

INCH-POUND

MIL-DTL-83723/80D
1 October 2010
SUPERSEDING
MIL-DTL-83723/80C
20 October 2000

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, (CIRCULAR, ENVIRONMENT RESISTING),
RECEPTACLE, (SOLDER OR WELD FLANGE MOUNT, BAYONET COUPLING,
SOLDER PIN CONTACT), (SERIES III, CLASSES H, J, L, P 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.

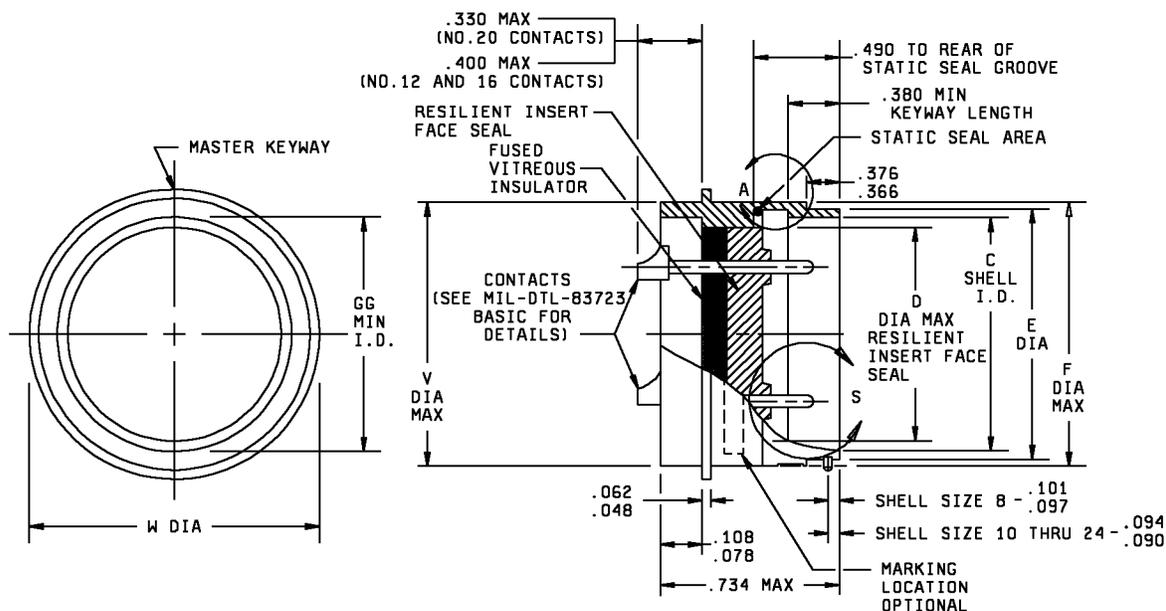


FIGURE 1. Dimensions and configurations.

