

MIL-DTL-83723/74F
w/AMENDMENT 2
8 March 2024
SUPERSEDING
MIL-DTL-83723/74F
w/AMENDMENT 1
22 September 2020

CONNECTORS, ELECTRIC, (CIRCULAR, ENVIRONMENT RESISTING),
RECEPTACLE, (SINGLE HOLE MOUNT, BAYONET COUPLING, CRIMP PIN CONTACT),
(SERIES III, CLASSES A, G, M, R, T, W AND Z)

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-83723.



Technical drawings of a panel cutout assembly, showing various views and dimensions.

DETAIL A (Top View):

- SHELL SIZE 8
- .076
- .071
- OPTIONAL DESIGN
- .089
- .084
- .560
- .540
- .490 REF
- .022
- .018
- 7°
- 6°
- S DIA GROOVE
- .020
- .015
- DETAIL A

DETAIL P (Left View):

- .054
- .048
- .019
- ±.008
- EXTENSION
- 5° MAX (TYP)
- .099
- .093
- U DIA
- .005 MAX TO END OF FLAT
- DETAIL P

DETAIL S (Right View):

- .090 DIA NO.20
- .084 SEE NOTE 6
- .112 DIA NO.20
- .106 DIA NO.20
- .144 DIA NO.16
- .138 DIA NO.16
- .204 DIA NO.12
- .198 DIA NO.12
- .259
- .199
- .032
- .008 MIN
- 11°30'
- 7°30'
- .392 SHELL SIZES NO.8 THRU NO.24
- .378
- HARD INSERT
- .046 DIA NO.20
- .042 DIA NO.20
- .069 DIA NO.16
- .065 DIA NO.16
- .101 DIA NO.12
- .097 DIA NO.12
- RESILIENT INSERT FACE SEAL
- DETAIL S

PANEL CUTOUT (Bottom View):

- 90°
- JJ MOUNTING FLAT
- MS3186 NUT
- EE
- FF
- PANEL CUTOUT

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Shell size	B	C	D max	F max	G	N thread
08	.137 .097	.428 .433	.312	.561	.536 .531	.625-20 UN-2A
10	.137 .097	.530 .535	.388	.696	.659 .654	.750-20 UNEF-2A
12	.137 .097	.700 .705	.558	.875	.829 .824	.9375-20 UNEF-2A
14	.137 .097	.769 .774	.627	.935	.898 .893	1.000-20 UNEF-2A
16	.137 .097	.896 .901	.772	1.062	1.025 1.020	1.125-20 UNEF-2A
18	.137 .097	1.002 1.007	.860	1.187	1.131 1.126	1.250-18 UNEF-2A
20	.137 .097	1.127 1.132	.985	1.312	1.256 1.251	1.375-18 UNEF-2A
22	.168 .128	1.252 1.257	1.110	1.437	1.381 1.376	1.500-18 UNEF-2A
24	.168 .128	1.377 1.382	1.235	1.562	1.506 1.501	1.625-18 UNEF-2A

Shell size	U	V max	S +.005 -.000	W max	EE	FF	JJ
08	.670	.979	.508	1.068	.605	.635	.596 .590
10	.796	1.104	.636	1.192	.730	.760	.721 .715
12	.984	1.291	.806	1.380	.917	.947	.908 .902
14	1.046	1.391	.875	1.505	.980	1.010	.971 .965
16	1.171	1.516	1.002	1.630	1.105	1.135	1.096 1.090
18	1.296	1.641	1.108	1.756	1.229	1.260	1.220 1.214
20	1.484	1.766	1.233	1.860	1.354	1.385	1.345 1.339
22	1.609	1.954	1.358	2.086	1.479	1.510	1.470 1.464
24	1.734	2.079	1.483	2.160	1.604	1.635	1.595 1.589

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FIGURE 1. Dimensions and configurations - Continued.

