

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, (CIRCULAR, ENVIRONMENT RESISTING),  
PLUG, (THREADED COUPLING, SELF-LOCKING, R.F.I. GROUNDING, CRIMP  
SOCKET CONTACTS), (SERIES III, CLASSES N AND S FIREWALL)

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.

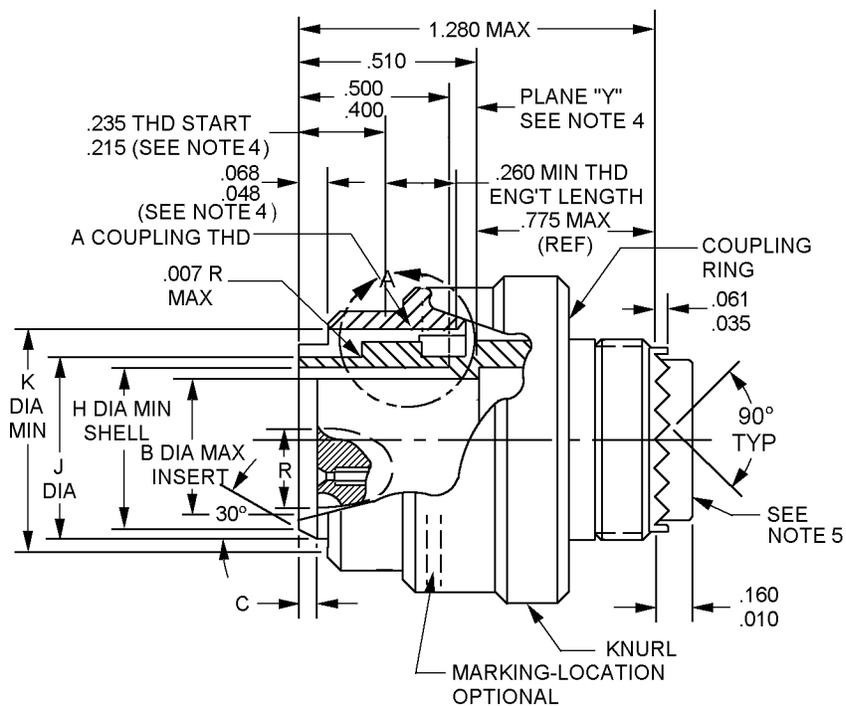


FIGURE 1. Dimensions and configurations.

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w/AMENDMENT 1

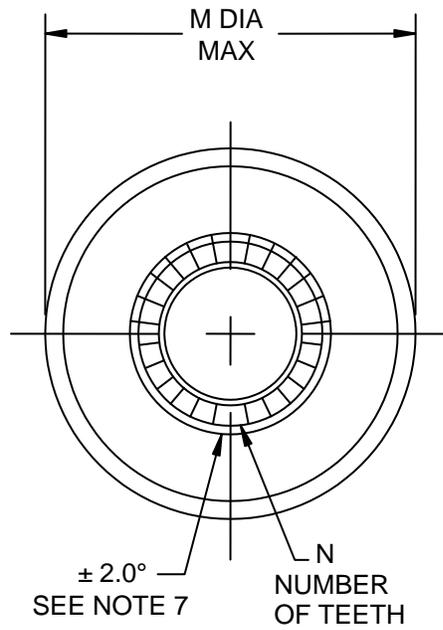
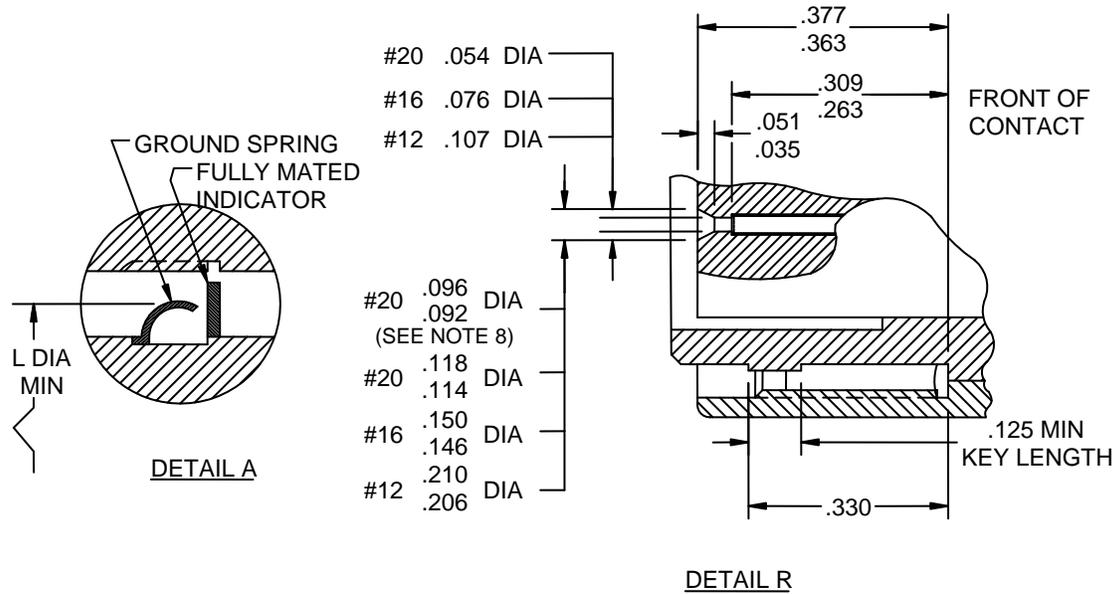


