

INCH-POUND

MIL-DTL-83723/82E
w/AMENDMENT 2
8 March 2024
SUPERSEDING
MIL-DTL-83723/82E
w/AMENDMENT 1
25 January 2018

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, CIRCULAR, ENVIRONMENT RESISTING,
RECEPTACLE, FLANGE MOUNT, THREADED COUPLING, CRIMP SOCKET CONTACT,
SERIES III, CLASSES A, G, K, M, N, R, S, T, W AND Z

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-83723.

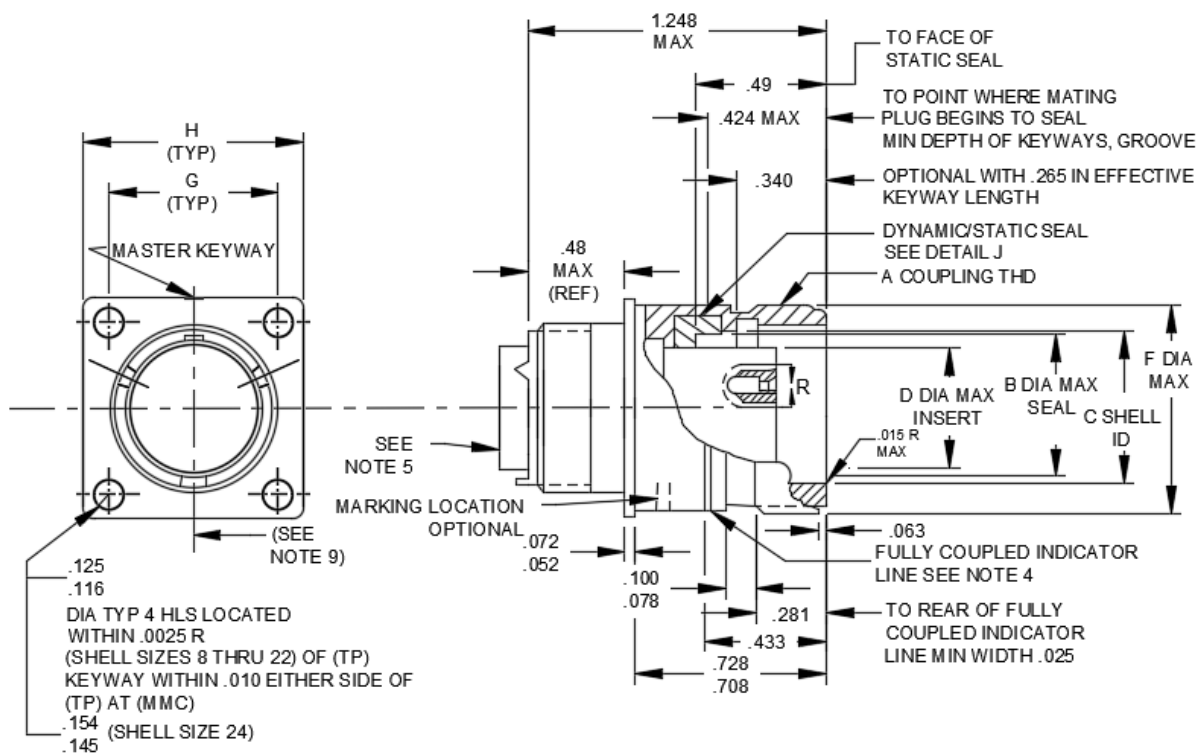
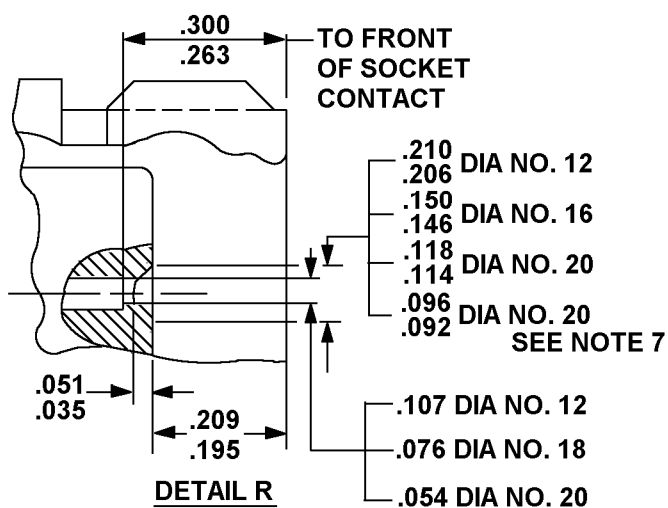
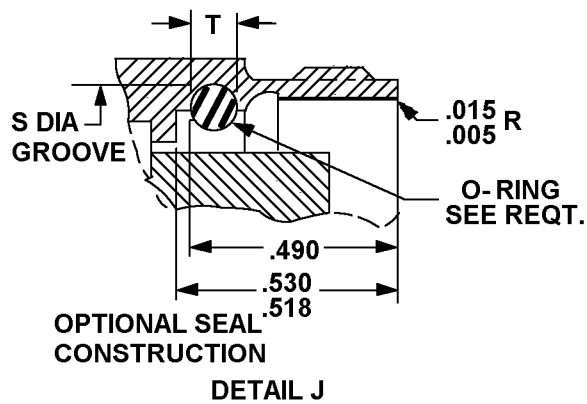