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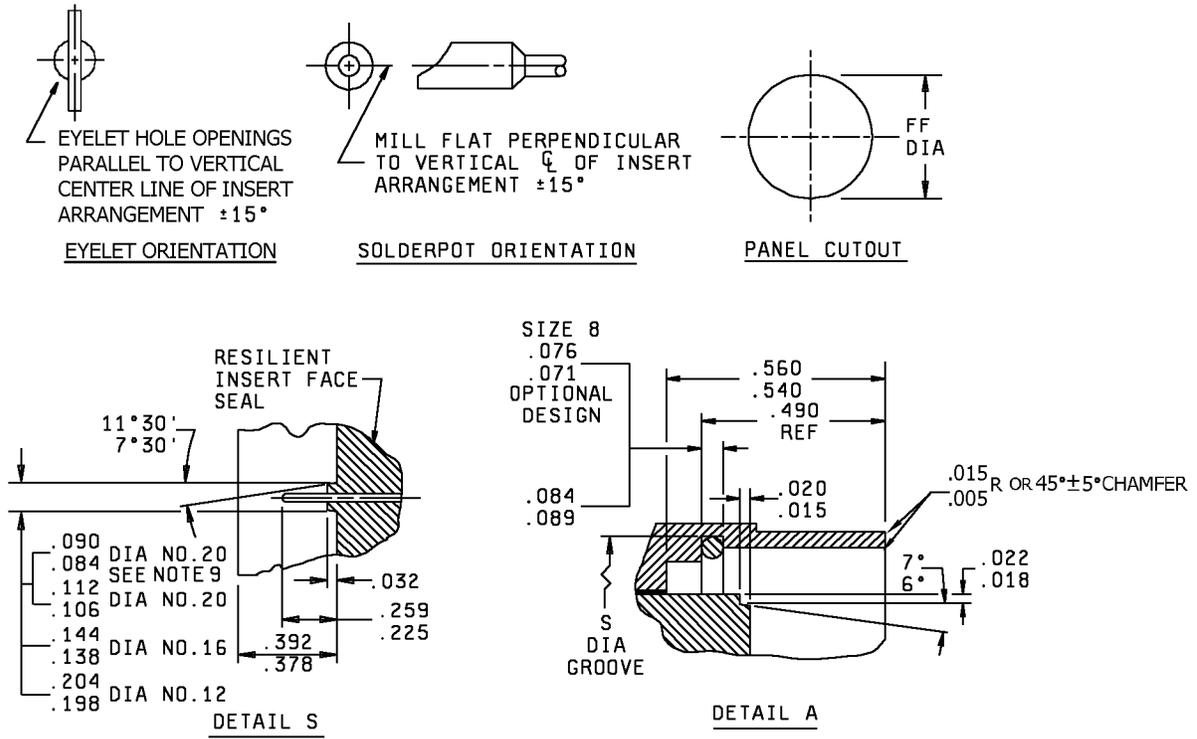


FIGURE 1. Dimensions and configurations - Continued.

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Shell size	C	D	E	F	S +.005 -.000	V	W	FF	GG
8	.428 .433	.312	.536 .531	.561	.508	.500	.760 .720	.505 .515	.406
10	.530 .535	.388	.659 .654	.696	.636	.562	.860 .820	.567 .577	.443
12	.700 .705	.558	.829 .824	.875	.806	.750	1.065 1.025	.755 .765	.668
14	.769 .774	.627	.898 .893	.935	.875	.812	1.110 1.070	.817 .827	.668
16	.896 .901	.772	1.025 1.020	1.062	1.002	.937	1.230 1.190	.942 .952	.763
18	1.002 1.007	.860	1.131 1.126	1.187	1.108	1.062	1.360 1.320	1.067 1.077	.862
20	1.127 1.132	.985	1.256 1.251	1.312	1.233	1.187	1.450 1.410	1.192 1.202	1.108
22	1.252 1.257	1.110	1.381 1.376	1.437	1.358	1.312	1.610 1.570	1.317 1.327	1.204
24	1.377 1.382	1.235	1.506 1.501	1.562	1.483	1.437	1.730 1.690	1.442 1.452	1.388

FIGURE 1. Dimensions and configurations - Continued.

