters of the raised seal barriers (pin barrier rings) or lead-in chamfers (socket entry holes) to ensure proper sealing of pin and socket after mating. See MIL-DTL-26482, connector intermateability control dimensions (series 1 and series 2) figure for reduced diameter "XX" for contact size 20 only.

#### **REQUIREMENTS:**

Dimensions and configuration: See figure 1 and table I. Connector mating: This connector mates with MS3475 and MS3476. For insert arrangement: See MIL-STD-1669. Connector identification marking shall be in accordance with MIL-DTL-26482. Example: MS3470L----, minimum height does not apply to shell sizes 8, 10 and 12. Class E is cancelled and superseded by class L. Intermateability and rear accessory interchangeability dimensions shall be in accordance with MIL-DTL-26482.

This MS sheet supersedes MS3470(Navy), MIL-C-83723/1B and MIL-C-83723/2B.

Part or Identifying Number (PIN) example:

	<u>MS3470</u>	Ļ	<u>24</u> -	<u>61</u>	<u>P</u>	<u>w</u>
MS number						
Class						
Shell size						
Insert arrangement						
Contact style						
Insert position						

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.

Referenced documents. In addition to MIL-DTL-26482, this document references the following:

MS3475 MS3476 MIL-STD-1669 ASME Y14.5M SAE-AS85049

# CONCLUDING MATERIAL

Custodians: Army - CR Navy - AS Air Force - 11 DLA - CC Preparing activity: DLA - CC

(Project 5935-4656-012)

Review activities: Army - AR. AV Navy - EC, MC, SH Air Force - 99

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 <u>http://assist.daps.dla.mil</u>.