

INCH-POUND

MS3128K
 29 April 2009
 SUPERSEDING
 MS3128J
 6 June 2003

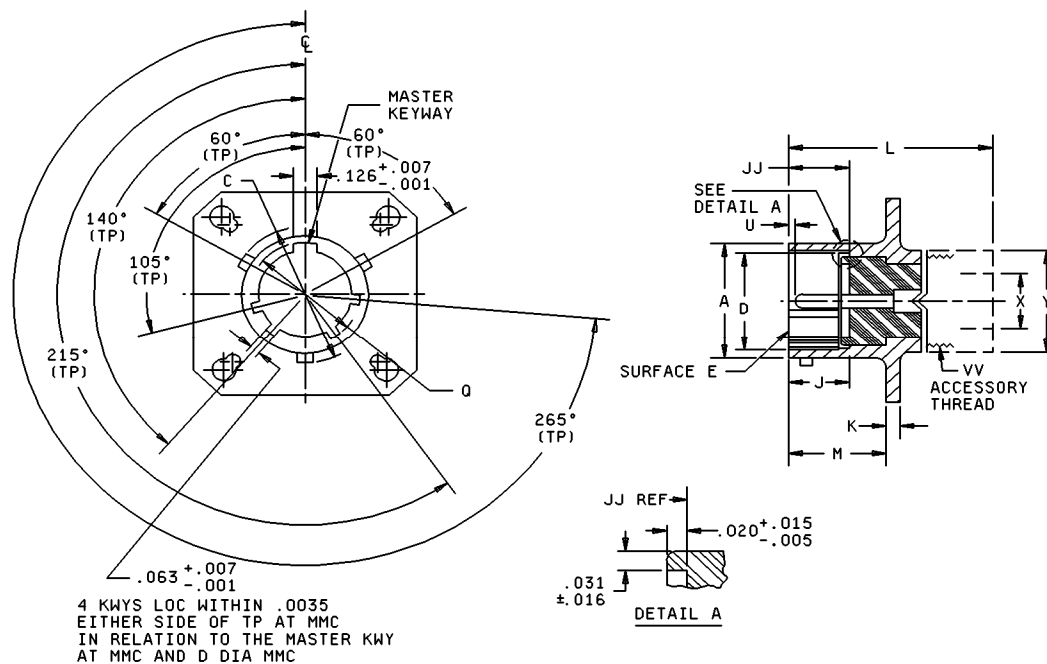
DETAIL SPECIFICATION SHEET

CONNECTOR, RECEPTACLE, ELECTRICAL, CRIMP TYPE,
 WALL MOUNTING, NO. 4/6 HOLES, BAYONET COUPLING, SERIES 1,
 CLASSES E, F and P

Inactive for new design after 15 February 1965.

This specification is approved for use by all Departments
 and Agencies of the Department of Defense.

