

INCH-POUND

MIL-DTL-83723/35F
w/AMENDMENT 1
1 February 2024
SUPERSEDING
MIL-DTL-83723/35F
20 October 2000

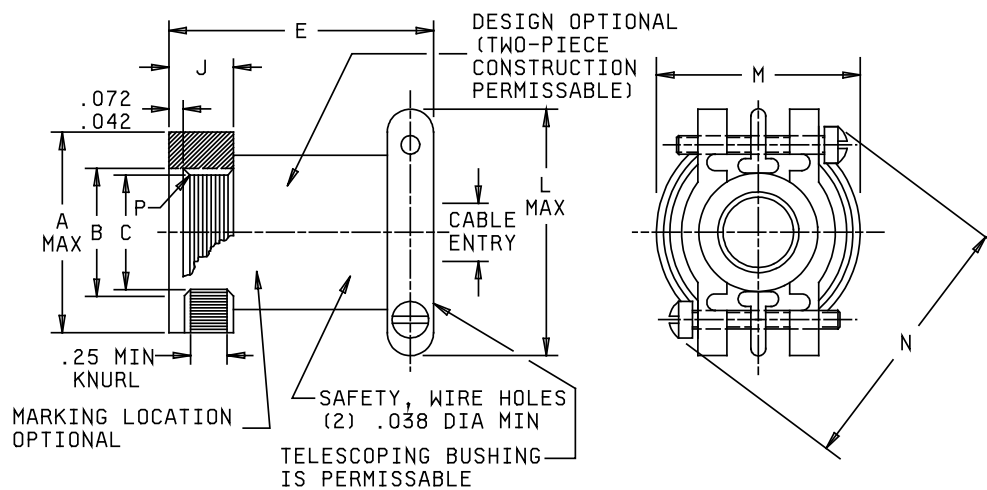
DETAIL SPECIFICATION SHEET

CONNECTOR, ELECTRIC, BACKSHELL, STRAIGHT W/O STRAIN RELIEF,
AND WITH MECHANICAL STRAIN RELIEF, STRAIGHT OR RIGHT ANGLE
THREADED COUPLING SERIES II

Inactive for new design after March 19, 1975

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 and MIL-DTL-83723.



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, $\pm .010$ (0.25 mm) for two place decimals, and angular tolerances $X^\circ = \pm 1^\circ 0'$, $X^\circ X' = \pm 30'$.
4. Dimensions apply after plating.
5. Remove all burrs and sharp edges.

FIGURE 1. Type S - Straight clamp.

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Shell size	A Max dia	B dia	C dia	D dia	E max	J min	L max	M max	N max	P thread class 2B	Cable entry 3/	
											Fig. 1 max	Fig. 1 min
08	.585	.450 .440	.291 .281	.257 .245	1.290 (32.77)	.285	.843	.900 (22.86)	1.075	.438-28 UNEF	.235	.125
10	.645	.513 .503	.351 .341	.310 .300	1.290 (32.77)	.285	.843	.900 (22.86)	1.075	.500-28 UNEF	.235	.125
11	.730	.575 .565	.420 .410	.390 .380	1.290 (32.77)	.285	.906	.980 (24.89)	1.140	.562-24 UNEF	.297	.170
13 1/	.770	.640 .628	.471 .461	.415 .403	1.290 (32.77)	.285	1.085	.995 (25.27)	1.140	.625-24 UNEF	.297	.170
15 2/	.910	.765 .753	.575 .564	.497 .485	1.368 (34.75)	.285	1.093	1.160 (29.46)	1.360	.750-20 UNEF	.422	.235
17	1.035	.890 .878	.700 .690	.616 .604	1.430 (36.32)	.285	1.187	1.260 (32.00)	1.520	.875-20 UNEF	.547	.295
16	1.035	.890 .878	.700 .690	.616 .604	1.587 (40.31)	.440	1.275	1.260 (32.00)	1.520	.875-20 UNEF	.547	.295
18	1.170	1.015 1.003	.817 .807	.735 .725	1.695 (43.05)	.440	1.475	1.455 (36.96)	1.600	1.000-20 UNEF	.610	.325
20	1.300	1.140 1.128	.953 .943	.875 .865	1.695 (43.05)	.440	1.500	1.580 (40.13)	1.890	1.125-18 UNEF	.735	.380
22	1.420	1.265 1.255	1.083 1.073	.983 .973	1.695 (43.05)	.440	1.710	1.580 (40.13)	1.890	1.250-18 UNEF	.735	.380
24	1.535	1.390 1.378	1.190 1.180	1.095 1.085	1.931 (49.05)	.440	1.719	1.890 (48.01)	2.145	1.375-18 UNEF	.922	.500
28	1.800	1.640 1.628	1.410 1.400	1.255 1.245	1.931 (49.05)	.440	2.040	1.890 (48.01)	2.145	1.625-18 UNEF	.922	.500
32	2.035	1.890 1.878	1.664 1.654	1.525 1.515	1.869 (47.47)	.440	2.332	2.215 (56.26)	2.550	1.875-16 UN	1.235	.705
36	2.270	2.140 2.128	1.875 1.862	1.760 1.750	1.869 (47.47)	.440	2.312	2.405 (61.09)	2.889	2.125-16 UN	1.360	.725
40	2.780	2.395 2.385	2.208 2.198	2.020 1.865	2.875 (73.03)	.459	2.950	2.781 (70.64)	3.500	2.375-16 UN	1.630	.911