FIGURE 1. Classes A, G, K, M, R, T, W and Z.



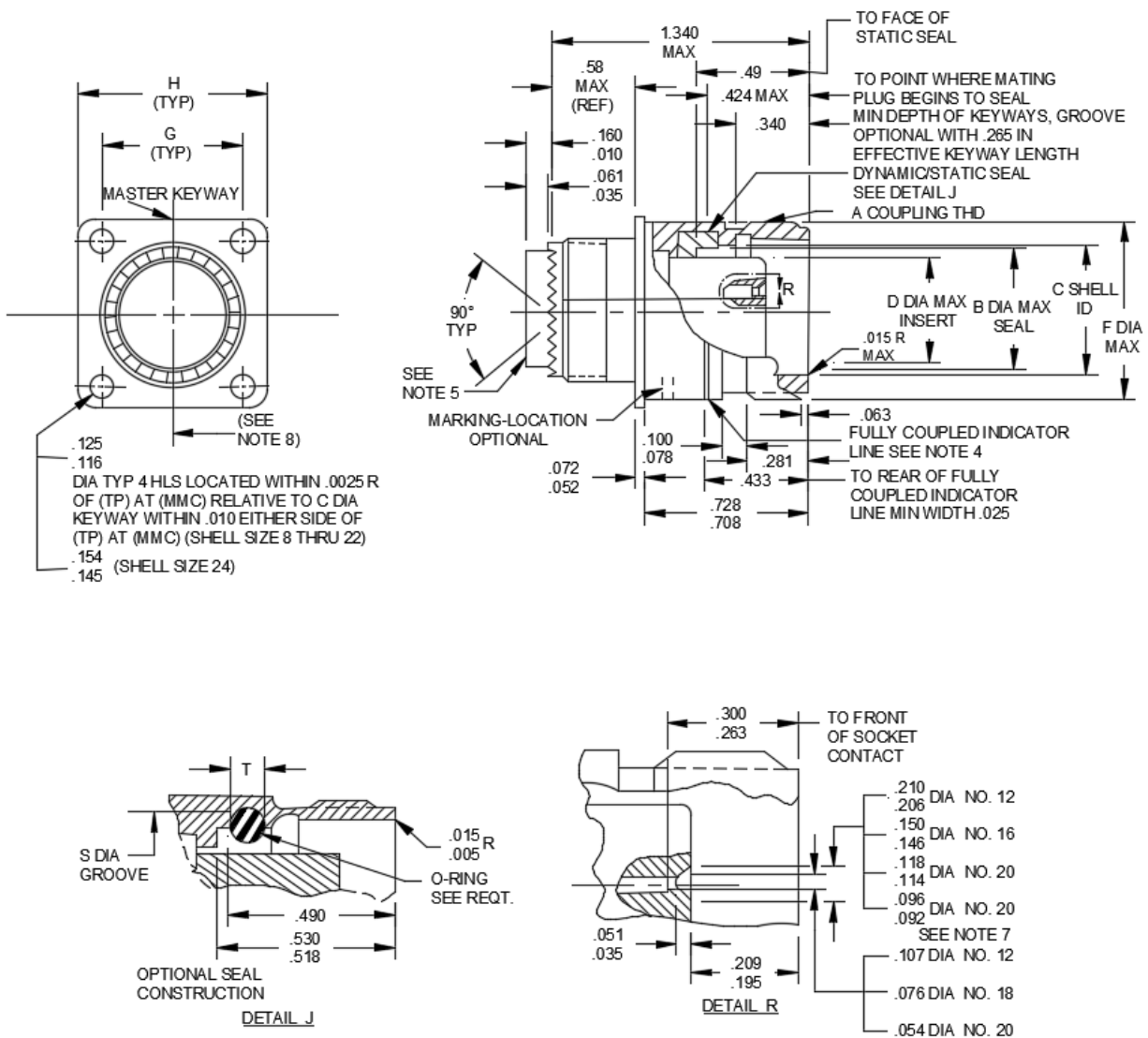


NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $\pm .005$ (0.13 mm) for three place decimals and $\pm .01$ (0.25 mm) for two place decimals and $\pm 1^\circ$ for all angles.
4. Coupling indicator line shall be color coded red.
5. Rear accessory interchangeability dimensions shall be in accordance with MIL-DTL-83723.
6. Shell size 8 will not mate with MIL-DTL-26500 connectors.
7. See table I for contact cavities requiring this dimension.
8. Phantomed configuration optional.
9. The centerline of indicated projection must be located on vertical centerline $\pm 2^\circ$.

