

INCH - POUND

MIL-DTL-83723/79E

1 October 2010

SUPERSEDING

MIL-DTL-83723/79D

20 October 2000

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, (CIRCULAR, ENVIRONMENT RESISTING),
RECEPTACLE, (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.

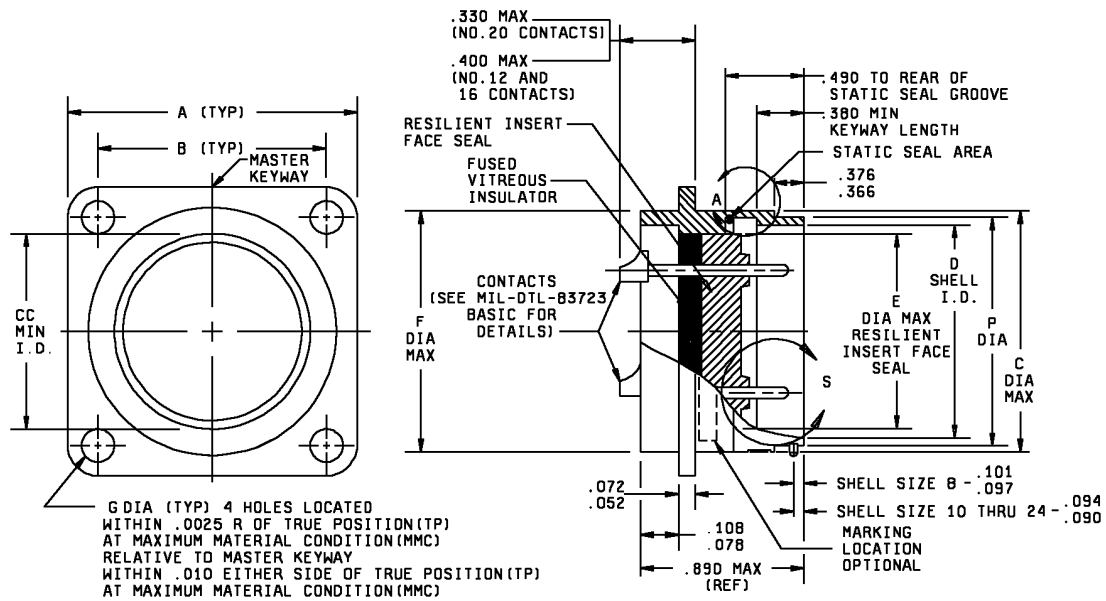


FIGURE 1. Dimensions and configurations.

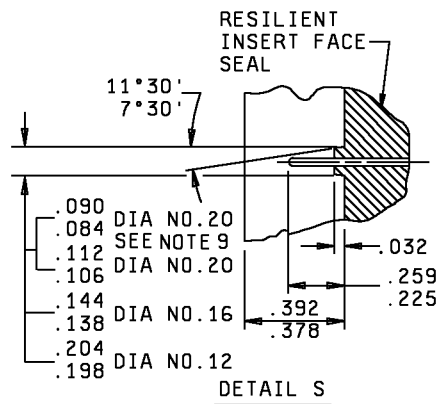
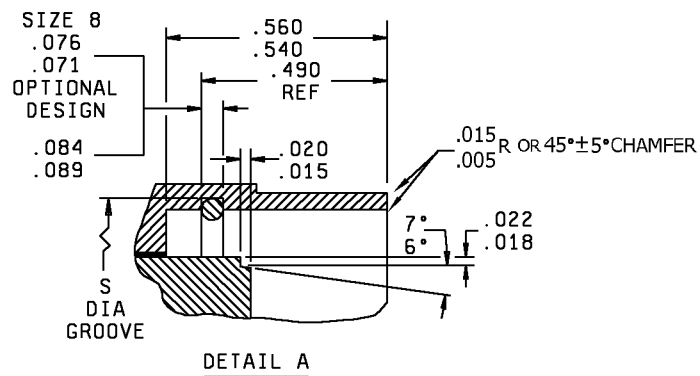
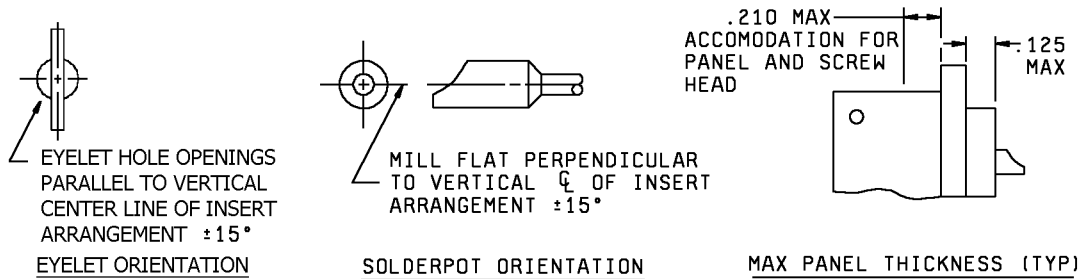