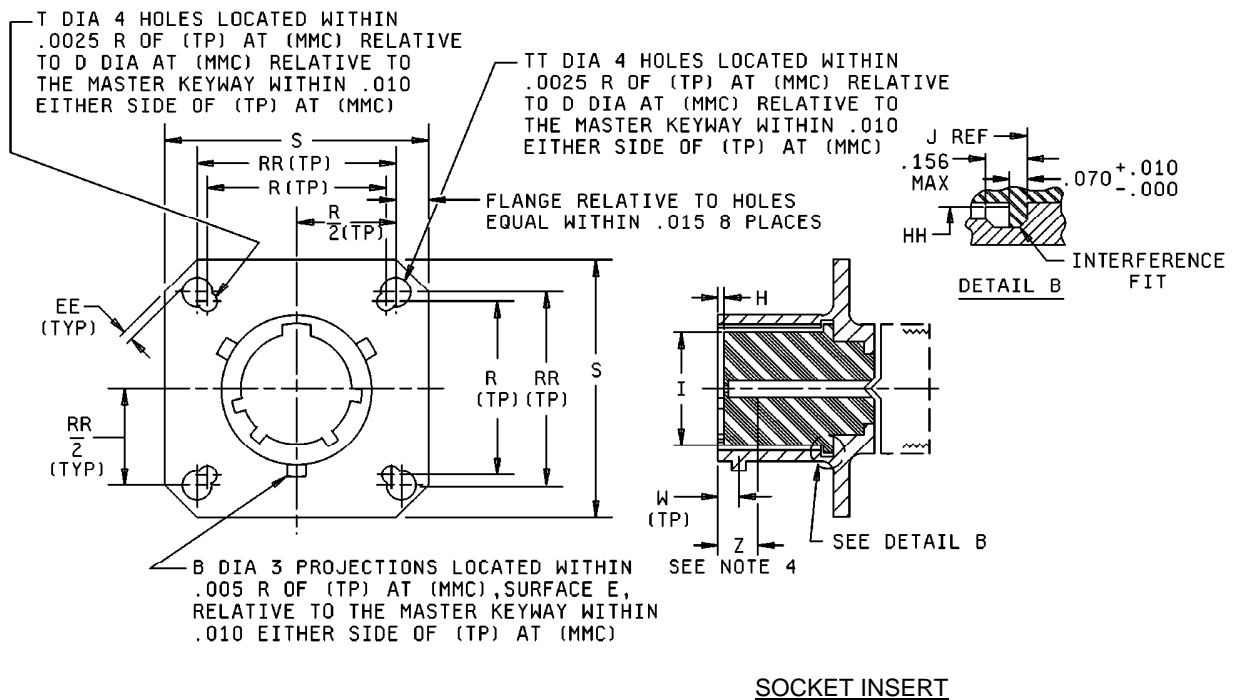
The requirements for acquiring the product described herein
 shall consist of this specification sheet and MIL-DTL-26482.



PIN INSERT

FIGURE 1. Receptacle, dimensions, classes E, F and P.

MS3128K

FIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

MS3128K

| Shell size | A dia -.005 +.001 OD | B +.016 -.001 | C dia +.000 -.016 over projection | D dia +.005 -.001 ID | EE min edge distance | H +.000 -.020 socket insert location |
|------------|----------------------------------|---------------------|--|----------------------------------|-------------------------------|---|
| 10 | .590 (14.99) | .078 (1.98) | .680 (17.27) | .490 (12.45) | .035 (.89) | .025 (.64) |
| 12 | .750 (19.05) | | .859 (21.82) | .607 (15.42) | | |
| 14 | .875 (22.23) | | .984 (24.99) | .732 (18.59) | | |
| 16 | 1.000 (25.40) | | 1.108 (28.14) | .857 (21.77) | | |
| 18 | 1.125 (28.58) | | 1.233 (31.32) | .962 (24.43) | | |
| 20 | 1.250 (31.75) | .125 (3.18) | 1.358 (34.49) | 1.087 (27.61) | .050 (1.27) | .087 (2.21) |
| 22 | 1.375 (34.93) | | 1.483 (37.67) | 1.212 (30.78) | | |
| 24 | 1.500 (38.10) | | 1.610 (40.89) | 1.337 (33.96) | | |

| Shell size | I dia max insert | J ±.010 | JJ -.020 +.000 pin insert location | K ±.016 thick mounting flange | JJ -.020 +.000 pin insert location | Q dia -.006 +.005 | R (TP) mounting |
|------------|---------------------------|-----------------|---|---|---|----------------------------|-----------------------|
| 10 | .402 (10.21) | .382 (9.70) | .332 (8.43) | .062 (1.57) | .462 (11.73) | .540 (13.72) | .719 (18.26) |
| 12 | .516 (13.11) | | | | | .659 (16.74) | .812 (20.62) |
| 14 | .641 (16.28) | | | | | .814 (20.68) | .906 (23.01) |
| 16 | .766 (19.46) | | | | | .939 (23.85) | .969 (24.61) |
| 18 | .855 (21.72) | | | | | 1.033 (26.24) | 1.062 (26.97) |
| 20 | .980 (24.89) | .444 (11.28) | .394 (10.01) | .094 (2.39) | .556 (14.12) | 1.164 (29.57) | 1.156 (29.36) |
| 22 | 1.105 (28.07) | | | | | 1.289 (32.74) | 1.250 (31.75) |
| 24 | 1.229 (31.22) | | | | .589 (14.96) | 1.414 (35.92) | 1.375 (34.93) |

FIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

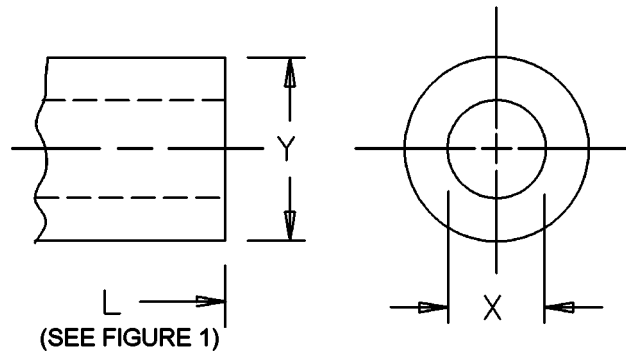
MS3128K

| Shell size | RR (TP) mounting holes | S max length side | T ± .005 dia mounting holes | TT ± .005 dia mounting holes | V (TP) bay pin location |
|------------|------------------------|-------------------|-----------------------------|------------------------------|-------------------------|
| 10 | .812 (20.62) | 1.141 (28.98) | .120 (3.05) | .150 (3.81) | .085 (2.16) |
| 12 | .938 (23.83) | 1.266 (32.16) | | | |
| 14 | 1.031 (26.19) | 1.360 (34.54) | | | |
| 16 | 1.125 (28.58) | 1.453 (36.91) | | | |
| 18 | 1.203 (30.56) | 1.532 (38.91) | | | |
| 20 | 1.297 (32.94) | 1.688 (42.88) | | | .147 (3.73) |
| 22 | 1.375 (34.93) | 1.766 (44.86) | | | |
| 24 | 1.500 (38.10) | 1.891 (48.03) | .147 (3.73) | | |

| Shell size | Z (see note 4) - .000 + .028 socket contact spring location | V V thread class 2A | MM max ID gasket |
|------------|---|---------------------|------------------|
| 10 | .153 (3.89) | 9/16-24 | .457 (11.61) |
| 12 | | 11/16-24 | .564 (14.33) |
| 14 | | 13/16-20 | .689 (17.50) |
| 16 | | 15/16-20 | .814 (20.68) |
| 18 | | 1 1/16-18 | .907 (23.04) |
| 20 | .215 (5.46) | 1 3/16-18 | 1.039 (26.39) |
| 22 | | 1 5/16-18 | 1.164 (29.57) |
| 24 | | 1 7/16-18 | 1.289 (32.74) |

FIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

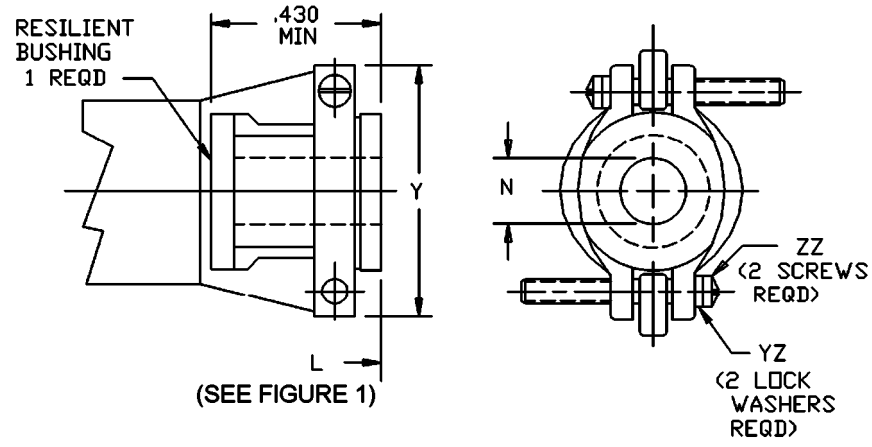
MS3128K



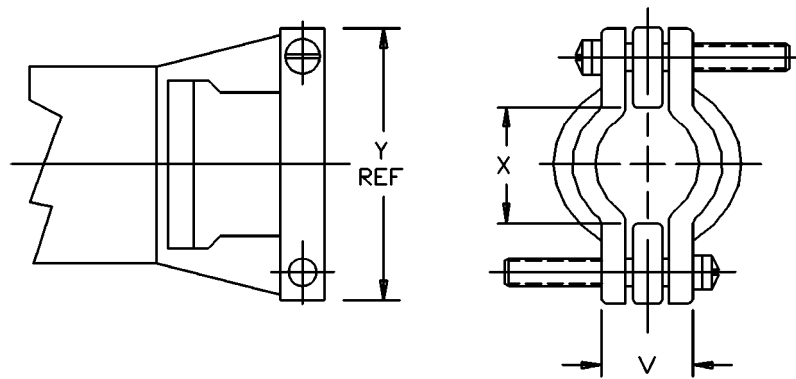
| Shell size | L max over-all length | X dia min ID | Y dia max OD |
|------------|--------------------------------|-----------------------|-----------------------|
| 10 | 1.552 (39.42) | .359 (9.12) | .730 (18.54) |
| 12 | | .469 (11.91) | .858 (21.79) |
| 14 | | .589 (14.96) | .954 (24.23) |
| 16 | | .717 (18.21) | 1.110 (28.19) |
| 18 | | .779 (19.79) | 1.244 (31.60) |
| 20 | 1.709 (43.41) | .901 (22.89) | 1.360 (34.54) |
| 22 | | 1.009 (25.63) | 1.404 (35.66) |
| 24 | | 1.123 (28.52) | 1.610 (40.89) |

CLASS EFIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

MS3128K



CLASS F, BUSHING INSTALLED



CLASS F, BUSHING REMOVED

FIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

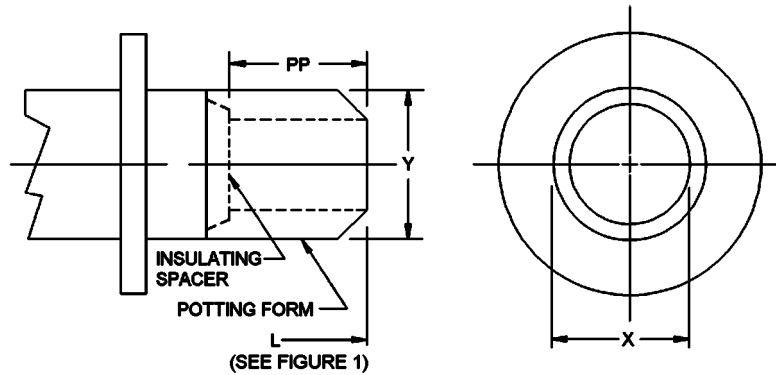
MS3128K

| Shell size | L max over-all length | X dia min open | Y max | V max closed |
|------------|--------------------------------|-------------------------|---------------|--------------------|
| 10 | 2.422 (61.52) | .297 (7.54) | .891 (22.63) | .187 (4.75) |
| 12 | | .422 (10.72) | 1.016 (25.81) | .281 (7.14) |
| 14 | | .547 (13.89) | 1.141 (28.98) | .325 (8.26) |
| 16 | 2.537 (64.44) | .609 (15.47) | 1.203 (30.56) | .356 (9.04) |
| 18 | | | | .456 (11.58) |
| 20 | 2.824 (71.73) | .734 (18.64) | 1.469 (37.31) | .519 (13.18) |
| 22 | | .922 (23.42) | 1.656 (42.06) | |
| 24 | 2.900 (73.66) | .984 (24.99) | 1.750 (44.45) | .657 (16.69) |

| Shell size | N (see note 6) free dia $\pm .010$ | ZZ screw threads | YZ (see note 7) lock washers NASM35338 or NASM35333 |
|------------|---|------------------------|--|
| 10 | .188 (4.78) | 6-32 UNC | NASM35338 - 98 or -41 NASM35333 -105 or -37 |
| 12 | .312 (7.92) | | |
| 14 | .373 (9.47) | | |
| 16 | .500 (12.70) | | |
| 18 | .625 (15.88) | 8-32 UNC | NASM35338 -99 or -42 NASM35333 -106 or -38 |
| 20 | | | |
| 22 | .750 (19.05) | | |
| 24 | .800 (20.32) | | |

