

FIGURE 1. Plug, dimensions and configuration - Continued.

MIL-DTL-83723/69B

Shell size	A	B	C	D	E	F thread	G	H
8	.704 (17.88)	.290 (7.37)	.470 (11.94)	.370 (9.40)	.305 (7.75)	.500-20 UNF-2A	.437 (11.10)	.294 (7.47)
10	.829 (21.06)	.388 (9.86)	.600 (15.24)	.497 (12.62)	.405 (10.29)	.625-24 UNEF-2A	.572 (14.53)	.428 (10.87)
12	1.016 (25.81)	.558 (14.17)	.724 (18.39)	.613 (15.57)	.531 (13.49)	.750-20 UNEF-2A	.687 (17.45)	.598 (15.19)
14	1.079 (27.41)	.627 (15.93)	.849 (21.56)	.738 (18.75)	.665 (16.89)	.875-20 UNEF-2A	.812 (20.62)	.667 (16.94)
16	1.204 (30.58)	.772 (19.61)	.974 (24.74)	.863 (21.92)	.790 (20.07)	1.000-20 UNEF-2A	.937 (23.80)	.794 (20.17)
18	1.345 (34.16)	.860 (21.84)	1.030 (26.16)	.919 (23.34)	.869 (22.07)	1.0625-18 UNEF-2A	.992 (25.20)	.900 (22.86)
20	1.470 (37.34)	.985 (25.02)	1.154 (29.31)	1.044 (26.52)	.994 (25.25)	1.1875-18 UNEF-2A	1.117 (28.37)	1.025 (26.04)
22	1.595 (40.51)	1.110 (28.19)	1.279 (32.49)	1.169 (29.69)	1.119 (28.42)	1.3125-18 UNEF-2A	1.242 (31.55)	1.150 (29.21)
24	1.720 (43.69)	1.235 (31.37)	1.404 (35.66)	1.294 (32.87)	1.244 (31.60)	1.4375-18 UNEF-2A	1.367 (34.72)	1.275 (32.39)

Shell size	J max	J min	K	M
8	.405 (10.29)	.396 (10.06)	.612 (15.54)	1.095 (27.81)
10	.526 (13.36)	.517 (13.13)	.737 (18.72)	1.240 (31.50)
12	.696 (17.68)	.687 (17.45)	.925 (23.50)	1.432 (36.37)
14	.765 (19.43)	.756 (19.20)	.987 (25.07)	1.490 (37.85)
16	.892 (22.66)	.883 (22.43)	1.112 (28.24)	1.711 (43.46)
18	.998 (25.35)	.989 (25.12)	1.237 (31.42)	1.815 (46.10)
20	1.123 (28.52)	1.114 (28.30)	1.362 (34.59)	1.962 (49.83)
22	1.248 (31.70)	1.239 (31.47)	1.487 (37.77)	2.070 (52.58)
24	1.373 (34.87)	1.364 (34.65)	1.612 (40.94)	2.195 (55.75)

FIGURE 1. Plug, dimensions and configuration - Continued.

