

MIL-DTL-83723/37B
w/AMENDMENT1
1 February 2024
SUPERSEDING
MIL-DTL-83723/37B
23 May 2003

CONNECTOR, ELECTRICAL, (CIRCULAR, ENVIRONMENT RESISTING),
PLUG, (BAYONET COUPLING, PREWIRED, SOCKET CONTACT),
(SERIES I, CLASSES A, G, AND R), (SHELL SIZE 8 FOR INSERTS 8-2, 8-3, AND 8-4 ONLY)

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

Technical drawing of a 285 Series Plug-In Terminal Block, showing side and end views with dimensions and labels.

Top View Dimensions:

- Overall length: 48.00 ±.50
- Leads: PER NEMA HP 3 - TYPE E SIZE 20 AWG

Side View Dimensions:

- INSULATOR MAX O.D.: 285
- SHELL MIN I.D.: .292
- Knurl dimensions: .486, .480, .358, .352
- Knurl length: .200 MIN TOTAL KNURL LENGTH
- Marking location: MARKING LOCATION OPTIONAL
- Shell thickness: 1.230 MAX
- Internal features: .887 MAX (REF), .320 MIN, .070 MAX
- Thread: .500-20 UNF-2A THD
- Full thread length: 290 MIN FULL THD
- Internal diameter: .061, .046
- Radius: .045 R MAX
- Shoulder diameter: .437 MAX
- Teeth diameter: .470 DIA MIN
- Teeth under diameter: .370 DIA MIN UNDER TEETH
- Grommet diameter: .305 DIA MAX GROMMET
- Teeth length: .190, .130

End View Dimensions:

- Master Key: 60°
- Teeth: 3 TEETH EQUALLY SPACED 120° APART
- Teeth angle: 90° TYP
- Overall diameter: .782 MAX

Other Labels:

- TO SHELL SHOULDER
- MAX FULLY COUPLED INDICATOR

AMSC N/A
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FSC 5935

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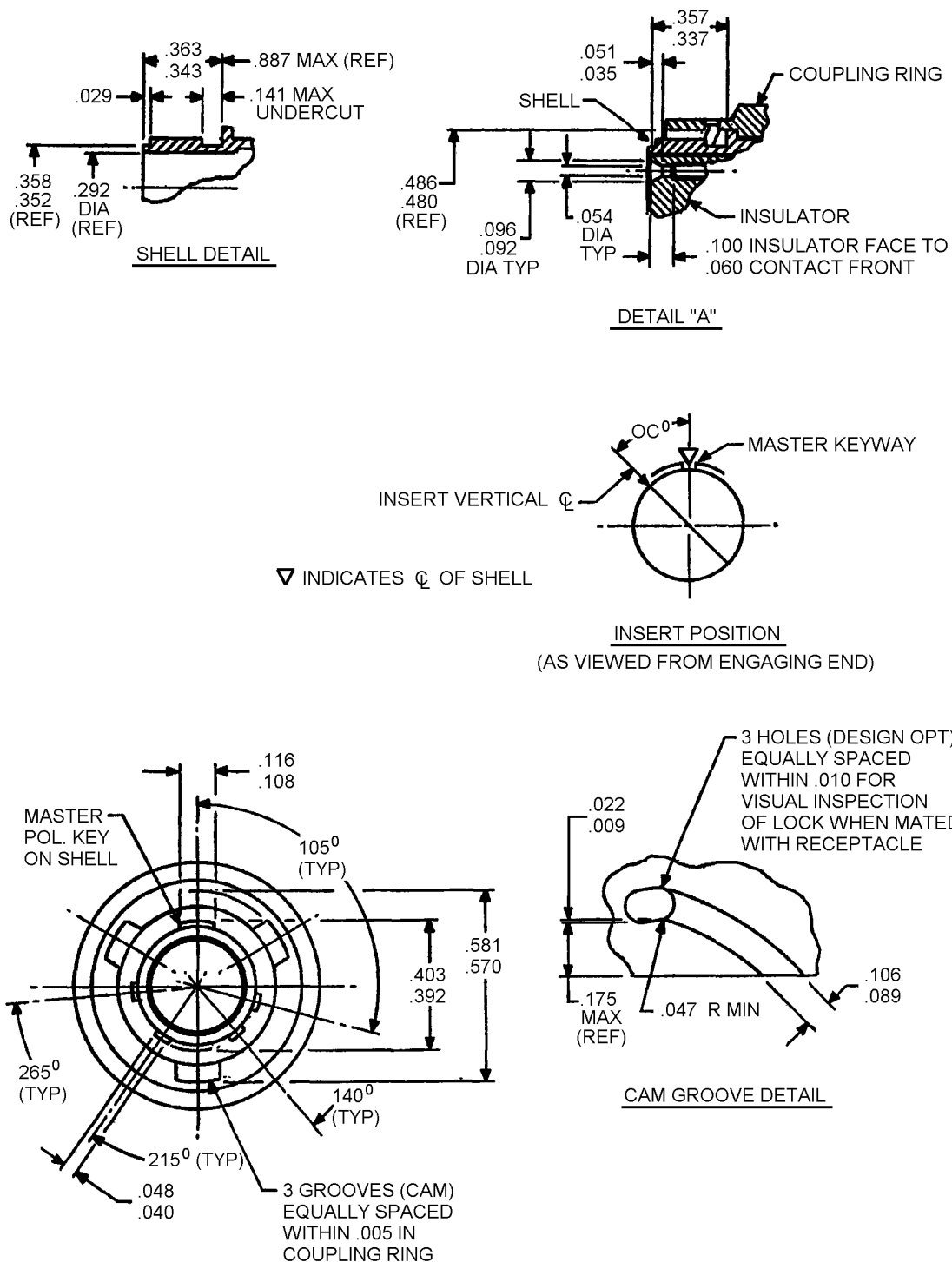