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.005	0.13	.211	5.36	.721	18.31	1.090	27.69	1.385	35.18
.008	0.20	.259	6.58	.730	18.54	1.096	27.84	1.391	35.33
.015	0.38	.312	7.92	.750	19.05	1.104	28.04	1.437	36.50
.018	0.46	.366	9.30	.760	19.30	1.105	28.07	1.455	36.96
.019	0.48	.376	9.55	.761	19.33	1.108	28.14	1.464	37.19
.020	0.51	.378	9.60	.769	19.53	1.110	28.19	1.470	37.34
.022	0.56	.380	9.65	.772	19.61	1.125	28.58	1.479	37.57
.032	0.81	.388	9.86	.774	19.66	1.127	28.63	1.483	37.67
.042	1.07	.392	9.96	.781	19.84	1.132	28.75	1.484	37.69
.046	1.17	.428	10.87	.796	20.22	1.135	28.83	1.500	38.10
.062	1.57	.433	11.00	.806	20.47	1.171	29.74	1.510	38.35
.065	1.65	.461	11.71	.860	21.84	1.187	30.15	1.516	38.51
.069	1.75	.481	12.22	.875	22.23	1.192	30.28	1.562	39.67
.071	1.80	.490	12.45	.896	22.76	1.214	30.84	1.589	40.36
.076	1.93	.508	12.90	.901	22.89	1.220	30.99	1.595	40.51
.084	2.13	.530	13.46	.902	22.91	1.229	31.22	1.604	40.74
.089	2.26	.535	13.59	.908	23.06	1.233	31.32	1.609	41.87
.090	2.29	.539	13.69	.917	23.29	1.235	31.37	1.625	41.28
.093	2.36	.540	13.72	.935	23.75	1.250	31.75	1.630	41.40
.094	2.39	.558	14.17	.9375	23.81	1.252	31.80	1.635	41.53
.097	2.46	.560	14.22	.947	24.05	1.257	31.93	1.641	41.68
.098	2.49	.561	14.25	.965	24.51	1.260	32.00	1.734	44.04
.101	2.57	.590	14.99	.971	24.66	1.291	32.79	1.756	44.60
.106	2.69	.596	15.14	.979	24.87	1.296	32.92	1.766	44.86
.109	2.77	.605	15.37	.980	24.89	1.300	33.02	1.860	47.24
.112	2.84	.625	15.88	.984	24.99	1.312	33.32	1.954	49.63
.125	3.18	.627	15.93	.985	25.02	1.339	34.01	2.068	52.53
.128	3.25	.635	16.13	1.000	25.40	1.345	34.16	2.079	52.81
.137	3.48	.636	16.15	1.002	25.45	1.354	34.39	2.160	54.86
.138	3.51	.670	17.02	1.007	25.58	1.358	34.49		
.144	3.66	.696	17.68	1.010	25.65	1.375	34.93		
.168	4.27	.700	17.78	1.046	26.57	1.377	34.98		
.198	5.03	.705	17.91	1.062	26.97	1.380	35.05		
.204	5.18	.715	18.16	1.068	27.13	1.382	35.10		

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FIGURE 1. Dimensions and configurations - Continued.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general 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. Rear accessory interchangeability dimensions shall be in accordance with MIL-DTL-83723.
5. The centerline of indicated projection shall be located on vertical centerline $\pm 2^\circ$.
6. See table I for contact cavities requiring this dimension.

FIGURE 1. Dimensions and configurations - Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

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

TABLE I. Inserts requiring reduced diameters for raised seal barriers on contact cavities.

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

For connector accessories: See SAE-AS85049.

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

O-ring shall be furnished with connector.

Part or Identifying Number (PIN) example:

M83723/ 74 R 08 55 N

<u>M83723/</u>	Military designator
<u>74</u>	Specification sheet number
<u>R</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 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.

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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
SAE-AS85049

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA-CC

(Project 5935-2024-053)

Review activities:

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

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