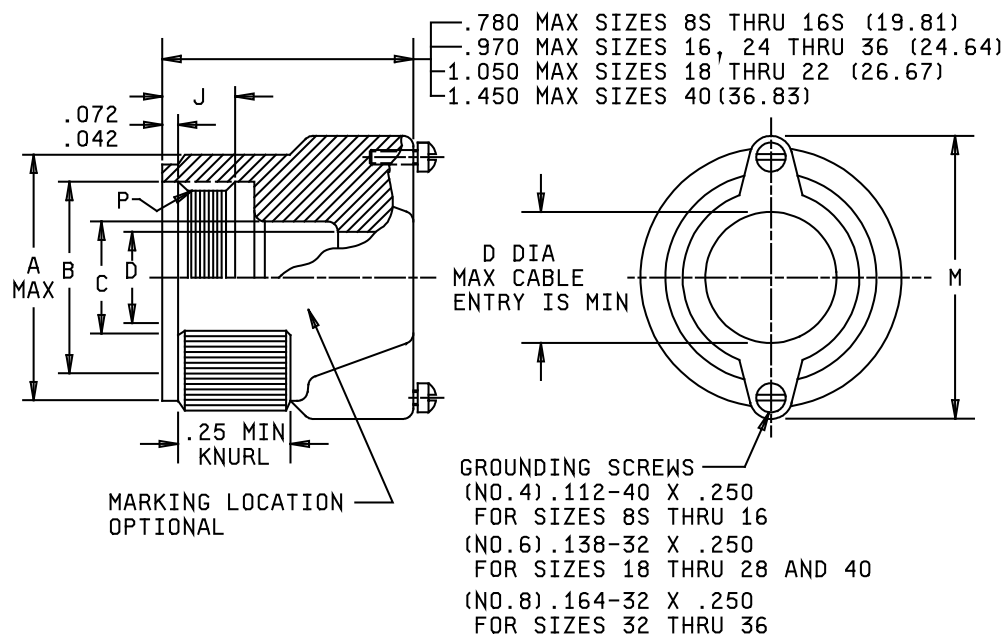
1/ Shell size 13 fits connector sizes 12 and 13.

2/ Shell sizes 14 and 15 fit connector sizes 14 and 16.

3/ "Cable entry" dimension is defined as the envelope area for the wire bundle. This dimension is not intended to define the clamp hardware limits.

FIGURE 1. Type S - Straight clamp - Continued.

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NOTES:

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4. Dimensions apply after plating.
5. Remove all burrs and sharp edges.

FIGURE 2. Type N - no clamp.

