

INCH-POUND

MS3126G
w/AMENDMENT 1
29 April 2009
SUPERSEDING
MS3126G
07 November 2007

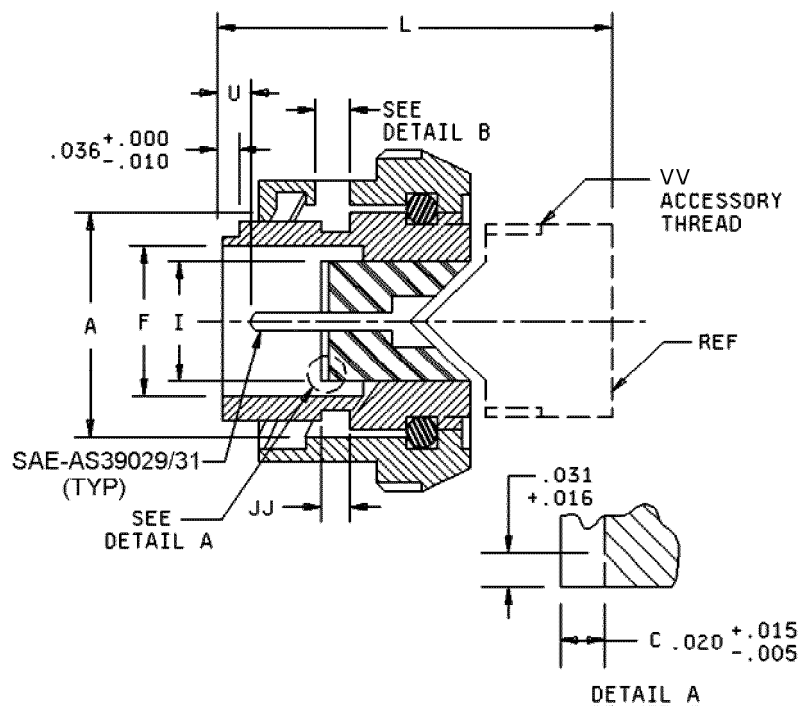
DETAIL SPECIFICATION SHEET

CONNECTORS, PLUG, ELECTRICAL, CRIMP TYPE,
STRAIGHT, BAYONET COUPLING, SERIES 1, CLASSES E, F AND P

Inactive for new design after 5 September 1975.
For new design, use MS3476.

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.



PLUG, STYLE P (PIN INSERT)

