

INCH-POUND

MS3470E
w/AMENDMENT 1
4 June 2009
SUPERSEDING
MS3470E
1 March 2007

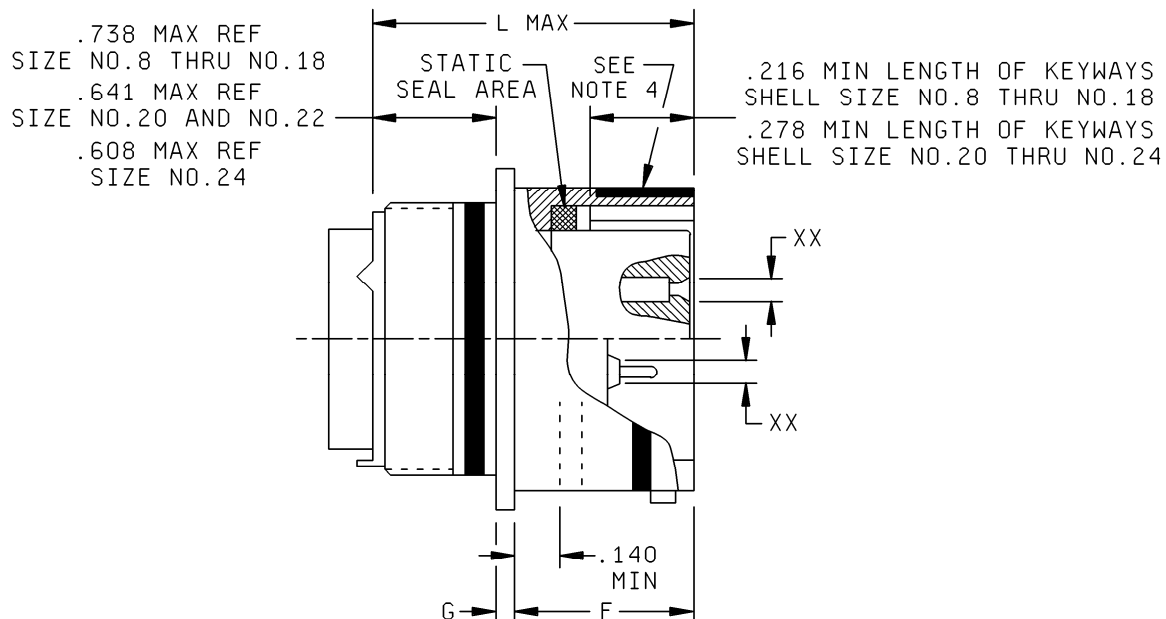
DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, SERIES 2,
CRIMP TYPE, NARROW FLANGE MOUNT, BAYONET COUPLING,
CLASSES A, D, L, T, W AND Z

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.



NOTE: For "XX", see note 6 and table I for contact cavities requiring reduced dimensions.

FIGURE 1. Receptacle, dimensions and configurations.

