

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, (CIRCULAR, ENVIRONMENT RESISTING),
 RECEPTACLE, (FLANGE MOUNT, THREADED COUPLING, CRIMP PIN CONTACT),
 (SERIES III, CLASSES A, G, K, M, N, R, S, T, W AND Z)

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.

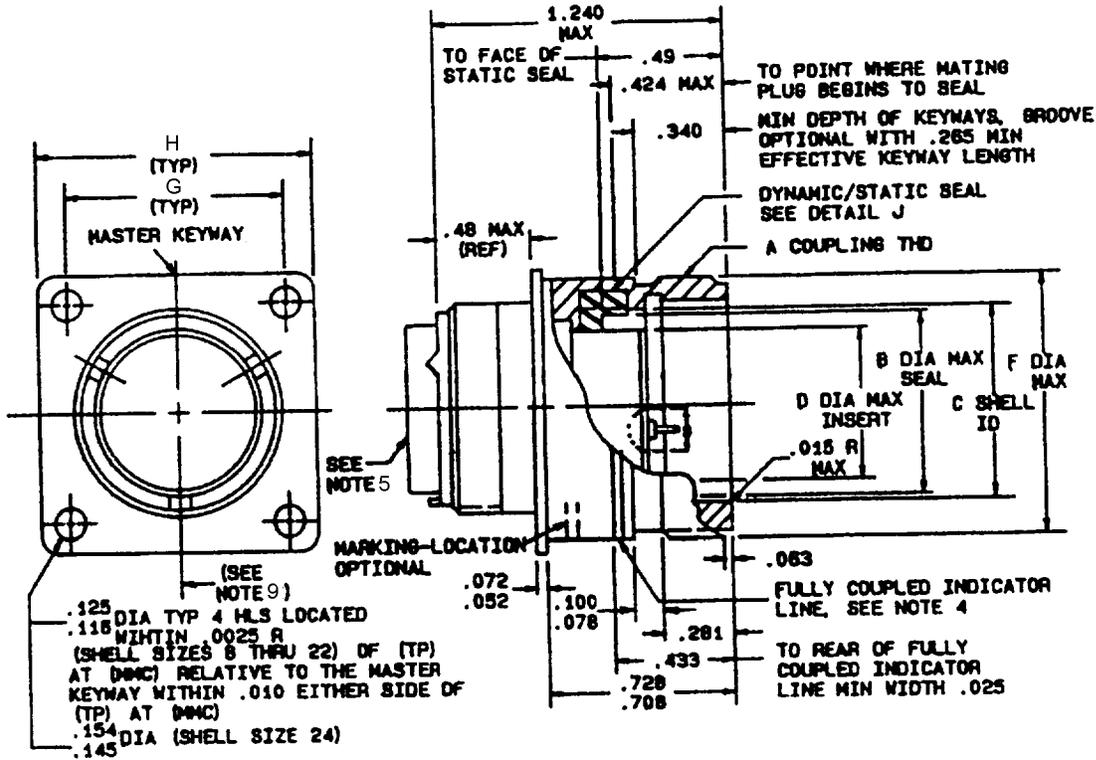


FIGURE 1. Classes A, G, K, M, R, T, W and Z.