FIGURE 1. Completed assembly – Continued.

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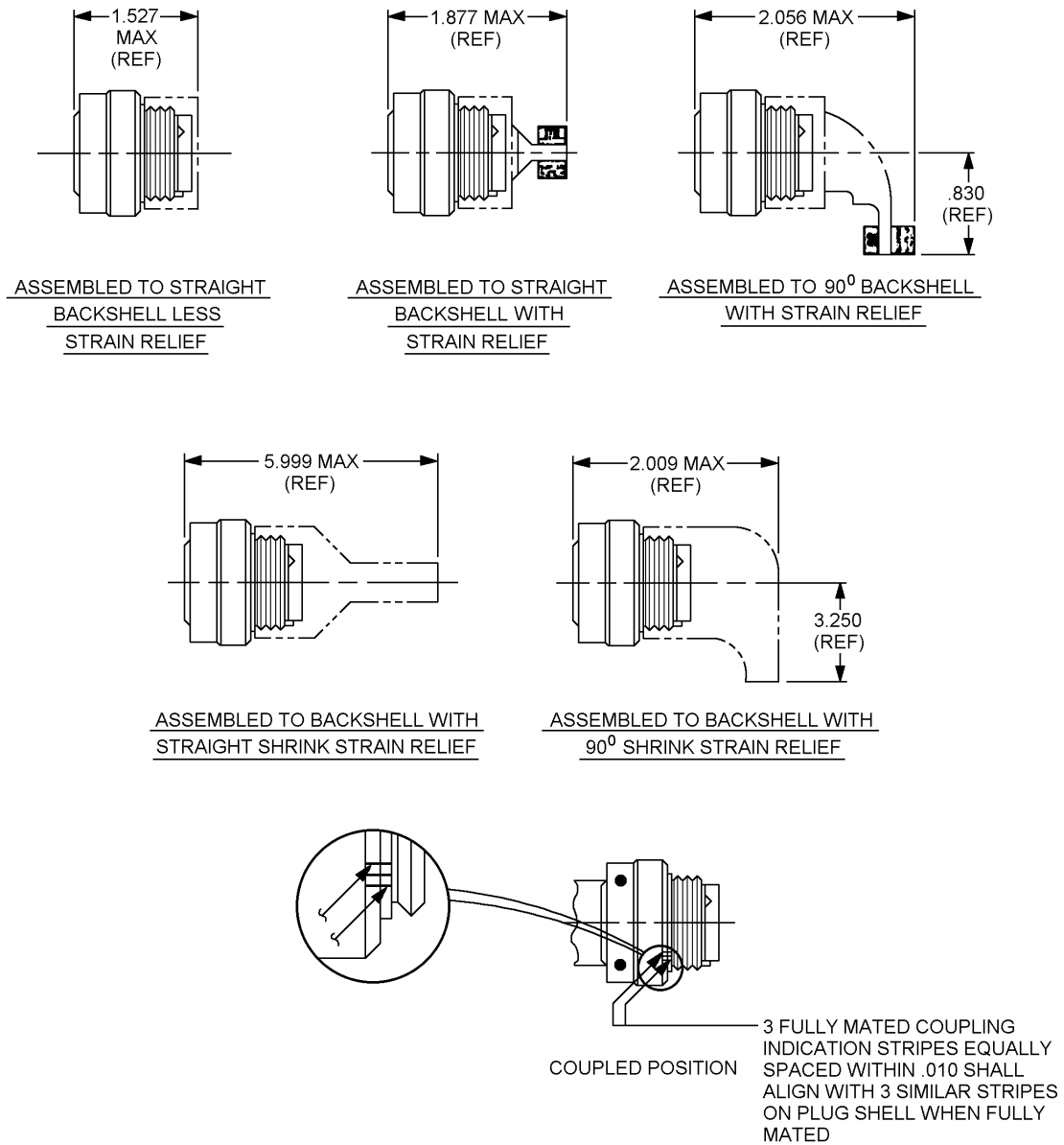