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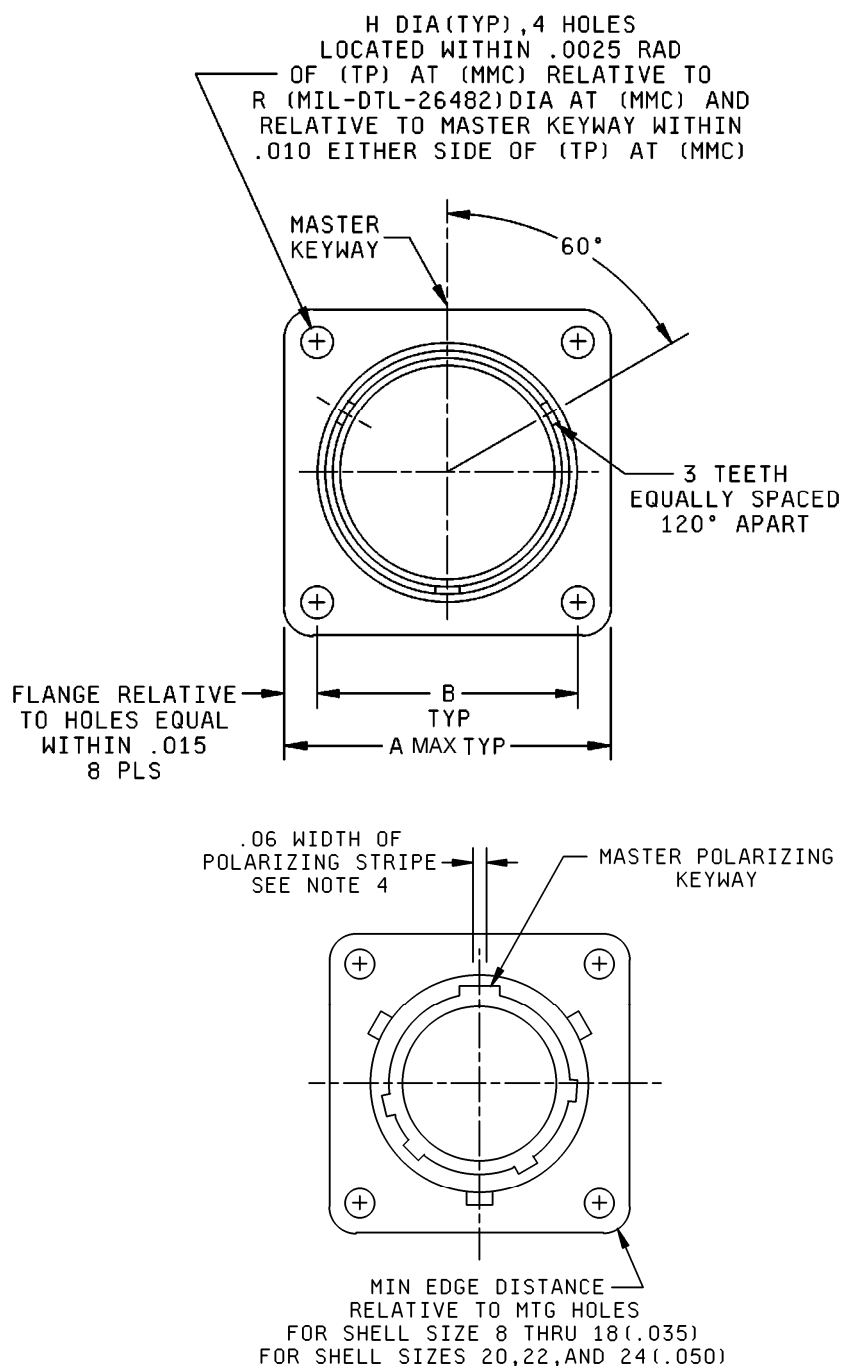
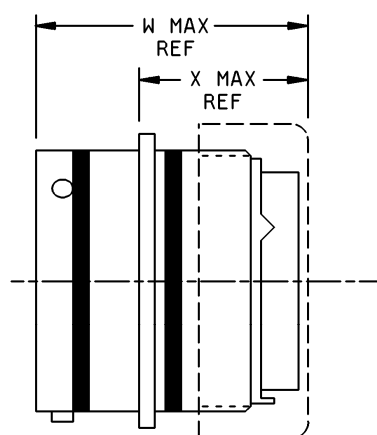
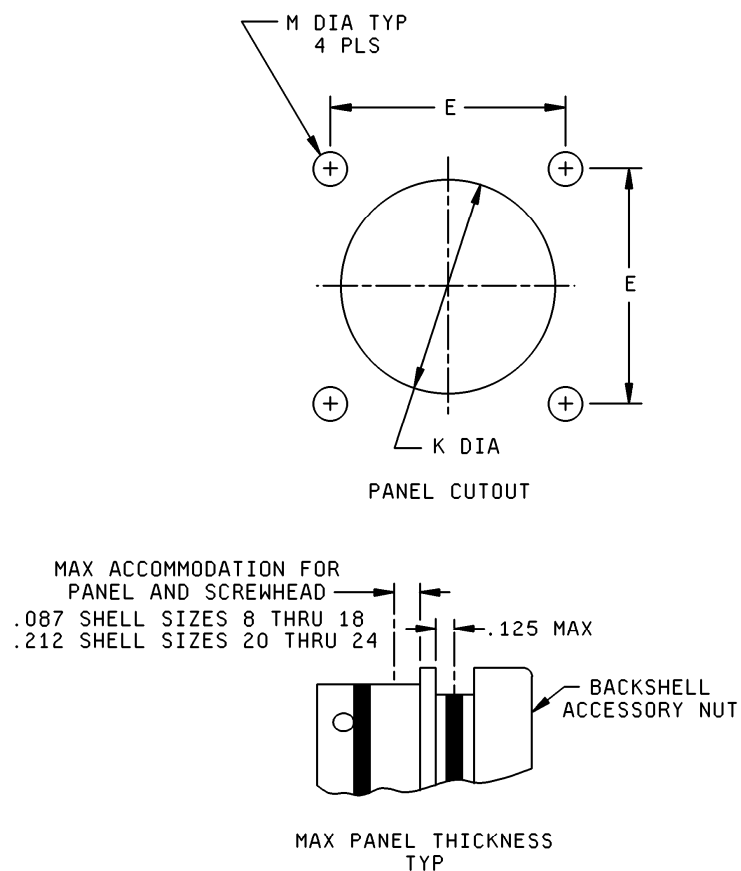