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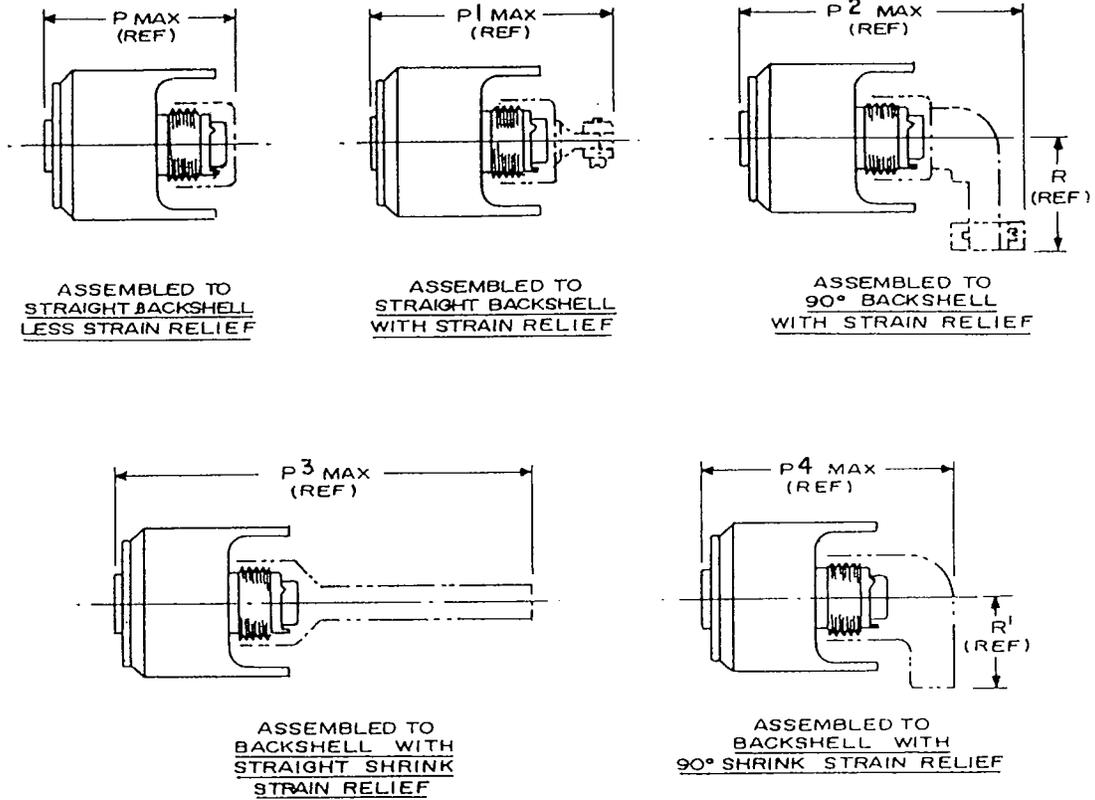
Inches	mm	Inches	mm	Inches	mm	Inches	mm
.031	.79	.092	2.34	.210	5.33	7.00	177.80
.045	1.14	.096	2.44	.290	7.37		
.046	1.17	.107	2.72	.309	7.85		
.048	1.22	.114	2.90	.320	8.13		
.054	1.37	.118	3.00	.330	8.38		
.062	1.57	.125	3.18	.400	10.16		
.068	1.73	.146	3.71	.500	12.70		
.070	1.78	.150	3.81	.510	12.95		
.076	1.93	.206	5.23	1.18	29.97		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances shall be $\pm .005$ (.13 mm) for three place decimals, $\pm .01$ (0.25 mm) for two place decimals, and $\pm 1^\circ$ and $\pm 30'$ for angular dimensions.
4. The dimensions showing the relationship of the coupling ring to the shell apply only when the coupling ring is in the full forward position.
5. The quick-disconnect connector plug is intended to be used with series III threaded coupling receptacles (MIL-DTL-83723/82 and MIL-DTL-83723/84), and with the adapter (MIL-DTL-83723/70) permanently attached to the receptacle.
6. Coupling of the quick-disconnect plug connector is to be accomplished by a straight axial push with no cocking of the coupling mechanism.
7. Uncoupling of the quick-disconnect plug connector is to be accomplished by a straight axial pull on the outer coupling ring.

FIGURE 1. Plug, dimensions and configuration - Continued.

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Shell size	P	P1	P2	P3	P4	R	R1
8	1.457 (37.01)	1.869 (47.47)	2.018 (51.26)	5.838 (148.29)	1.848 (46.94)	.830 (21.08)	4.585 (116.46)
10	1.457 (37.01)	1.979 (50.27)	2.100 (53.34)	6.528 (165.81)	1.888 (47.96)	.880 (22.35)	5.390 (136.91)
12	1.457 (37.01)	2.124 (53.95)	2.293 (58.24)	7.348 (186.64)	1.928 (48.97)	.950 (24.13)	6.330 (160.78)
14	1.457 (37.01)	2.124 (53.95)	2.353 (59.77)	7.348 (186.64)	1.928 (48.97)	1.010 (25.65)	6.330 (160.78)
16	1.457 (37.01)	2.229 (56.62)	2.502 (63.55)	8.068 (204.93)	2.028 (51.51)	1.070 (27.18)	6.710 (170.43)
18	1.457 (37.01)	2.474 (62.84)	2.614 (66.40)	8.068 (204.93)	2.028 (51.51)	1.130 (28.70)	6.710 (170.43)
20	1.457 (37.01)	2.604 (66.14)	2.739 (69.57)	9.068 (230.33)	2.148 (54.56)	1.190 (30.23)	7.740 (196.60)
22	1.457 (37.01)	2.729 (69.32)	2.864 (72.75)	9.068 (230.33)	2.148 (54.56)	1.260 (32.00)	7.740 (196.60)
24	1.457 (37.01)	2.854 (72.49)	2.989 (75.92)	9.068 (230.33)	2.228 (56.59)	1.320 (33.53)	8.030 (203.96)