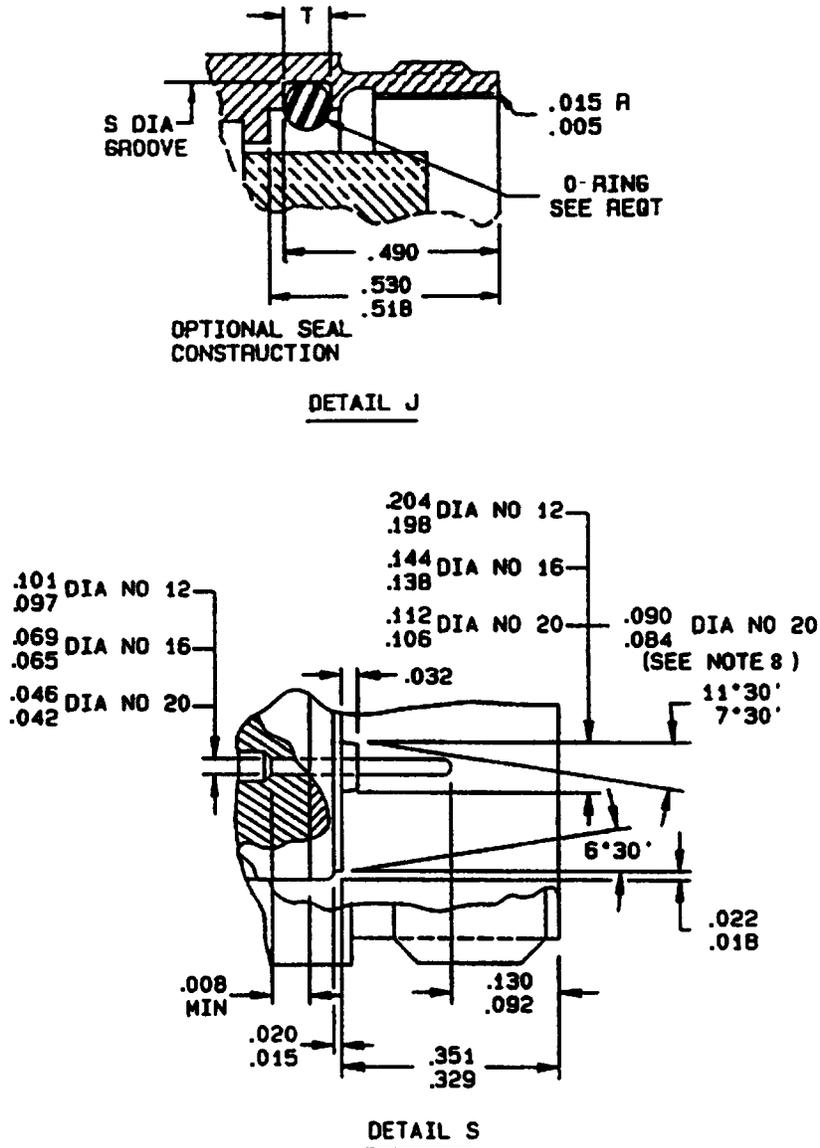


FIGURE 1. Classes A, G, K, M, R, T, W and Z - Continued.

MIL-DTL-83723/83E

| Inches | mm | Inches | mm | Inches | mm | Inches | mm | Inches | mm |
|--------|------|--------|------|--------|-------|--------|-------|--------|-------|
| .005 | 0.08 | .069 | 1.75 | .130 | 3.30 | .418 | 10.62 | .685 | 17.40 |
| .008 | 0.20 | .071 | 1.80 | .138 | 3.51 | .424 | 10.77 | .696 | 17.68 |
| .010 | 0.25 | .076 | 1.93 | .144 | 3.66 | .433 | 11.00 | .700 | 17.78 |
| .015 | 0.38 | .078 | 1.98 | .160 | 4.06 | .480 | 12.19 | .705 | 17.19 |
| .018 | 0.46 | .084 | 2.13 | .195 | 4.95 | .490 | 12.45 | .708 | 17.98 |
| .020 | 0.51 | .089 | 2.26 | .198 | 4.27 | .515 | 13.08 | .719 | 18.26 |
| .022 | 0.56 | .092 | 2.34 | .204 | 5.18 | .518 | 13.16 | .728 | 18.49 |
| .025 | 0.64 | .093 | 2.36 | .281 | 7.14 | .530 | 13.46 | .754 | 19.15 |
| .032 | 0.81 | .097 | 2.46 | .290 | 7.37 | .535 | 13.59 | .769 | 19.53 |
| .035 | 0.89 | .098 | 2.49 | .329 | 8.36 | .558 | 14.17 | .772 | 19.61 |
| .042 | 1.07 | .100 | 2.54 | .340 | 8.64 | .562 | 14.27 | .774 | 19.66 |
| .046 | 1.17 | .101 | 2.57 | .351 | 8.92 | .580 | 14.70 | | |
| .061 | 1.55 | .106 | 2.69 | .388 | 9.86 | .594 | 15.09 | | |
| .063 | 1.60 | .112 | 2.84 | .394 | 10.01 | .627 | 15.93 | | |
| .065 | 1.65 | .125 | 3.18 | .413 | 10.49 | .636 | 16.15 | | |

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $\pm .005$ (0.13 mm) for three place decimals and $\pm .01$ (0.25 mm) for two place decimals and $\pm 1^\circ$ for all angles.
4. Coupling indicator line shall be color coded red.
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. Phantomed configuration optional.
8. See table I for contact cavities requiring this dimension.
9. The centerline of indicated projection must be located on vertical centerline $\pm 2^\circ$.

