## DETAIL SPECIFICATION SHEET

## CONNECTOR, RECEPTACLE, ELECTRICAL, JAM NUT MOUNTING, CRIMP TYPE, BAYONET COUPLING, SERIES II

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 and MIL-DTL-38999.

Inactive for new design.


FIGURE 1. Receptacle, classes E and I.

DISTRIBUTION STATEMENTA. Approved for public release; distribution is unlimited.

## MS27481F



| Shell size | $\begin{gathered} \mathrm{A} \\ \mathrm{dia} \\ +.001 \\ -.005 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { B dia } \\ +.000 \\ -.016 \\ \text { over proj } \\ \hline \end{array}$ | $\begin{gathered} \mathrm{C} \\ \text { dia } \\ +.006 \\ -.002 \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \mathrm{dia} \\ +.005 \\ -.001 \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{F} \\ \pm .005 \end{gathered}$ | $\begin{gathered} \mathrm{l} \\ \mathrm{dia} \\ \pm .005 \end{gathered}$ | $\begin{gathered} \mathrm{K} \\ +.011 \\ -.010 \end{gathered}$ | M thd class 2A Plated | $\begin{gathered} \mathrm{N} \\ \mathrm{dia} \\ +.005 \\ -.006 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | . 473 | . 563 | . 078 | . 362 | . 438 | . 285 | . 094 | . 875 - 20 UNEF | 412 |
| 10 | . 590 | . 680 |  | 490 |  | 413 |  | 1.000-20 UNEF | . 540 |
| 12 | . 750 | . 859 |  | . 607 |  | . 527 |  | 1.125-18 UNEF | . 689 |
| 14 | . 875 | . 984 |  | . 732 |  | . 652 |  | 1.250-18 UNEF | . 814 |
| 16 | 1.000 | 1.103 |  | . 857 |  | 777 |  | 1.375-18 UNEF | . 939 |
| 18 | 1.125 | 1.233 |  | . 962 |  | . 866 |  | 1.500-18 UNEF | 1.039 |
| 20 | 1.250 | 1.358 | . 125 | 1.087 | . 464 | . 991 |  | 1.625-18 UNEF | 1.164 |
| 22 | 1.375 | 1.483 |  | 1.212 |  | 1.116 |  | 1.750-18 UNS | 1.289 |
| 24 | 1.500 | 1.610 |  | 1.337 |  | 1.241 |  | 1.875-16 UN | 1.414 |

FIGURE 1. Receptacle, classes E and I - Continued.

| Shell size | $\begin{gathered} \hline \mathrm{O} \\ \text { FLAT } \\ +.001 \\ -.006 \\ \hline \end{gathered}$ | $\begin{gathered} \mathrm{Q} \\ \mathrm{dia} \\ \pm .016 \end{gathered}$ | $\begin{gathered} \mathrm{S} \\ \pm .016 \end{gathered}$ | $\begin{gathered} \hline \mathrm{Z} \\ \mathrm{dia} \\ +.006 \\ -.005 \\ \hline \end{gathered}$ | CC | $\begin{aligned} & \text { DD } \\ & \mathrm{min}_{\text {dia }} \end{aligned}$ | $\begin{gathered} \mathrm{EE} \\ +.005 \\ -.000 \end{gathered}$ | Recommended packing ("O" ring) see note 9 | For insert arrangement, see MS drawing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 817 | 1.375 | 1.250 | . 965 | . 004 | 678 | . 140 | AS3578-022 | 27343, 27516 |
| 10 | 941 | 1.500 | 1.375 | 1.090 | . 010 | 780 |  | AS3578-024 | 27344, 27517 |
| 12 | 1.065 | 1.625 | 1.500 | 1.215 |  | 963 |  | AS3578-026 | 27345, 27518 |
| 14 | 1.190 | 1.750 | 1.625 | 1.340 |  | 1.088 |  | AS3578-028 | 27346, 27519 |
| 16 | 1.320 | 1.938 | 1.781 | 1.477 |  | 1.222 |  | AS3578-029 | 27347, 27520 |
| 18 | 1.440 | 2.016 | 1.890 | 1.602 |  | 1.333 |  | AS3578-030 | 27348, 27521 |
| 20 | 1.565 | 2.141 | 2.016 | 1.727 |  | 1.458 | . 166 | AS3578-031 | 27349, 27522 |
| 22 | 1.690 | 2.265 | 2.140 | 1.852 |  | 1.583 |  | AS3578-032 | 27350, 27523 |
| 24 | 1.815 | 2.390 | 2.265 | 1.977 |  | 1.708 |  | AS3578-033 | 27351, 27524 |