FIGURE 2. Plug and backshell assembly, dimensions and configuration.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances shall be $\pm .005$ (.13 mm) for three place decimals, $\pm .01$ (0.25 mm) for two place decimals, and $\pm 1^\circ$ and $\pm 30'$ for angular dimensions.

FIGURE 2. Plug and backshell assembly, dimensions and configuration - Continued.

REQUIREMENTS:

Dimensions and configurations: See figures 1 and 2.

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

TABLE I. Inserts requiring reduced diameters for lead-in chamfers 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 and MIL-C-83723/16.

Unless otherwise specified in the purchase order, the following components shall be furnished with the connector:

- a. Contacts in accordance with SAE-AS39029 shall be furnished with the connector. Spare contacts are required for each size contact. The total quantity of spare contacts shall be 10 percent or 1, whichever is greater, of the total number of each size contact required.
- b. Grommet seal plugs in accordance with MS27488 shall be furnished with the connector. Total quantity shall be 15 percent of each contact size or 3, whichever is greater.
- c. Contact extraction tools in accordance with MIL-I-81969 shall be included in the connector package.

Connector assembly shall include a backshell to ensure compliance with moisture sealing requirements. See SAE-AS85049 and MIL-C-83723/16.

The coupling mechanism of the connector plug shall withstand a minimum tensile load of 100 lb (45.36 kg) minimum. Load shall be applied to the rear accessory hardware in a straight axial direction.

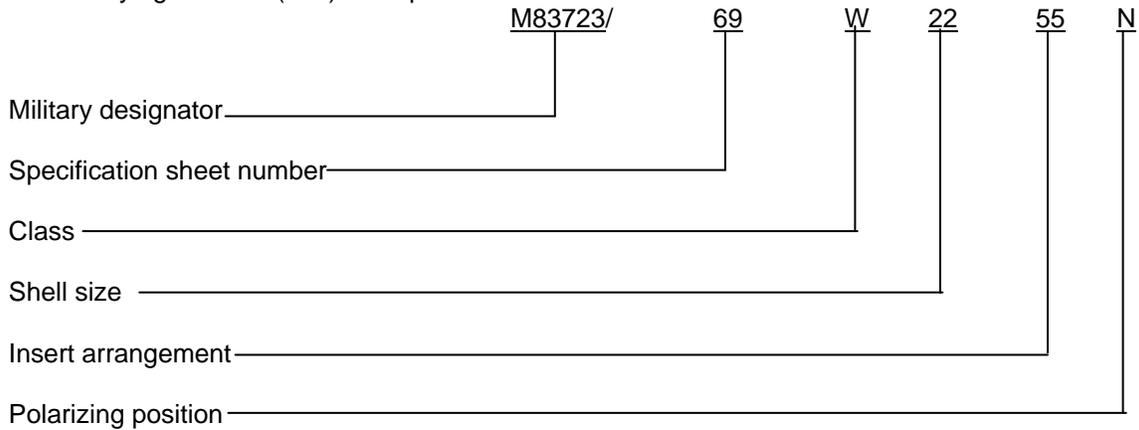
The quick-disconnect connector plug shall meet the vibration and shock requirements in accordance with MIL-DTL-83723. The coupling mechanism shall maintain the plug and receptacle in the locked position during testing.

The tensile force required to unlock the coupling mechanism shall be 5 lb minimum and 20 lb maximum.

The locking mechanism shall meet the performance requirements of MIL-DTL-83723.

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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-STD-1554
- MS27488
- MIL-I-81969
- MIL-C-83723/16
- MIL-DTL-83723/70
- MIL-DTL-83723/82
- MIL-DTL-83723/84
- SAE-AS39029
- SAE-AS85049

CONCLUDING MATERIAL

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

Preparing activity:
DLA - CC

Review activities:
Air Force – 70, 99

(Project 5935-2008-105)

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 <http://assist.daps.dla.mil>.