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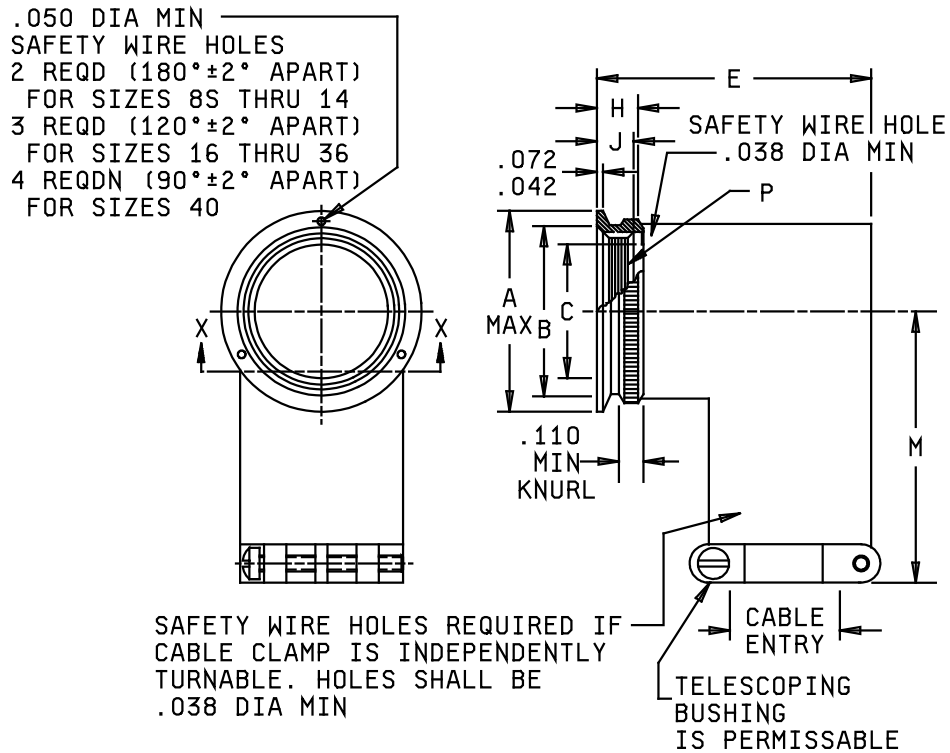
Shell size	A Max dia	B dia	C dia	D dia	E max	J min	L max	M max	N max	P thread class 2B	Cable entry 3/	
											Fig. 1 max	Fig. 1 min
08	.585	.450 .440	.291 .281	.257 .245	1.290 (32.77)	.285	.843	.900 (22.86)	1.075	.438-28 UNEF	.235	.125
10	.645	.513 .503	.351 .341	.310 .300	1.290 (32.77)	.285	.843	.900 (22.86)	1.075	.500-28 UNEF	.235	.125
11	.730	.575 .565	.420 .410	.390 .380	1.290 (32.77)	.285	.906	.980 (24.89)	1.140	.562-24 UNEF	.297	.170
13 1/	.770	.640 .628	.471 .461	.415 .403	1.290 (32.77)	.285	1.085	.995 (25.27)	1.140	.625-24 UNEF	.297	.170
15 2/	.910	.765 .753	.575 .564	.497 .485	1.368 (34.75)	.285	1.093	1.160 (29.46)	1.360	.750-20 UNEF	.422	.235
17	1.035	.890 .878	.700 .690	.616 .604	1.430 (36.32)	.285	1.187	1.260 (32.00)	1.520	.875-20 UNEF	.547	.295
16	1.035	.890 .878	.700 .690	.616 .604	1.587 (40.31)	.440	1.275	1.260 (32.00)	1.520	.875-20 UNEF	.547	.295
18	1.170	1.015 1.003	.817 .807	.735 .725	1.695 (43.05)	.440	1.475	1.455 (36.96)	1.600	1.000-20 UNEF	.610	.325
20	1.300	1.140 1.128	.953 .943	.875 .865	1.695 (43.05)	.440	1.500	1.580 (40.13)	1.890	1.125-18 UNEF	.735	.380
22	1.420	1.265 1.255	1.083 1.073	.983 .973	1.695 (43.05)	.440	1.710	1.580 (40.13)	1.890	1.250-18 UNEF	.735	.380
24	1.535	1.390 1.378	1.190 1.180	1.095 1.085	1.931 (49.05)	.440	1.719	1.890 (48.01)	2.145	1.375-18 UNEF	.922	.500
28	1.800	1.640 1.628	1.410 1.400	1.255 1.245	1.931 (49.05)	.440	2.040	1.890 (48.01)	2.145	1.625-18 UNEF	.922	.500
32	2.035	1.890 1.878	1.664 1.654	1.525 1.515	1.869 (47.47)	.440	2.332	2.215 (56.26)	2.550	1.875-16 UN	1.235	.705
36	2.270	2.140 2.128	1.875 1.862	1.760 1.750	1.869 (47.47)	.440	2.312	2.405 (61.09)	2.889	2.125-16 UN	1.360	.725
40	2.780	2.395 2.385	2.208 2.198	2.020 1.865	2.875 (73.03)	.459	2.950	2.781 (70.64)	3.500	2.375-16 UN	1.630	.911

1/ Shell size 13 fits connector sizes 12 and 13.