FIGURE 1. Classes A, G, K, M, R, T, W and Z - Continued.

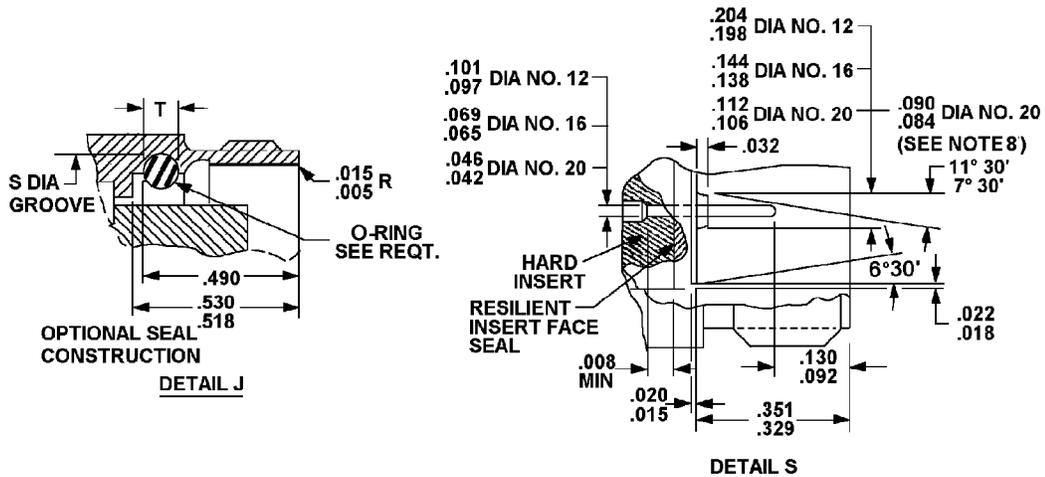
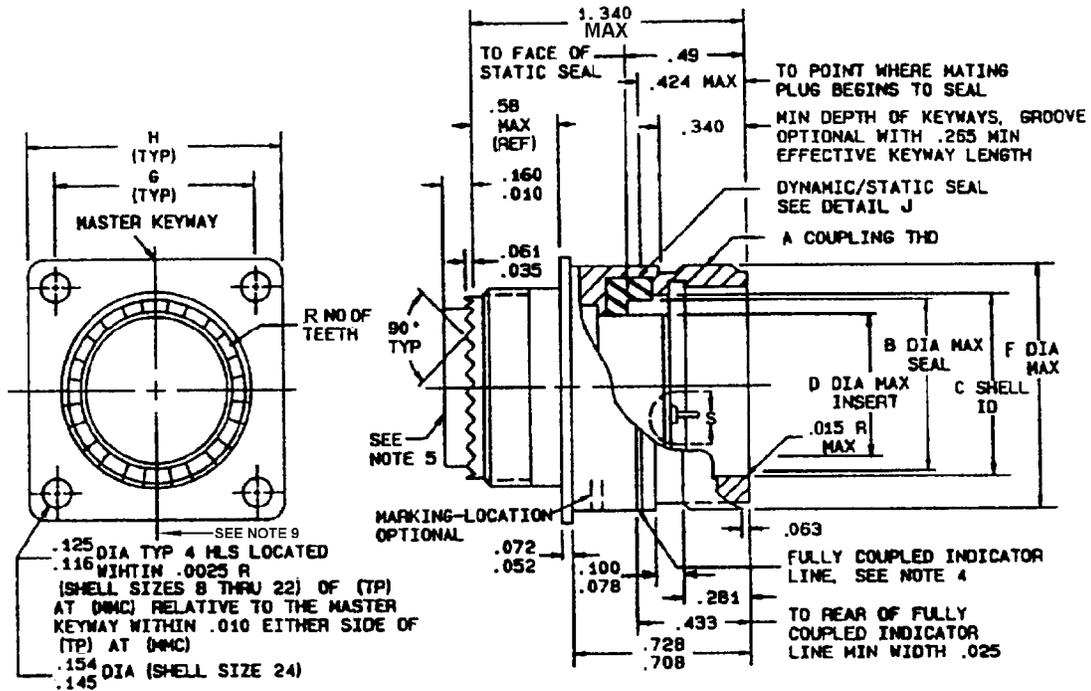


FIGURE 2. Classes N and S.

