

INCH-POUND

MIL-DTL-83723/94F

w/AMENDMENT 2

12 March 2024

SUPERSEDING

MIL-DTL-83723/94F

w/AMENDMENT 1

11 March 2022

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, (CIRCULAR, ENVIRONMENT RESISTING), RECEPTACLE,
(SINGLE HOLE MOUNT, BAYONET COUPLING, STRAIGHT PIN CONTACT),
(SERIES III, CLASSES H, AND Y)

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.

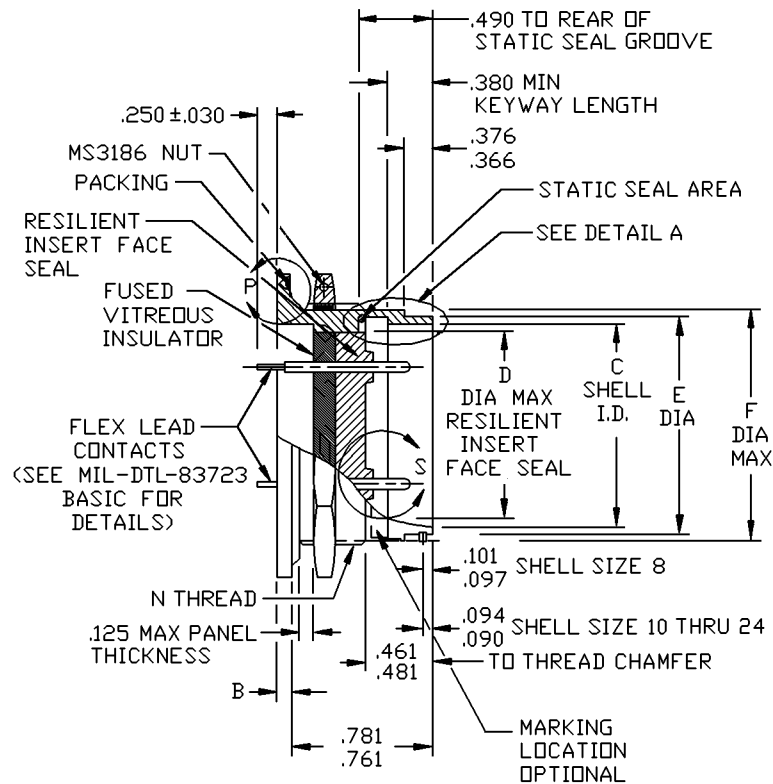


FIGURE 1. Dimensions and configurations.