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

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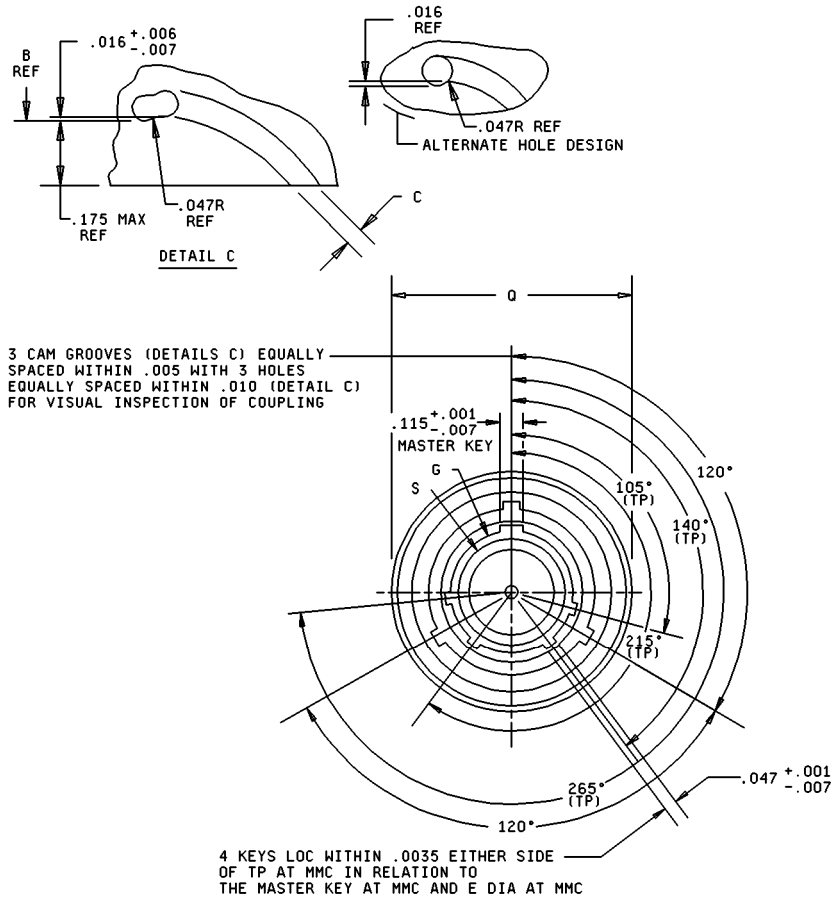
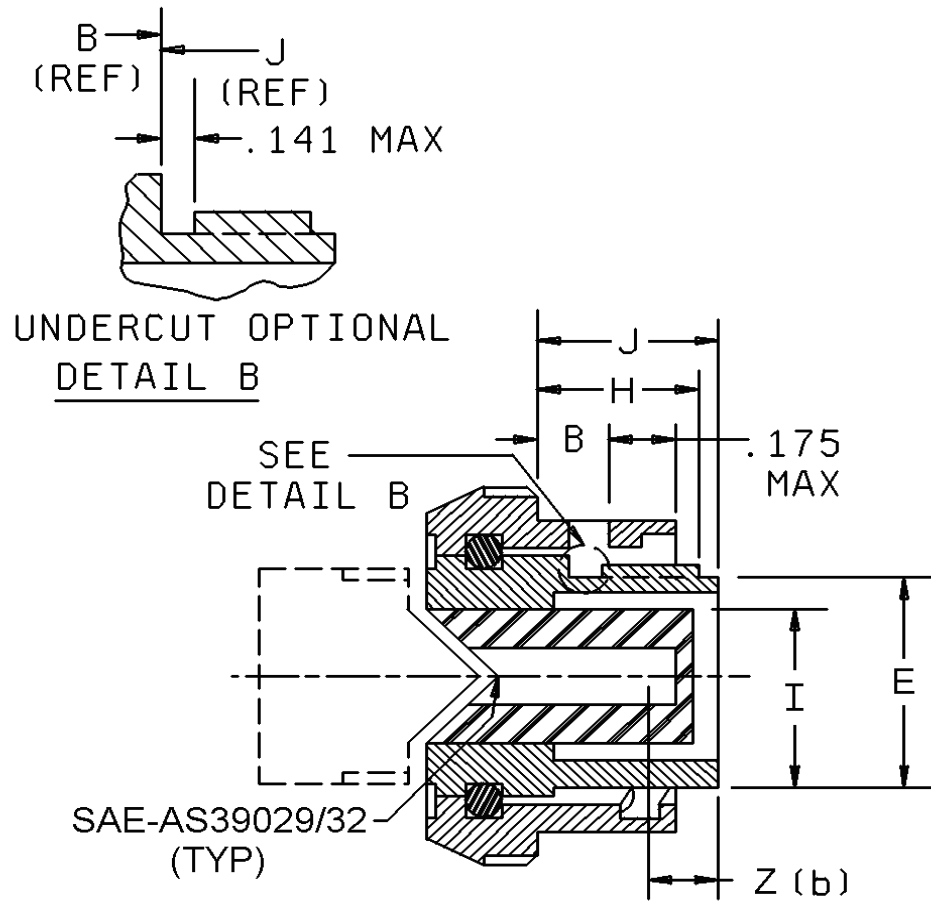


FIGURE 1. Plug, dimensions, classes E, F and P - Continued.