FIGURE 1. Dimensions and configurations - Continued.

Shell size	A	B	C dia	D dia	E dia	F dia	G dia
8	.812	.594	.561	.428 .433	.312	.500	.120
10	.937	.719	.696	.530 .535	.388	.562	.120
12	1.031	.812	.875	.700 .705	.558	.750	.120
14	1.125	.906	.935	.769 .774	.627	.812	.120
16	1.250	.969	1.062	.896 .901	.772	.937	.120
18	1.343	1.062	1.187	1.002 1.007	.860	1.062	.120
20	1.437	1.156	1.312	1.127 1.132	.985	1.187	.120
22	1.562	1.250	1.437	1.252 1.257	1.110	1.312	.120
24	1.703	1.375	1.562	1.377 1.382	1.235	1.437	.149

FIGURE 1. Dimensions and configurations - Continued.

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Shell size	P dia	S +.005/ -.000	Panel cutout for C dia	Panel cutout for F dia	CC
8	.536 .531	.508	.630 .620	.515 .505	.406
10	.659 .654	.636	.758 .748	.582 .572	.443
12	.829 .824	.806	.923 .913	.770 .760	.668
14	.898 .893	.875	.990 .980	.832 .822	.668
16	1.025 1.020	1.002	1.117 1.107	.958 .948	.763
18	1.131 1.126	1.108	1.219 1.209	1.082 1.072	.862
20	1.256 1.251	1.233	1.347 1.337	1.202 1.192	1.108
22	1.381 1.376	1.358	1.462 1.452	1.332 1.322	1.204
24	1.506 1.501	1.483	1.587 1.577	1.452 1.442	1.388

FIGURE 1. Dimensions and configurations - Continued.