2/ Shell sizes 14 and 15 fit connector sizes 14 and 16.

3/ "Cable entry" dimension is defined as the envelope area for the wire bundle. This dimension is not intended to define the clamp hardware limits.

FIGURE 2. Type N - no clamp - Continued.



NOTES:

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2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .005$ (0.13 mm) for three place decimals, $\pm .010$ (0.25) for two place decimals, and angular tolerances $X^\circ = \pm 1^\circ 0'$, $X^\circ X' = \pm 30'$.
4. Dimensions apply after plating.
5. Remove all burrs and sharp edges.

FIGURE 3. Type A - 90° clamp.

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Shell size	A max dia	B dia	C dia	E max	H max	J	M max	P thread class 2B	Cable entry ^{1/}	
									Max	Min
08	.805	.455 .440	.300 .279	1.187 (30.15)	.350	.285 .272	1.220	.438-28 UNEF	.235	.102
10	.890	.520 .500	.360 .339	1.187 (30.15)	.350	.285 .272	1.250	.500-28 UNEF	.235	.102
11	.975	.580 .560	.430 .408	1.312 (33.32)	.350	.285 .272	1.280	.562-24 UNEF	.297	.140
13	1.005	.645 .625	.480 .459	1.312 (33.32)	.350	.285 .272	1.280	.625-24 UNEF	.297	.140
12	1.005	.645 .625	.480 .459	1.468 (37.29)	.505	.441 .428	1.280	.625-24 UNEF	.297	.140
15	1.130	.770 .750	.584 .562	1.437 (36.50)	.355	.285 .272	1.405	.750-20 UNEF	.422	.195
14	1.130	.770 .750	.584 .562	1.594 (40.49)	.510	.441 .428	1.405	.750-20 UNEF	.422	.195
17	1.255	.895 .875	.710 .688	1.531 (38.89)	.350	.285 .272	1.529	.875-20 UNEF	.547	.255
16	1.255	.895 .875	.710 .688	1.687 (42.85)	.510	.441 .428	1.529	.875-20 UNEF	.547	.255
18	1.350	1.020 1.000	.827 .805	1.765 (44.83)	.490	.441 .428	1.593	1.000-20 UNEF	.610	.285
20	1.475	1.145 1.125	.962 .942	2.000 (50.80)	.495	.441 .428	1.655	1.125-18 UNEF	.735	.350
22	1.600	1.270 1.250	1.095 1.073	2.000 (50.80)	.495	.441 .428	1.718	1.250-18 UNEF	.735	.350
24	1.725	1.395 1.375	1.202 1.180	2.265 (57.53)	.488	.423 .410	1.894	1.375-18 UNEF	.922	.468
28	1.975	1.645 1.625	1.423 1.401	2.265 (57.53)	.488	.423 .410	1.973	1.625-18 UNEF	.922	.468
32	2.225	1.895 1.875	1.674 1.652	2.578 (65.48)	.488	.423 .410	2.187	1.875-16 UN	1.235	.664
36	2.475	2.145 2.125	1.887 1.865	2.815 (71.50)	.488	.423 .410	2.405	2.125-16 UN	1.360	.694
40	2.750	2.390 2.375	2.125 2.117	5.800 (147.23)	.500	.423 .410	5.100	2.375-16 UN	1.630	.911

^{1/} "Cable entry" dimension is defined as the envelope area for the wire bundle. This dimension is not intended to define the clamp hardware limits.

FIGURE 3. Type A - 90° clamp - Continued.

REQUIREMENTS:

Material: Aluminum alloy in accordance with ASTM-B85/B85M Aluminum Alloy Die Castings, Stainless Steel in accordance with ASTM A967/A967M, Aluminum black anodize in accordance with MIL-PRF-8625.

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Telescoping type bushing shall be capable of passing fluid and temperature requirements of the basic specification.

Part or Identifying Number (PIN) example:

| M83723/ 35 A 08 R

<u>M83723/</u>	Military designation
<u>35</u>	Specification sheet number
<u>A</u>	Type
	S: Straight clamp
	A: 90° clamp
	N: No clamp
<u>08</u>	Shell size
<u>R</u>	Class - Material and finish
	R: Aluminum, 200°C, conductive finish.
	G: Stainless steel passivated, 200°C.
	A: Aluminum black anodize, nonconductive, 200°C.

| 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.

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - AS
Air Force – 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2024-065)

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