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PLUG, STYLE S (SOCKET INSERT)

| Inches | mm |
|--------|------|
| .141 | 3.58 |
| .175 | 4.44 |

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

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| Shell size | A dia +.005 -.001 coupling location | B \pm .020 bay lock location | C dia +.016 - .001 bay groove width | E dia +.001 -.005 OD | F dia min ID | G dia +.005 -.005 ID slots |
|------------|---|---|---|-------------------------------|--------------------|--|
| 8 | .481 | .113 | .090 | .357 | .292 | .576 |
| 10 | .602 | | | .485 | .409 | .697 |
| 12 | .761 | | | .597 | .523 | .871 |
| 14 | .885 | | | .722 | .648 | .995 |
| 16 | 1.010 | | | .847 | .722 | 1.120 |
| 18 | 1.136 | | | .947 | .862 | 1.245 |
| 20 | 1.260 | | | 1.072 | .987 | 1.370 |
| 22 | 1.385 | 1.197 | 1.111 | 1.495 | | |
| 24 | 1.510 | .152 | .137 | 1.322 | 1.237 | 1.624 |

| Shell size | H +.020 -.000 socket insert location | I max insert dia | J \pm .010 shoulder location | JJ +.020 -.000 pin insert location | Q max dia over-all | S +.001 -.010 dia over keys |
|------------|---|---------------------------|---|---|-----------------------------|--|
| 8 | .337 | .285 | .353 | .030 | .782 | .402 |
| 10 | | .402 | | | .926 | .530 |
| 12 | | .516 | | | 1.043 | .674 |
| 14 | | .641 | | | 1.183 | .804 |
| 16 | | .766 | | | 1.305 | .929 |
| 18 | | .855 | | | 1.391 | 1.029 |
| 20 | .399 | .980 | .415 | .092 | 1.531 | 1.154 |
| 22 | | 1.105 | | | 1.656 | 1.279 |
| 24 | | 1.229 | | | 1.777 | 1.404 |

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

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| Shell size | U +.010 -.020 pin contact location | Z (b) +.000 -.078 socket contact spring location | V V class 2A accessory thread |
|------------|--|--|-------------------------------------|
| 8 | .075 | .143 | 7/16-28 |
| 10 | | | 9/16-24 |
| 12 | | | 11/16-24 |
| 14 | | | 13/16-20 |
| 16 | | | 15/16-20 |
| 18 | | | 11/16-18 |
| 20 | | | 13/16-18 |
| 22 | | | 15/16-18 |
| 24 | | | 17/16-18 |

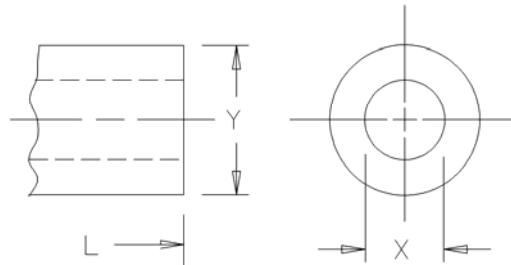
FIGURE 1. Plug, dimensions, classes E, F and P - Continued.