MIL-DTL-83723/83E

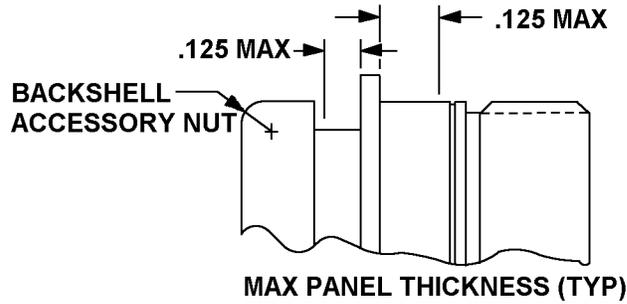
| Inches | mm | Inches | mm | Inches | mm | Inches | mm | Inches | mm |
|--------|------|--------|------|--------|-------|--------|-------|--------|-------|
| .005 | 0.08 | .069 | 1.75 | .130 | 3.30 | .418 | 10.62 | .685 | 17.40 |
| .008 | 0.20 | .071 | 1.80 | .138 | 3.51 | .424 | 10.77 | .696 | 17.68 |
| .010 | 0.25 | .076 | 1.93 | .144 | 3.66 | .433 | 11.00 | .700 | 17.78 |
| .015 | 0.38 | .078 | 1.98 | .160 | 4.06 | .480 | 12.19 | .705 | 17.19 |
| .018 | 0.46 | .084 | 2.13 | .195 | 4.95 | .490 | 12.45 | .708 | 17.98 |
| .020 | 0.51 | .089 | 2.26 | .198 | 4.27 | .515 | 13.08 | .719 | 18.26 |
| .022 | 0.56 | .092 | 2.34 | .204 | 5.18 | .518 | 13.16 | .728 | 18.49 |
| .025 | 0.64 | .093 | 2.36 | .281 | 7.14 | .530 | 13.46 | .754 | 19.15 |
| .032 | 0.81 | .097 | 2.46 | .290 | 7.37 | .535 | 13.59 | .769 | 19.53 |
| .035 | 0.89 | .098 | 2.49 | .329 | 8.36 | .558 | 14.17 | .772 | 19.61 |
| .042 | 1.07 | .100 | 2.54 | .340 | 8.64 | .562 | 14.27 | .774 | 19.66 |
| .046 | 1.17 | .101 | 2.57 | .351 | 8.92 | .580 | 14.70 | | |
| .061 | 1.55 | .106 | 2.69 | .388 | 9.86 | .594 | 15.09 | | |
| .063 | 1.60 | .112 | 2.84 | .394 | 10.01 | .627 | 15.93 | | |
| .065 | 1.65 | .125 | 3.18 | .413 | 10.49 | .636 | 16.15 | | |

NOTES:

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4. Coupling indicator line shall be color coded red.
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. Phantomed configuration optional.
8. See table I for contact cavities requiring this dimension.
9. The centerline of indicated projection must be located on vertical centerline $\pm 2^\circ$.

FIGURE 2. Classes N and S – Continued.

