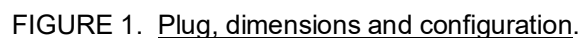


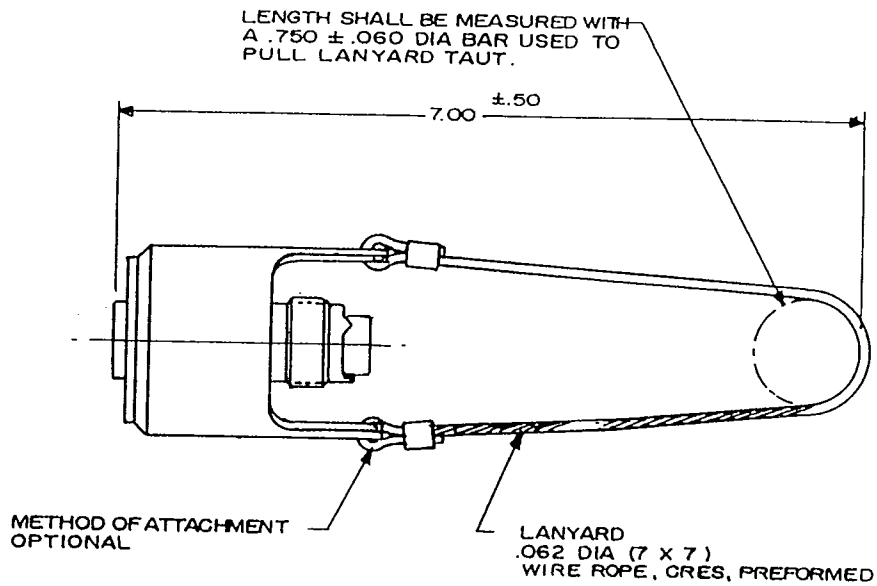
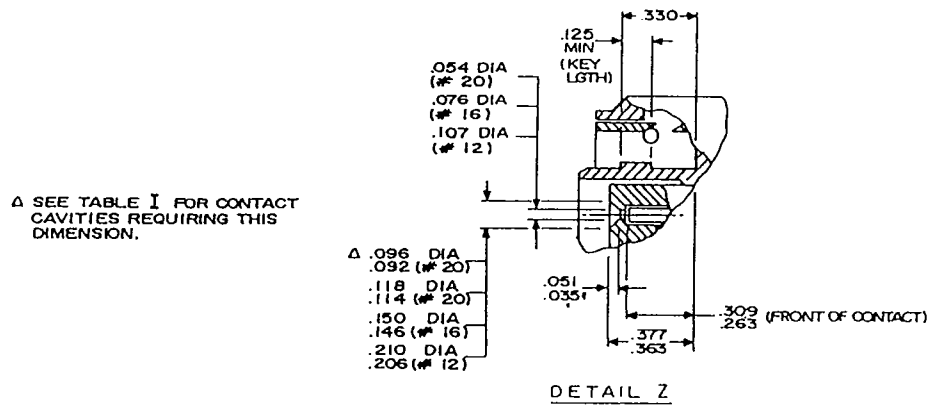
MIL-DTL-83723/69B
w/AMENDMENT 2
1 February 2024
SUPERSEDING
MIL-DTL-83723/69B
w/AMENDMENT 1
14 August 2019

CONNECTORS, ELECTRICAL, CIRCULAR, ENVIRONMENT RESISTING,
PLUG, THREADED COUPLING, PUSH-PULL, QUICK-DISCONNECT WITH LANYARD,
CRIMP SOCKET 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.



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LANYARD

FIGURE 1. Plug, dimensions and configuration - Continued.

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Shell size	A	B	C	D	E	F thread	G	H
08	.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
08	.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)

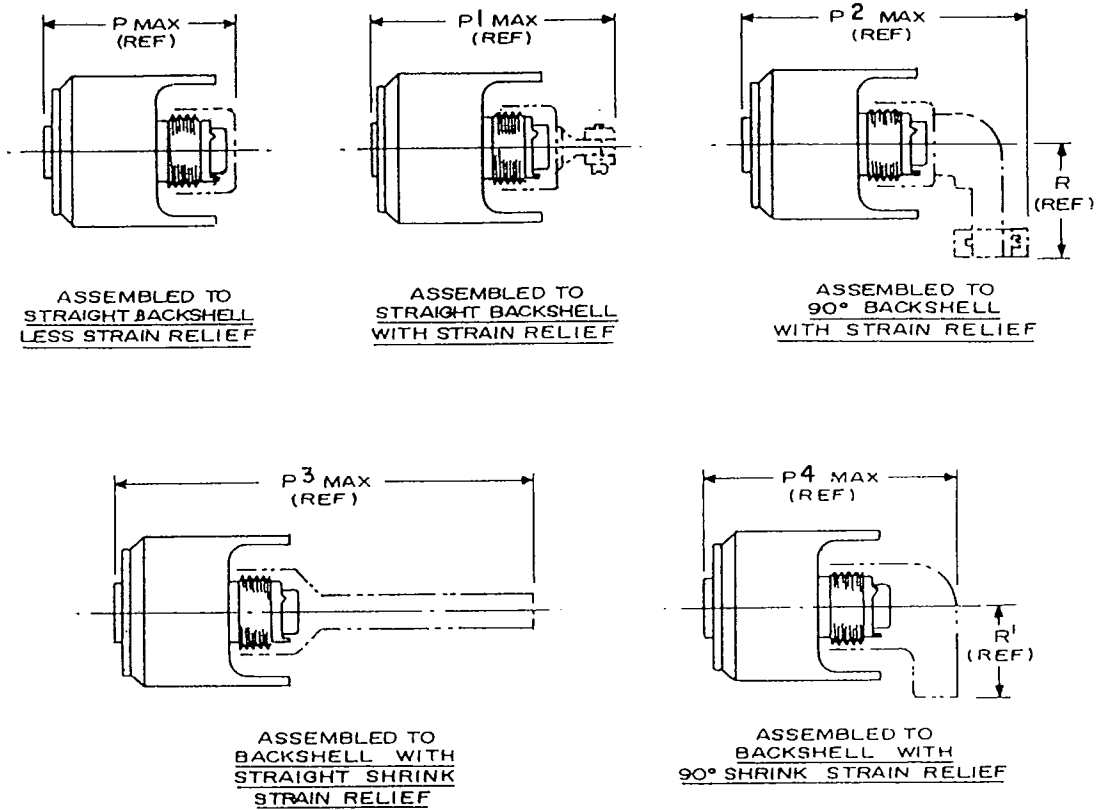
FIGURE 1. Plug, dimensions and configuration - Continued.

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
08	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.

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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
08	03	1, 2, 3
10	06	1, 2, 3, 4, 5, 6

For connector accessories: See SAE-AS85049 and MIL-DTL-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 SAE-AS81969 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-DTL-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:

| M83723/ 69 W 08 55 N

| M83723/ Military designator
 69 Specification sheet number
 W Class
 08 Shell size
 55 Insert arrangement
 N 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.

Referenced documents. In addition to MIL-DTL-83723, this document references the following:

MIL-STD-1554
MS27488
MIL-DTL-83723/16
MIL-DTL-83723/70
MIL-DTL-83723/82
MIL-DTL-83723/84
SAE-AS39029
SAE-AS81969
SAE-AS85049

CONCLUDING MATERIAL

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

Preparing activity:
DLA - CC

(Project 5935-2024-075)

Review activity:
Air Force – 70

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