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.0025	0.065	.378	9.60	.700	17.78	.958	24.33	1.235	31.37
.003	0.08	.380	9.65	.705	17.92	.969	24.61	1.250	31.75
.004	0.10	.388	9.86	.719	18.26	.970	24.64	1.251	31.78
.005	0.13	.392	9.96	.730	18.54	.980	24.89	1.252	31.80
.010	0.25	.400	10.16	.748	19.00	.985	25.02	1.256	31.90
.015	0.38	.406	10.31	.750	19.05	.988	25.10	1.257	31.93
.018	0.48	.428	10.87	.758	19.25	.990	25.15	1.312	33.32
.020	0.51	.433	11.00	.760	19.30	1.002	25.45	1.322	33.58
.022	0.56	.443	11.25	.763	19.38	1.007	25.58	1.328	33.73
.032	0.81	.490	12.45	.769	19.53	1.020	25.91	1.332	33.83
.052	1.32	.500	12.70	.770	19.56	1.025	26.04	1.337	33.96
.071	1.80	.505	12.83	.772	19.61	1.031	26.19	1.343	34.11
.072	1.83	.508	12.90	.774	19.66	1.062	26.97	1.346	34.19
.076	1.93	.515	13.08	.806	20.47	1.072	27.23	1.347	34.21
.078	1.98	.530	13.46	.812	20.62	1.082	27.48	1.358	34.49
.084	2.13	.531	13.49	.822	20.88	1.096	27.96	1.375	34.93
.089	2.26	.535	13.51	.824	20.93	1.107	28.12	1.376	34.95
.090	2.29	.536	13.61	.829	21.06	1.108	28.14	1.377	34.98
.094	2.39	.540	13.72	.832	21.13	1.110	28.19	1.381	35.08
.097	2.46	.558	14.17	.860	21.84	1.114	28.30	1.382	35.10
.101	2.57	.560	14.22	.862	21.98	1.117	28.37	1.388	35.26
.106	2.69	.561	14.25	.875	22.23	1.125	28.58	1.437	36.50
.108	2.74	.562	14.27	.890	22.61	1.126	28.60	1.442	36.63
.112	2.84	.572	14.53	.893	22.68	1.127	28.63	1.452	36.88
.125	3.18	.582	14.78	.896	22.76	1.131	28.73	1.462	37.13
.138	3.51	.594	15.09	.898	22.81	1.132	28.75	1.470	37.34
.144	3.66	.602	15.29	.900	22.86	1.156	29.36	1.483	37.67
.198	5.03	.620	15.75	.901	22.89	1.187	30.15	1.501	38.13
.204	5.18	.627	15.93	.906	23.01	1.192	30.28	1.506	38.25
.225	5.72	.630	16.00	.913	23.19	1.202	30.53	1.562	39.67
.259	6.58	.636	16.15	.918	23.32	1.204	30.58	1.577	40.06
.312	7.92	.654	16.61	.923	23.44	1.209	30.71	1.578	40.08
.330	8.38	.659	16.74	.935	23.75	1.219	30.96	1.587	40.31
.366	9.30	.668	16.97	.937	23.80	1.220	30.99	1.596	40.54
.376	9.55	.696	17.68	.948	24.08	1.233	31.32	1.703	43.26

NOTES:

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 decimals, $\pm .01$ inches (0.25 mm) for two place decimals and $\pm 1^\circ$ for all angles.
4. Dimensions apply after plating.
5. Surface finish: 63 () 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.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

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

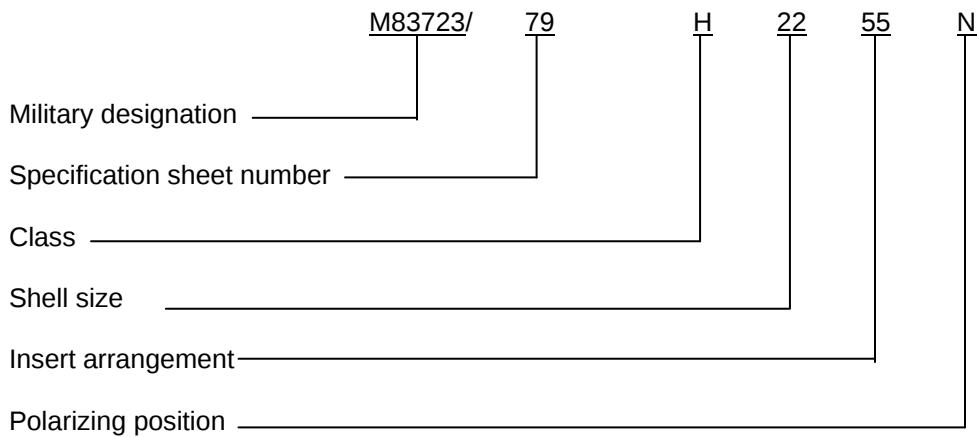
For insert arrangements, see MIL-STD-1554 and table I.

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

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2010-047)

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>.