FIGURE 1. Receptacle, dimensions and configurations - Continued.

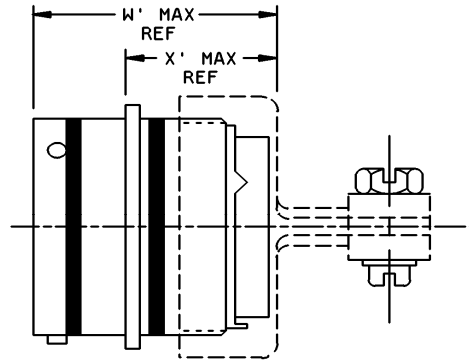
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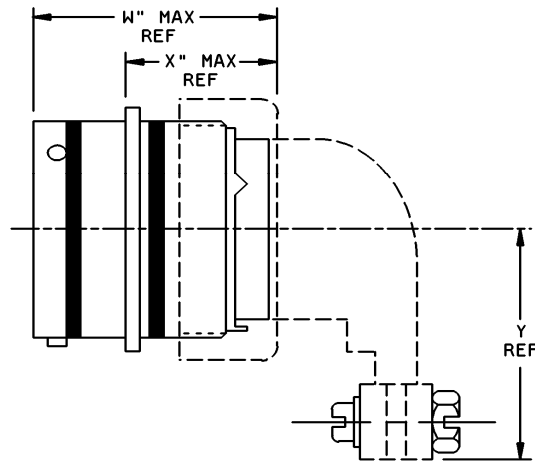
ASSEMBLED TO STRAIGHT BACKSHELL LESS STRAIN RELIEF
SEE NOTE 7

FIGURE 1. Receptacle, dimensions and configurations - Continued.

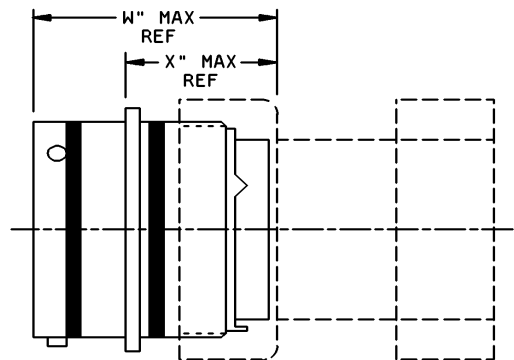
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ASSEMBLED TO STRAIGHT BACKSHELL WITH STRAIN RELIEF
SEE NOTE 7



ASSEMBLED TO 90° BACKSHELL WITH STRAIN RELIEF
SEE NOTE 7



ASSEMBLED TO RFI BACKSHELL
SEE NOTE 7

CRIMP SLEEVE NOT
SUPPLIED WITH CONNECTOR

FIGURE 1. Receptacle, dimensions and configurations - Continued.