## NOTES:

1. Dimensions are in inches.
2. Insert front surface shall be flat within .005 T.I.R.
3. Diameters $A, D, M, Q$ and $Z$ shall be concentric within .005 T.I.R.
4. Diameters $D$ and $I$ shall be concentric within . 005 T.I.R at MMC.
5. Diameter A with respect to diameter B , and diameter D with respect to diameter N , shall be concentric at MMC.
6. Sides of groove may have $5^{\circ}$ max taper.
7. Normal keyway position. For other keyway positions see MIL-DTL-38999.
8. The point at which a gage pin, having the same basic diameter as the mating contact and a square face, touches socket contact spring.
9. Recommended packing is for dimensions only. Material is optional.

10 The gauge features for GG shall be CC smaller than their MMC size at basic location.

FIGURE 1. Beceptacle, classes E and I - Continued.

MS27481F


FIGURE 1. Receptacle, classes E and T-Continued.

## MS27481F

| Shell <br> size | HH dia <br> +.000 <br> -.005 | KK <br> DATUM <br> dia | NN | PP <br> dia <br> $\pm .003$ |
| :---: | :---: | :---: | :---: | :---: |
| 8 | .387 | .366 | 12 | .344 |
| 10 | .515 | .487 | 16 | .472 |
| 12 | .628 | .609 | 20 | .586 |
| 14 | .754 | .731 | 24 | .711 |
| 16 | .879 | .853 | 28 | .836 |
| 18 | .985 | .974 | 32 | .942 |
| 20 | 1.110 | 1.097 | 36 | 1.067 |
| 22 | 1.235 | 1.218 | 40 | 1.192 |
| 24 | 1.360 | 1.340 | 44 | 1.317 |


| Shell size | $\begin{gathered} \text { Nut } \\ \text { MS3186- } \end{gathered}$ | G insert projection class T only | $\begin{gathered} \text { LE } \\ \text { max } \\ \text { length } \end{gathered}$ | $\begin{aligned} & \mathrm{LT} \\ & \max \end{aligned}$length | $\begin{gathered} \hline \text { XE } \\ \max \\ \text { dia } \end{gathered}$ | VV thread UNEF-2A MOD (plated) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Size | Major dia MOD |
| 8 | 8 C | $\begin{gathered} .120 \\ \pm .030 \end{gathered}$ | . 516 | . 344 | . 594 | 7/16-28 | . 421 - . 417 |
| 10 | 10 C |  |  |  | . 719 | 9/16-24 | . $542-.538$ |
| 12 | 12 C |  |  |  | . 844 | 11/16-24 | . $667-.663$ |
| 14 | 14 C |  |  |  | . 969 | 13/16-20 | . $791-.787$ |
| 16 | 16 C |  |  |  | 1.094 | 15/16-20 | . $916-.912$ |
| 18 | 18C |  |  |  | 1.219 | 11/16-18 | 1.034-1.030 |
| 20 | 20 C |  | . 484 | . 312 | 1.344 | 13/16-18 | 1.158-1.154 |
| 22 | 22 C |  |  |  | 1.469 | 15/16-18 | 1.283-1.279 |
| 24 | 24 C | . $090 \pm .050$ |  | . 375 | 1.594 | 17/16-18 | 1.408-1.404 |

FIGURE 1. Receptacle, classes E and T - Continued.

## MS27481F

## REQUIREMENTS:

Dimensions and configuration: See figure 1. Interface dimensions shall conform to MIL-DTL-38999. This receptacle mates with MS27473, MS27480, MS27484 and MS27500. Insert arrangements: See MIL-STD-1560.

Part or Identifying Number (PIN) example:


## CONCLUDING MATERIAL

Custodians:
Army - CR
Preparing activity:
DLA - CC
Navy - AS
Air Force-11
(Project 5935-4375)
DLA - CC

Review activities:
Army - AR, MI
Navy - EC, MC, OS
Air Force - 19, 99
DLA - IS