FIGURE 1. Dimensions and configurations – Continued.

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| Shell size | A<br>Thread<br>UNEF-2B | B     | C    | H     | J              | K     | L     | M     | N<br>number<br>of teeth |
|------------|------------------------|-------|------|-------|----------------|-------|-------|-------|-------------------------|
| 8          | .562-24                | .290  | .025 | .294  | .405<br>.396   | .575  | .425  | .967  | 12                      |
| 10         | .688-24                | .388  | .031 | .428  | .526<br>.517   | .707  | .546  | 1.093 | 15                      |
| 12         | .875-20                | .558  | .031 | .598  | .696<br>.687   | .895  | .711  | 1.170 | 21                      |
| 14         | .938-20                | .627  | .031 | .667  | .765<br>.756   | .957  | .785  | 1.310 | 24                      |
| 16         | 1.062-18               | .772  | .031 | .794  | .892<br>.883   | 1.084 | .912  | 1.500 | 30                      |
| 18         | 1.188-18               | .860  | .031 | .900  | .998<br>.989   | 1.209 | 1.018 | 1.562 | 33                      |
| 20         | 1.312-18               | .985  | .031 | 1.025 | 1.123<br>1.114 | 1.334 | 1.143 | 1.710 | 36                      |
| 22         | 1.438-18               | 1.110 | .031 | 1.150 | 1.248<br>1.239 | 1.459 | 1.268 | 1.812 | 39                      |
| 24         | 1.562-18               | 1.235 | .031 | 1.275 | 1.373<br>1.364 | 1.584 | 1.393 | 1.948 | 42                      |

FIGURE 1. Dimensions and configurations – Continued.

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| Inches | mm   | Inches | mm    | Inches | mm    | Inches | mm    |
|--------|------|--------|-------|--------|-------|--------|-------|
| .005   | 0.13 | .210   | 5.33  | .562   | 14.27 | .967   | 24.56 |
| .007   | 0.18 | .215   | 5.46  | .575   | 14.60 | .989   | 25.12 |
| .010   | 0.25 | .235   | 5.97  | .598   | 15.19 | .998   | 25.35 |
| .025   | 0.64 | .260   | 6.60  | .627   | 15.93 | 1.062  | 26.97 |
| .031   | 0.79 | .263   | 6.68  | .667   | 16.94 | 1.084  | 27.53 |
| .035   | 0.89 | .290   | 7.37  | .687   | 17.45 | 1.093  | 27.76 |
| .048   | 1.22 | .294   | 7.47  | .688   | 17.48 | 1.110  | 28.19 |
| .051   | 1.30 | .309   | 7.85  | .696   | 17.68 | 1.150  | 29.21 |
| .054   | 1.37 | .310   | 7.87  | .707   | 17.96 | 1.170  | 29.71 |
| .061   | 1.55 | .330   | 8.38  | .756   | 19.20 | 1.188  | 30.18 |
| .068   | 1.73 | .366   | 9.30  | .765   | 19.43 | 1.209  | 30.71 |
| .076   | 1.93 | .377   | 9.58  | .772   | 19.61 | 1.239  | 31.47 |
| .092   | 2.34 | .388   | 9.86  | .775   | 19.69 | 1.248  | 31.70 |
| .096   | 2.44 | .396   | 10.05 | .794   | 20.17 | 1.280  | 32.51 |
| .107   | 2.71 | .400   | 10.16 | .860   | 21.84 | 1.310  | 33.27 |
| .114   | 2.90 | .405   | 10.29 | .875   | 22.23 | 1.438  | 36.53 |
| .118   | 3.00 | .428   | 10.87 | .883   | 22.43 | 1.459  | 37.06 |
| .125   | 3.18 | .500   | 12.70 | .892   | 22.66 | 1.500  | 38.10 |
| .146   | 3.71 | .510   | 12.95 | .895   | 22.73 | 1.562  | 39.67 |
| .150   | 3.81 | .517   | 13.13 | .900   | 22.86 | 1.812  | 46.02 |
| .160   | 4.06 | .526   | 13.36 | .938   | 23.83 |        |       |
| .206   | 5.23 | .558   | 14.71 | .957   | 24.31 |        |       |