FIGURE 1. Completed assembly – Continued.

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NOTES:

1. For alternate polarizing positions, the connector insert is rotated in respect to the shell.
2. In "Normal Position" (Position "N") the insert vertical centerline coincides with the centerline of the master key of the shell.
3. In "alternate Positions" (Positions "W", "Y", and "Z") the socket insert is rotated OC degrees clockwise relative to centerline of the master key of the shell.
4. Fully mated coupling indication stripes and polarization stripes shall be color coded blue. Stripes shall have minimum width of .050 on coupling ring and minimum width of .040 on the shell.
5. Four keys (MMC) and insert shall be located within .0035 either side of (TP) relative to master key (MMC) and shell O. D. (MMC).
6. Dimensions in inches. Unless otherwise specified, tolerance shall be $.XX \pm .010$ and $.XXX \pm .005$ angular $X^\circ \pm -0'$ and $X^\circ \pm 30'$.
7. Contacts in this connector are nonremovable.

FIGURE 1. Completed assembly – Continued.

REQUIREMENTS

Dimensions and configuration: See figure 1.

For insert arrangements: See MIL-STD-1669.

Rear hardware shall be in accordance with MIL-DTL-83723/16, /23, and SAE-AS85049/31, /51, /52, /60.

Contacts and leads shall be furnished in assembled configuration.

Connector assembly must include a backshell to meet moisture sealing requirements.

Shell material: Class A and R – Aluminum alloy in accordance with SAE-AMS-QQ-A-367.

Class G – Corrosion resistant steel in accordance with SAE-AMS-QQ-S-763.

Circumferential color bands specified in MIL-DTL-26482 do not apply.

Connector identification marking specified in MIL-DTL-26482 does not apply. Marking shall be as specified in the Part or Identifying Number (PIN) below.

PIN example:

<u>M83723/</u>	<u>37</u>	<u>R</u>	<u>08</u>	<u>02</u>	<u>N</u>
<u>M83723/</u>	Military designator				
<u>37</u>	Specification sheet number				
<u>R</u>	Class				
<u>08</u>	Shell size				
<u>02</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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CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2024-066)

Review activities:

Air Force - 70, 80, 84

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 <https://assist.dla.mil>.