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Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.003	0.08	.330	8.38	.636	16.15	.901	22.89	1.251	31.78
.004	0.10	.366	9.30	.654	16.61	.935	23.75	1.252	31.80
.005	0.13	.376	9.55	.659	16.74	.937	23.80	1.256	31.90
.015	0.38	.378	9.60	.668	16.97	.942	23.93	1.257	31.93
.018	0.48	.380	9.65	.696	17.68	.952	24.18	1.312	33.32
.020	0.51	.388	9.86	.700	17.78	.985	25.02	1.317	33.45
.022	0.56	.392	9.96	.705	17.92	1.002	25.45	1.320	33.53
.032	0.81	.400	10.16	.720	18.29	1.007	25.58	1.327	33.71
.048	1.22	.406	10.31	.734	18.64	1.020	25.91	1.332	33.83
.062	1.57	.428	10.87	.750	19.05	1.025	26.04	1.358	34.49
.071	1.80	.433	11.00	.755	19.18	1.062	26.97	1.360	34.54
.076	1.93	.443	11.25	.760	19.30	1.065	27.05	1.376	34.95
.078	1.98	.490	12.45	.763	19.38	1.067	27.10	1.377	34.98
.084	2.13	.500	12.70	.765	19.43	1.070	27.18	1.381	35.08
.089	2.26	.505	12.83	.769	19.53	1.077	27.36	1.382	35.10
.090	2.29	.508	12.90	.772	19.61	1.108	28.14	1.388	35.26
.094	2.39	.515	13.08	.774	19.66	1.110	28.19	1.410	35.81
.097	2.46	.530	13.46	.806	20.47	1.126	28.60	1.437	36.50
.101	2.57	.531	13.49	.812	20.62	1.127	28.63	1.442	36.63
.106	2.69	.535	13.51	.820	20.83	1.131	28.73	1.450	36.83
.108	2.74	.536	13.61	.824	20.93	1.132	28.75	1.452	36.88
.112	2.84	.540	13.72	.827	21.01	1.187	30.15	1.483	37.67
.138	3.51	.558	14.17	.829	21.06	1.190	30.23	1.501	38.13
.144	3.66	.560	14.22	.860	21.84	1.192	30.28	1.506	38.25
.198	5.03	.561	14.25	.862	21.98	1.202	30.53	1.562	39.67
.204	5.18	.562	14.27	.875	22.23	1.204	30.58	1.570	39.89
.225	5.72	.567	14.40	.893	22.68	1.230	31.24	1.610	40.89
.259	6.58	.577	14.66	.896	22.76	1.233	31.32	1.690	42.93
.312	7.92	.627	15.93	.898	22.81	1.235	31.37	1.730	43.94

NOTES: (Notes 4 through 8 apply to contacts only).

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $\pm .005$ inches (0.13 mm) for three place decimal, $\pm .01$ inches (0.25 mm) for two place decimals, and $\pm 1^\circ$ for all angles.
4. Dimensions apply after plating.
5. Surface finish: 63 (R) all over in accordance with ASME-B46.1, unless otherwise specified.
6. Remove all burrs and sharp edges .003 to .005 inches (0.076 to 0.127 mm) R.
7. Diameters to be concentric within .004 inches (0.102 mm) TIR.
8. Diameter in the same cross-sectional plane to be concentric with each other within .003 inches (0.076 mm) TIR.
9. See table I for contact cavities requiring this dimension.

FIGURE 1. Dimensions and configurations - Continued.

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REQUIREMENTS:

Dimensions and configurations: See figure 1.

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

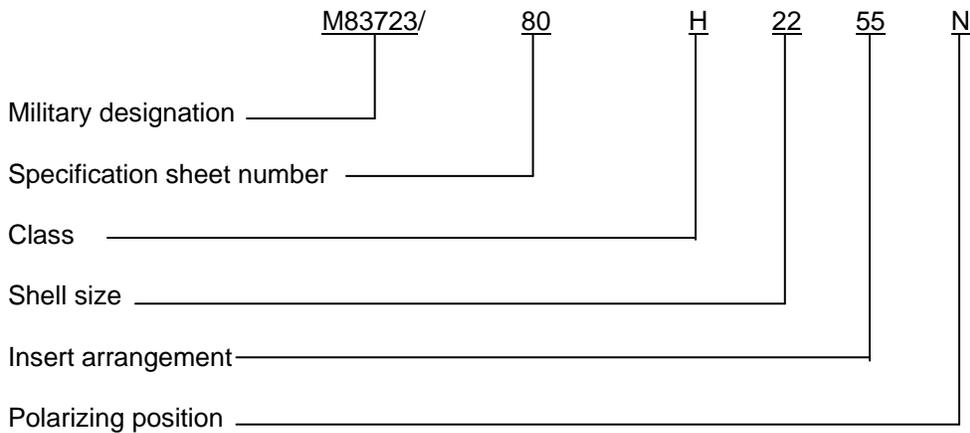
For insert arrangements, see MIL-STD-1554 and table I.

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

Shell size	Insert arrangements	Contact cavities
8	03, 98	1, 2, and 3
10	06	1, 2, 3, 4, 5, and 6

Connector accessories: See SAE-AS85049.

Part or Identifying Number (PIN) example:



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-83723, this document references the following:

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

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CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2010-049)

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.daps.dla.mil>.