NOTES:

1. Dimensions are inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are .005 inches (0.13 mm) for three place decimals and .01 inches (0.25 mm) for two place decimals, and angular tolerance +/- 1°0' and +/- 30'.
4. The dimensions showing relationship of coupling ring to shell apply only when coupling ring is in the fully forward position.
5. Rear accessory interchangeability dimensions shall be in accordance with MIL-DTL-83723.
6. Shell size 8 will not mate with MIL-DTL-26500 connectors.
7. The centerline of indicated projection shall be located on vertical centerline within 2.0°.
8. See table I for contact cavities requiring these dimensions.

FIGURE 1. Dimensions and configurations - Continued.

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w/AMENDMENT 1

REQUIREMENTS:

Dimensions and configurations: See figure 1.

This connector mates with MIL-DTL-83723/83, /85, /88, /89 and /90.

Insert arrangement and polarizing positions: See MIL-STD-1554 and table I.

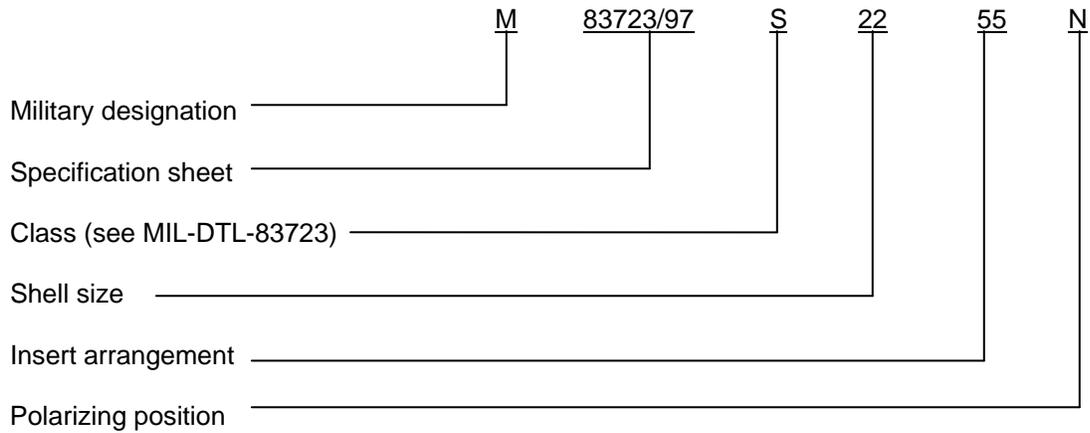
TABLE I. Insert arrangements requiring reduced diameter for lead-in chamfer on outer row of the cavities as indicated.

| Shell size | Insert arrangement | Contact cavities |
|------------|--------------------|------------------|
| 8          | 03                 | 1, 2, 3          |
| 10         | 06                 | 1, 2, 3, 4, 5, 6 |

Connector accessories: See SAE-AS85049.

RFI spring strip shall have a minimum of six fingers per inch and shall point to the rear of the connector.

Part or Identifying Number (PIN) example:



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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-DTL-26500  
MIL-DTL-83723/83  
MIL-DTL-83723/85  
MIL-DTL-83723/88  
MIL-DTL-83723/89  
MIL-DTL-83723/90  
MIL-STD-1554  
SAE-AS85049

CONCLUDING MATERIAL

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

Preparing activity:  
DLA-CC  
  
(Project 5935-2011-040)

Review activities:  
Army - AR, MI  
Navy - EC  
Air Force - 19, 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 <https://assist.daps.dla.mil>.