FIGURE 1. Classes A, G, K, M, R, T, W and Z - Continued.

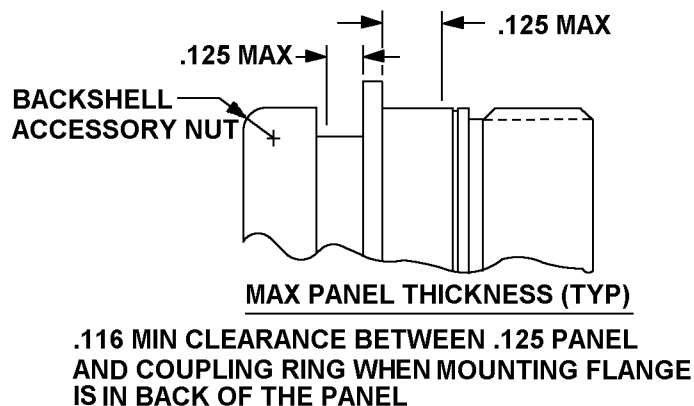
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4. Coupling indicator line shall be color coded red.
5. Rear accessory interchangeability dimensions shall be in accordance with MIL-DTL-83723.
6. Shell size 8 will not mate with MIL-DTL-26500 connectors.
7. See table I for contact cavities requiring this dimension.
8. Phantomed configuration optional.
9. The centerline of indicated projection must be located on vertical centerline $\pm 2^\circ$.

FIGURE 2. Classes N and S.