CLASS FFIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

MS3128K



| Shell size | L max over-all length | X dia min | Y dia max | PP min |
|------------|-----------------------|-----------|-----------|--------|
| 10 | 1.750 | .434 | .734 | .250 |
| 12 | | .548 | .858 | |
| 14 | | .673 | .984 | |
| 16 | | .798 | 1.110 | |
| 18 | | .899 | 1.234 | |
| 20 | 1.892 | 1.024 | 1.360 | |
| 22 | 1.953 | 1.149 | 1.484 | |
| 24 | | 1.274 | 1.610 | |

CLASS P

NOTES:

1. Dimensions are in inches.
2. Angle tolerance is $\pm 1/2^\circ$.
3. Metric equivalents are given for general information only.
4. Distance between end of shell and the point at which a gage pin having the same basic diameter as the mating contact and a square face first engages socket contact spring.
5. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
6. For class F: Use MS3420 bushing if reduced opening is required.
7. For class F: Lockwashers may be captivated.

FIGURE 1. Receptacle, dimensions, classes E, F and P - Continued.

MS3128K

REQUIREMENTS:

Dimensions and configuration: See figure 1.

This connector mates with MS3121 and MS3126.

Insert arrangements shall be in accordance with MIL-STD-1669.

Connector accessories: See SAE-AS85049.

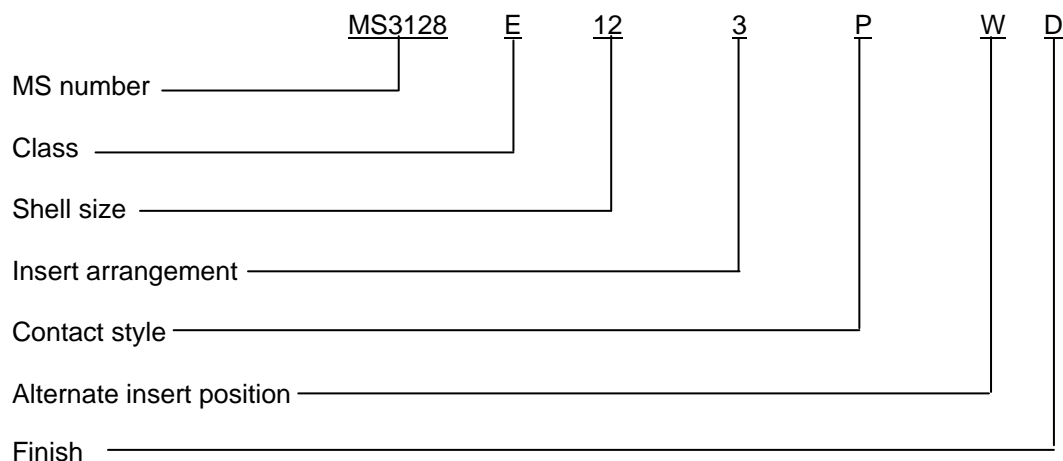
Packing material shall meet the requirements of ASTM-D2000.

Finishes: A finish designator shall not be included in the PIN when finish W is required. See MIL-DTL-26482 for alternative finishes D, T and Z for classes E, F and P.

Material:

- a. Shell - aluminum alloy.
- b. Bayonet pins (B dia) - stainless steel, passivated.

Part or Identifying Number (PIN) example:



Note: When finish W is required, no finish designator is used (class W is the default finish).

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-26482, this document references the following:

MS3121
 MS3126
 MS3420
 MIL-STD-1669
 SAE-AS85049
 ASTM-D2000
 ASME Y14.5M
 NASM35333
 NASM35338

MS3128K

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2007-186)

Review activities:

Army - MI
Air Force - 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>.