AMSC N/A

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

FSC 5935



MIL-DTL-83723/94F
w/AMENDMENT 2

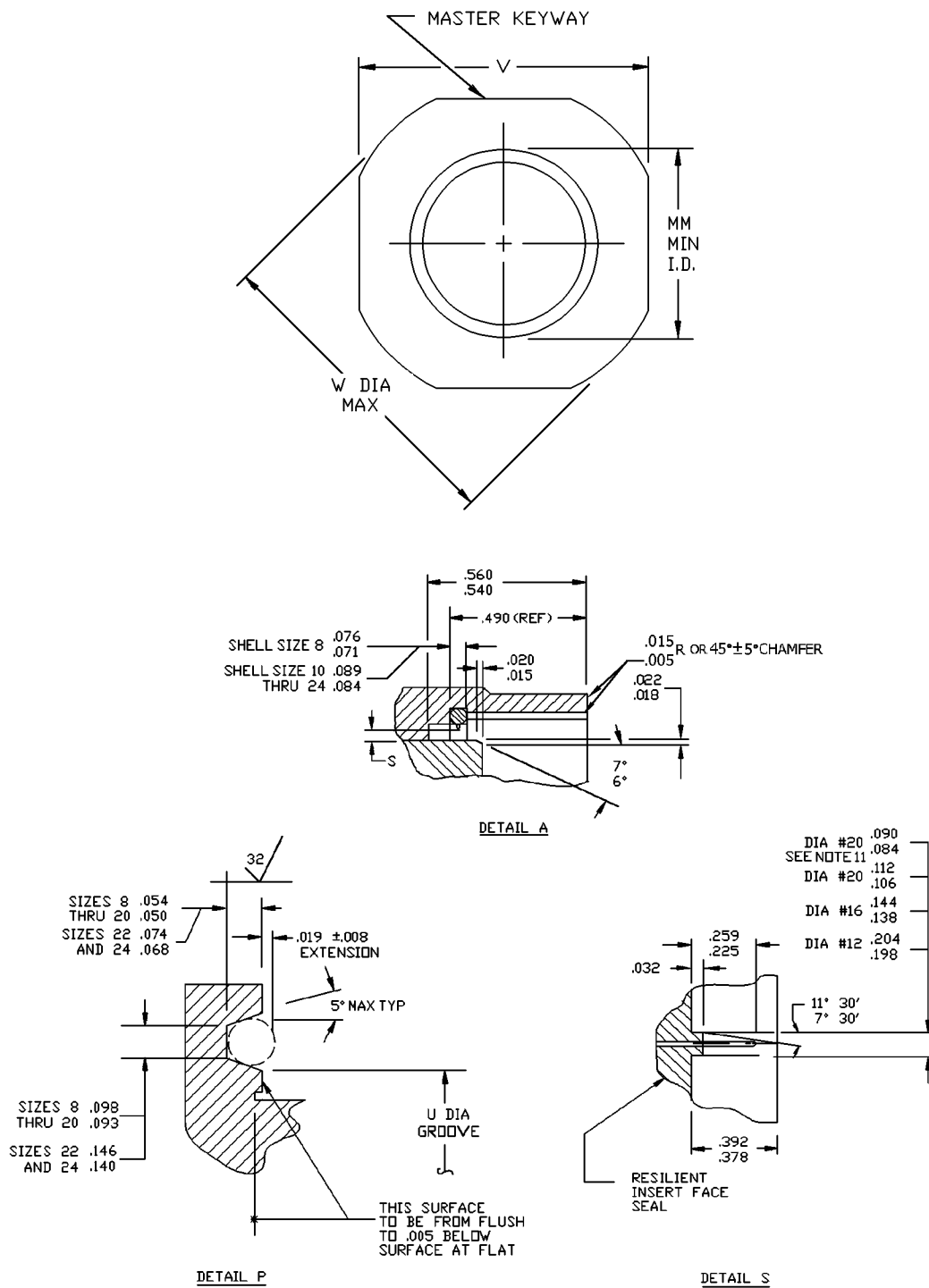
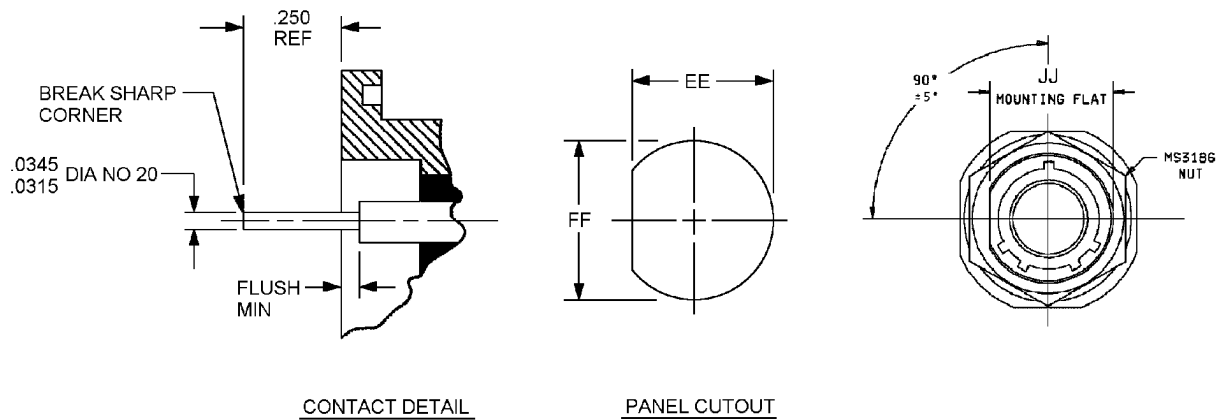


FIGURE 1. Dimensions and configurations – Continued.