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Shell size	A	B	E	F	G	H	K
8	.828 (21.03)	.594 (15.09)	.589 (14.96) .599 (15.21)	.462 (11.73) .431 (10.95)	.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)				.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)	.110 (2.79) .078 (1.98)	.147 (3.73)	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)				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)				1.610 (40.89) 1.620 (41.15)

FIGURE 1. Receptacle, dimensions and configurations - Continued.

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Shell size	L	M	W	W'	W''	W' "	X
8	1.215 (30.86)	.110 (2.79) .130 (3.30)	1.492 (37.90)	1.842 (46.79)	2.115 (53.72)	2.339 (59.41)	1.061 (26.95)
10					2.250 (57.15)		
12				2.077 (52.76)	2.340 (59.44)		
14					2.475 (62.87)		
16					2.574 (65.38)		
18					2.767 (70.28)	2.399 (60.93)	.996 (25.30)
20	1.275 (32.39)	.137 (3.48) .157 (3.99)	1.552 (39.42)	2.137 (54.28)	2.890 (73.41)		
22					3.012 (76.50)		.963 (24.46)
24							

Shell size	X'	X''	X' "	Y	Pin max weight lbs (grams)	Pin max weight lbs (grams)
8	1.411 (35.84)	1.684 (42.77)	1.920 (48.77)	.830 (21.08)	.0159 (7.22)	.0167 (7.58)
10				.880 (22.35)	.0227 (10.30)	.0239 (10.85)
12		1.819 (46.20)		.950 (24.13)	.0311 (14.12)	.0369 (16.75)
14	1.646 (41.81)	1.909 (48.49)		1.010 (25.65)	.0392 (17.79)	.0483 (21.93)
16		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 (40.16)	2.211 (56.16)	1.855 (47.12)	1.190 (30.23)	.0698 (31.69)	.0898 (40.77)
22		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. Receptacle, dimensions and configurations - Continued.

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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, $\pm .01$ (0.3 mm) for 2 place decimals, and $\pm 1^\circ$ for all angles.
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 barriers 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. Receptacle, dimensions and configurations - Continued.

TABLE I. Contact cavities requiring reduced diameters (XX) for pins and sockets in outer row of contact cavities. 1/

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

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 figure (series 1 and series 2) for reduced diameter "XX" for contact size 20 only.

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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.

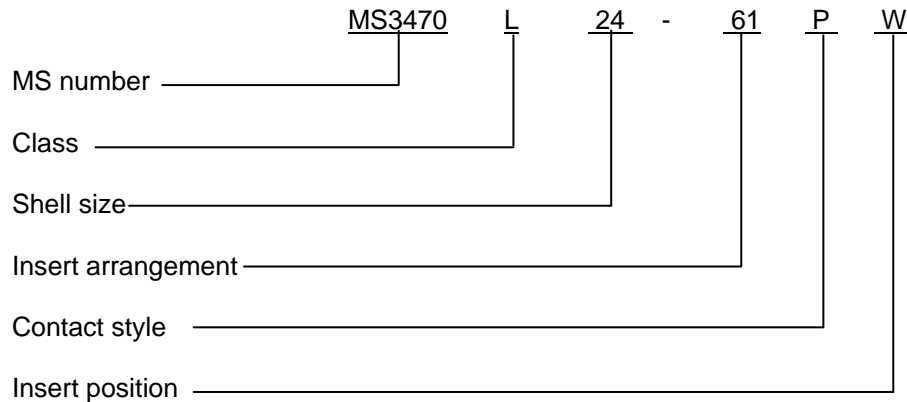
Connector identification marking shall be in accordance with MIL-DTL-26482. Example: MS3470L----, minimum height does not apply to shell sizes 8, 10 and 12.

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-83723/1 and MIL-C-83723/2.

Part or Identifying Number (PIN) example:



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-26482, this document references the following:

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

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CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - AS
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2008-133)

Review activities:

Army - AR, AV
Navy - EC, MC, SH
Air Force - 99

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