MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial drafts of MIL-DTL-83723/66B w/Amendment 1, MIL-DTL-83723/67B w/Amendment 1, and MIL-DTL-83723/68B w/Amendment 1 (see table for details).

<table>
<thead>
<tr>
<th>Initial Draft</th>
<th>Title</th>
<th>Project Number</th>
</tr>
</thead>
</table>

The drafts for the subject documents, dated July 2, 2019, are now available for viewing and downloading from the DLA Land and Maritime-VA website at the following internet address: [https://landandmaritimeapps.dla.mil/programs/milspec/default.aspx](https://landandmaritimeapps.dla.mil/programs/milspec/default.aspx).

The subject documents are being amended to delete and replace MIL-I-81969. This mil spec document has been cancelled and superseded by SAE-AS81969, a non-governmental standard. Other editorial changes include the following: 1) Add QR code. 2) Delete AF-99. 3) Update ASSIST website link. Proposed additions to these documents are indicated in the drafts with bold lettering and /or yellow highlighting. Proposed deletions are indicated with cross-outs and /or green highlighting.

If these documents are of interest to you, please provide your comments or suggested changes. Concurrence or comments are required at this Center within 30 calendar days from the date of this letter. Late comments will be held for the next coordination of these documents. Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their military department’s document custodian in sufficient time to allow for consolidation of the department’s reply.
SUBJECT: Initial drafts of MIL-DTL-83723/66B w/Amendment 1, MIL-DTL-83723/67B w/Amendment 1, and MIL-DTL-83723/68B w/Amendment 1 (see table for details) – Continued.

If no response is received by the above due date, it will be interpreted as either concurrence with or no interest in these documents. Subsequent coordination for these documents will be circulated only to those interested parties that have responded to the subject initial drafts.

The point of contact for these documents is Mrs. Lisa Hoffer, phone number 614-692-7702, DSN 850-7702, facsimile transmission 614-692-6940, or e-mail lisa.hoffer@dla.mil. Comments may also be mailed via the US Postal Service to DLA Land and Maritime–VAI (ATTN: Lisa Hoffer), P.O. Box 3990, Columbus, OH 43218-3990.

Sincerely,

/ SIGNED /

ABDONASSER M. ABDOUNI
Chief,
Interconnection Branch

cc:
DLA Land and Maritime-FMVA (D. Barman)
DLA Land and Maritime -VQP (K. Hochevar)
DSCC.Standardization@dla.mil
DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, [CIRCULAR, ENVIRONMENT RESISTING],
PLUG, THREADED COUPLING, [PUSH-PULL, QUICK-DISCONNECT WITHOUT LANYARD],

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. Plug, threaded coupling, dimensions and configurations.
FIGURE 1. Plug, threaded coupling, dimensions and configurations - Continued.
### Shell size

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
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<th>C</th>
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<th>E</th>
<th>F</th>
<th>G</th>
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### Shell size

<table>
<thead>
<tr>
<th>Size</th>
<th>J</th>
<th>K</th>
<th>M</th>
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<tbody>
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<td>1.612 (40.94)</td>
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</table>

**FIGURE 1.** Plug, threaded coupling, dimensions and configurations - Continued.
NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only. Metric equivalents are in parentheses.
3. Unless otherwise specified, tolerances are ± .010 (0.25) for two place decimals, ± .005 (0.13) for three place decimals, and ± 1° and ± 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. This quick-disconnect connector plug is intended to be used with series III threaded coupling receptacles MIL-DTL-83723/82 and MIL-DTL-83723/84, with 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.
8. See table I for contact cavities requiring this dimension.

FIGURE 1. Plug, threaded coupling, dimensions and configurations - Continued.
FIGURE 2. Plug and backshell assembly, dimensions and configurations.
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only. Metric equivalents are in parentheses.
3. Unless otherwise specified, tolerances are ± .010 (0.25) for two place decimals, ± .005 (0.13) for three place decimals, and ± 1° 30’ for angular dimensions.

FIGURE 2. Plug and backshell assembly, dimensions and configurations – Continued.

REQUIREMENTS:

Dimensions and configurations: See figures 1 and 2.

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

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Insert arrangements</th>
<th>Contact cavities</th>
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</thead>
<tbody>
<tr>
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<td>03</td>
<td>1, 2, 3</td>
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<tr>
<td>10</td>
<td>06</td>
<td>1, 2, 3, 4, 5, 6</td>
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</table>

TABLE I. Inserts requiring reduced diameters for raised seal barriers on the outer row of the contact cavities.

For connector accessories: See SAE-AS85049 and MIL-C-83723/16 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 for each size contact are required. 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 SAE-AS81969 shall be included in the connector package.

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

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 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 and the coupling mechanism shall maintain the plug and receptacle in a locked condition.

The tensile force required to unlock the coupling mechanism shall be 5 lb (2.27 kg) minimum and 20 lb (9.07 kg) maximum.

The locking mechanism shall meet the performance requirements of MIL-DTL-83723.
Part or Identifying Number (PIN) example:

<table>
<thead>
<tr>
<th>Military designator</th>
<th>Specification sheet number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Class
Shell size
Insert arrangement
Polarizing position

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
- SAE-AS81969
- MIL-C-83723/16
- MIL-DTL-83723/16
- MIL-DTL-83723/70
- MIL-DTL-83723/82
- MIL-DTL-83723/84
- SAE-AS39029
- SAE-AS85049

CONCLUDING MATERIAL

Custodians: Preparing activity:
Army - CR DLA - CC
Navy - AS
Air Force - 85 (Project 5935-2019-103)
DLA - CC

Review activities activity:
Air Force – 70, 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 http://assist.daps.dla.mil, https://assist.dla.mil.