MIL-DTL-83723/94F
w/AMENDMENT 2



Shell size	B	C	D	E	F	N thread	S +.005 -.000	U
08	.137 .097	.428 .433	.312	.536 .531	.561	.625-20UN-2A	.508	.670
10	.137 .097	.530 .535	.388	.659 .654	.696	.750-20UNEF-2A	.636	.777
12	.137 .097	.700 .705	.558	.829 .824	.875	.9375-20UNEF-2A	.806	.965
14	.137 .097	.769 .774	.627	.898 .893	.935	1.000-20UNEF-2A	.875	1.090
16	.137 .097	.896 .901	.772	1.025 1.020	1.062	1.125-20UNEF-2A	1.002	1.215
18	.137 .097	1.002 1.007	.860	1.131 1.126	1.187	1.250-18UNEF-2A	1.108	1.340
20	.137 .097	1.127 1.132	.985	1.256 1.251	1.312	1.375-18UNEF-2A	1.233	1.465
22	.168 .128	1.252 1.257	1.110	1.381 1.376	1.437	1.500-18UNEF-2A	1.358	1.574
24	.168 .128	1.377 1.382	1.235	1.506 1.501	1.562	1.625-18UNEF-2A	1.483	1.699

FIGURE 1. Dimensions and configurations – Continued.

MIL-DTL-83723/94F
w/AMENDMENT 2

Shell size	V	W dia., max	EE	FF	MM	JJ
08	.984 .974	1.068	.605	.635	.493	.596 .590
10	1.109 1.099	1.192	.730	.760	.555	.721 .715
12	1.296 1.286	1.380	.917	.947	.743	.908 .902
14	1.396 1.386	1.505	.980	1.010	.805	.971 .965
16	1.521 1.511	1.630	1.105	1.135	.931	1.096 1.090
18	1.646 1.636	1.756	1.229	1.260	1.055	1.220 1.214
20	1.771 1.761	1.860	1.354	1.385	1.243	1.345 1.339
22	1.959 1.949	2.068	1.479	1.510	1.305	1.470 1.464
24	2.084 2.074	2.160	1.604	1.635	1.493 1.452	1.595 1.589

FIGURE 1. Dimensions and configurations – Continued.

MIL-DTL-83723/94F
w/AMENDMENT 2

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $\pm .005$ inches (0.13mm) for three place decimals, $\pm .01$ inches (0.25mm) for two place decimals, and $\pm 1^\circ$ for all angles.
4. Notes 5 through 10 applicable to contacts only.
5. Dimensions apply after plating.
6. Contact finish: Gold plate .000050 inch (0.00127 mm) minimum in accordance with ASTM B488. A suitable underplating shall be used. Silver shall not be used. Finish is applied after sealing.
7. Surface finish: 63 ($\sqrt{\text{R}}$) all over in accordance with ASME-B46.1 unless otherwise specified.
8. Remove all burrs and sharp edges .003 to .005 inches (0.076 to 0.127 mm) R.
9. Diameters to be concentric within .004 inches (0.102 mm) TIR.
10. Diameters in the same cross-sectional plane to be concentric with each other within .003 (0.076 mm) TIR.
11. See table I for contact cavities requiring this dimension.

FIGURE 1. Dimensions and configurations – Continued.

REQUIREMENTS

Dimensions and configurations: See figure 1.

This connector mates with MIL-DTL-83723/75 and /77.

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

TABLE I. Insert arrangements requiring reduced diameters for raised seal barriers on contact cavities as indicated.

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

Connector accessories: See SAE-AS85049.

MIL-DTL-83723/94F
w/AMENDMENT 2

Part or Identifying Number (PIN) example:

M83723/ 94 H 08 03 N

<u>M83723/</u>	Military designation
<u>94</u>	Specification sheet number
<u>H</u>	Class
<u>08</u>	Shell size
<u>03</u>	Insert arrangement
<u>N</u>	Polarizing 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-83723, this document references the following:

MIL-DTL-83723/75
MIL-DTL-83723/77
MIL-STD-1554
MS3186
ASME-B46.1
ASTM B488
SAE-AS85049

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA – CC

(Project 5935-2024-103)

Review activities:

Army – AR, AV, MI
Navy – EC
Air Force – 19

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>.