MIL-DTL-83723/83E



.116 MIN CLEARANCE BETWEEN .125 PANEL AND COUPLING RING WITH MOUNTING FLANGE IS IN BACK OF THE PANEL

| Inches | mm |
|--------|------|
| .116 | 2.95 |
| .125 | 3.18 |

| Shell size | A thread coupling thread | B max | C | D max | F max |
|------------|-----------------------------|-------|----------------|-------|-------|
| 8 | .562-24 UNEF-2A | .394 | .418 .413 | .290 | .562 |
| 10 | .688-24 UNEF-2A | .515 | .535 .530 | .388 | .696 |
| 12 | .875-20 UNEF-2A | .685 | .705 .700 | .558 | .875 |
| 14 | .938-20 UNEF-2A | .754 | .774 .769 | .627 | .936 |
| 16 | 1.062-18 UNEF-2A | .881 | .901 .896 | .772 | 1.062 |
| 18 | 1.188-18 UNEF-2A | .987 | 1.007 1.002 | .860 | 1.187 |
| 20 | 1.312-18 UNEF-2A | 1.112 | 1.132 1.127 | .985 | 1.312 |
| 22 | 1.438-18 UNEF-2A | 1.237 | 1.257 1.252 | 1.110 | 1.437 |
| 24 | 1.562-18 UNEF-2A | 1.362 | 1.382 1.377 | 1.235 | 1.562 |

FIGURE 3. Dimensions and configurations.

MIL-DTL-83723/83E

| Shell size | G | H | R number of teeth | S +.005 / -.000 | T |
|------------|-------|-------|-------------------------|--------------------|--------------|
| 8 | .594 | .812 | 12 | .490 | .076 .071 |
| 10 | .719 | .937 | 15 | .636 | .089 .084 |
| 12 | .812 | 1.031 | 21 | .806 | |
| 14 | .906 | 1.125 | 24 | .875 | |
| 16 | .969 | 1.250 | 30 | 1.002 | |
| 18 | 1.062 | 1.343 | 33 | 1.108 | |
| 20 | 1.156 | 1.437 | 36 | 1.233 | |
| 22 | 1.250 | 1.562 | 39 | 1.358 | |
| 24 | 1.375 | 1.703 | 42 | 1.483 | |

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9. The centerline of indicated projection must be located on vertical centerline $\pm 2^\circ$.

FIGURE 3. Dimensions and configurations - Continued.

REQUIREMENTS:

Dimensions and configurations: See figures 1 and 3 for classes A, G, K, M, R, T, W and Z. See figures 2 and 3 for classes N and S.

This connector mates with MIL-DTL-83723/86, MIL-DTL-83723/91 and MIL-DTL-83723/95 and MIL-C-83723/97.

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

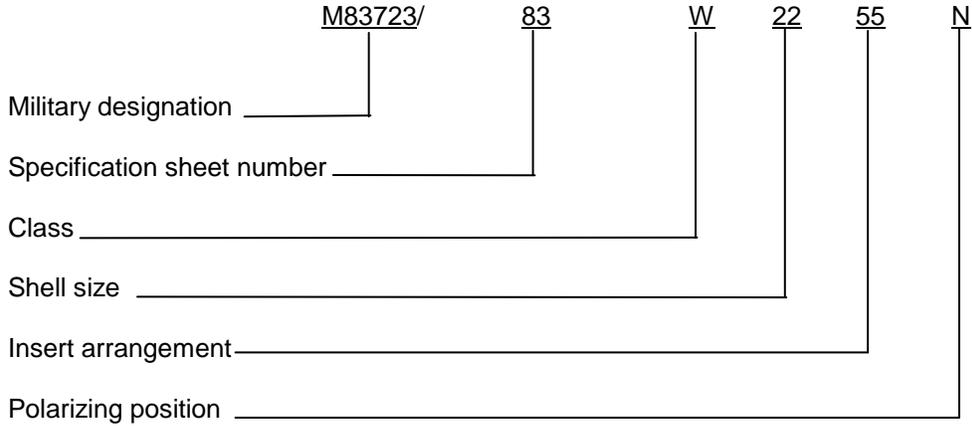
TABLE I. Insert arrangements requiring reduced diameter for raised seal barriers on outer row of contact cavities as indicated.

| Shell size | Insert arrangements | Contact cavities |
|------------|---------------------|------------------|
| 8 | 03, 98 | 1, 2, 3 |
| 10 | 06 | 1, 2, 3, 4, 5, 6 |

MIL-DTL-83723/83E

O-ring: See MIL-DTL-83723.

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
- MIL-DTL-26500
- MIL-C-83723/97
- MIL-DTL-83723/86
- MIL-DTL-83723/91
- MIL-DTL-83723/95

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2008-162)

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