Shell size	A thread	B	C	D	F
08	.562-24 UNEF-2A	.394 (10.01)	.418 (10.62) .413 (10.49)	.290 (7.37)	.562 (14.27)
10	.688-24 UNEF-2A	.515 (13.08)	.535 (13.59) .530 (13.46)	.388 (9.86)	.696 (17.68)
12	.875-20 UNEF-2A	.685 (17.40)	.705 (17.91) .700 (17.78)	.558 (14.17)	.875 (22.23)
14	.938-20 UNEF-2A	.754 (19.15)	.774 (19.66) .769 (19.53)	.627 (15.93)	.936 (23.77)
16	1.062-18 UNEF-2A	.881 (22.38)	.901 (22.89) .896 (22.76)	.772 (19.61)	1.062 (26.97)
18	1.188-18 UNEF-2A	.987 (25.07)	1.007 (25.58) 1.002 (25.45)	.860 (21.84)	1.187 (30.15)
20	1.312-18 UNEF-2A	1.112 (28.24)	1.132 (28.75) 1.127 (28.63)	.985 (25.02)	1.312 (33.32)
22	1.438-18 UNEF-2A	1.237 (31.42)	1.257 (31.93) 1.252 (31.80)	1.110 (28.19)	1.437 (36.50)
24	1.562-18 UNEF-2A	1.362 (34.59)	1.382 (35.10) 1.377 (34.98)	1.235 (31.37)	1.562 (39.67)

FIGURE 3. Dimensions and configurations.

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Shell size	G	H	R number of teeth	S +.005 / - .000	T
08	.594 (15.09)	.812 (20.62)	12	.490 (12.45)	.076 (1.93) .071 (1.80)
10	.719 (18.26)	.937 (23.80)	15	.636 (16.15)	.089 (2.26) .084 (2.13)
12	.812 (20.62)	1.031 (26.19)	21	.806 (20.47)	
14	.906 (23.01)	1.125 (28.58)	24	.875 (22.23)	
16	.969 (24.61)	1.250 (31.75)	30	1.002 (25.45)	
18	1.062 (26.97)	1.343 (34.11)	33	1.108 (28.14)	
20	1.156 (29.36)	1.437 (36.50)	36	1.233 (31.32)	
22	1.250 (31.75)	1.562 (39.67)	39	1.358 (34.49)	
24	1.375 (34.93)	1.703 (43.26)	42	1.483 (37.67)	

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4. Coupling indicator line shall be color coded red.
5. Rear accessory interchangeability dimensions shall be in accordance with MIL-DTL-83723.
6. Shell size 8 will not mate with MIL-DTL-26500 connectors.
7. See table I for contact cavities requiring this dimension.
8. Phantom configuration optional.
9. The centerline of indicated projection must be located on vertical centerline $\pm 2^\circ$.

FIGURE 3. Dimensions and configurations - Continued.

REQUIREMENTS:

Dimensions and configurations: See figures 1 and 3 for classes A, G, K, M, R, T, W and Z. See figures 2 and 3 for classes N and S.

This connector mates with MIL-DTL-83723/87, MIL-DTL-83723/92, MIL-DTL-83723/96 and MIL-DTL-83723/98.

Insert arrangements and polarizing positions: See MIL-STD-1554 and table I.

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TABLE I. Insert arrangements requiring reduced diameter for lead-in chamfers on outer row of contact cavities as indicated.

Shell size	Insert arrangements	Contact cavities
08	03, 98	1, 2, 3
10	06	1, 2, 3, 4, 5, 6

O-ring: See MIL-DTL-83723.

Part or Identifying Number (PIN) example:

M83723/ 82 W 08 55 N

<u>M83723/</u>	Military designation
<u>82</u>	Specification sheet number
<u>W</u>	Class
<u>08</u>	Shell size
<u>55</u>	Insert arrangement
<u>N</u>	Polarizing position

Amendment notations. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. 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 and relationship to the last previous issue.

Referenced documents. In addition to MIL-DTL-83723, this document references the following:

MIL-DTL-26500
MIL-DTL-83723/87
MIL-DTL-83723/92
MIL-DTL-83723/96
MIL-DTL-83723/98
MIL-STD-1554

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CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2024-061)

Review activities:

Army - AR, MI
Navy - EC
Air Force - 19, 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 <https://assist.dla.mil>.