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| Inches | mm | Inches | mm | Inches | mm | Inches | mm |
|--------|------|--------|-------|--------|-------|--------|-------|
| .001 | .03 | .292 | 7.42 | .772 | 19.61 | 1.154 | 29.31 |
| .005 | .13 | .337 | 8.56 | .782 | 19.86 | 1.183 | 30.05 |
| .006 | .15 | .353 | 8.97 | .804 | 20.42 | 1.197 | 30.40 |
| .007 | .18 | .357 | 9.07 | .847 | 21.51 | 1.229 | 31.22 |
| .010 | .25 | .399 | 10.13 | .855 | 21.72 | 1.237 | 31.42 |
| .015 | .38 | .402 | 10.21 | .862 | 21.89 | 1.245 | 31.62 |
| .016 | .41 | .409 | 10.39 | .871 | 22.12 | 1.260 | 32.00 |
| .020 | .51 | .415 | 10.54 | .885 | 22.48 | 1.279 | 32.49 |
| .030 | .76 | .485 | 12.32 | .926 | 23.52 | 1.305 | 33.15 |
| .031 | .79 | .516 | 13.11 | .929 | 23.60 | 1.322 | 33.58 |
| .036 | .91 | .523 | 13.28 | .947 | 24.05 | 1.370 | 34.80 |
| .075 | 1.90 | .530 | 13.46 | .980 | 24.89 | 1.385 | 35.18 |
| .090 | 2.29 | .576 | 14.63 | .987 | 25.07 | 1.391 | 35.33 |
| .092 | 2.34 | .597 | 15.16 | .995 | 25.27 | 1.404 | 35.66 |
| .113 | 2.87 | .602 | 15.29 | 1.010 | 25.65 | 1.495 | 37.97 |
| .115 | 2.92 | .641 | 16.28 | 1.029 | 26.14 | 1.510 | 38.35 |
| .137 | 3.48 | .648 | 16.46 | 1.043 | 26.49 | 1.531 | 38.89 |
| .141 | 3.58 | .679 | 17.25 | 1.072 | 27.23 | 1.624 | 41.25 |
| .143 | 3.63 | .697 | 17.70 | 1.105 | 28.07 | 1.656 | 42.06 |
| .152 | 3.86 | .722 | 18.34 | 1.111 | 28.22 | 1.777 | 45.14 |
| .175 | 4.44 | .761 | 19.33 | 1.120 | 28.45 | | |
| .285 | 7.24 | .766 | 19.46 | 1.136 | 28.85 | | |

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

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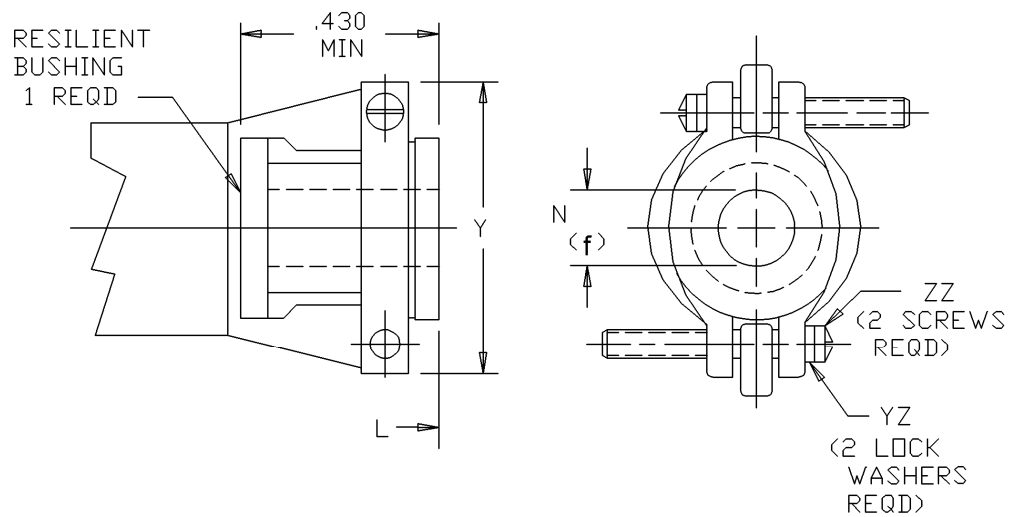


| Shell size | L max over-all length | X dia min ID | Y dia max OD |
|------------|-----------------------|------------------|------------------|
| 8 | 1.513 (38.43) | .259 (6.58) | .608 (15.44) |
| 10 | | .359 (9.12) | .730 (18.54) |
| 12 | | .469 (11.91) | .858 (21.79) |
| 14 | | .589 (14.96) | .954 (24.23) |
| 16 | | .717 (18.21) | 1.110 (28.19) |
| 18 | | .779 (19.79) | 1.244 (31.60) |
| 20 | 1.638 (41.61) | .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) |

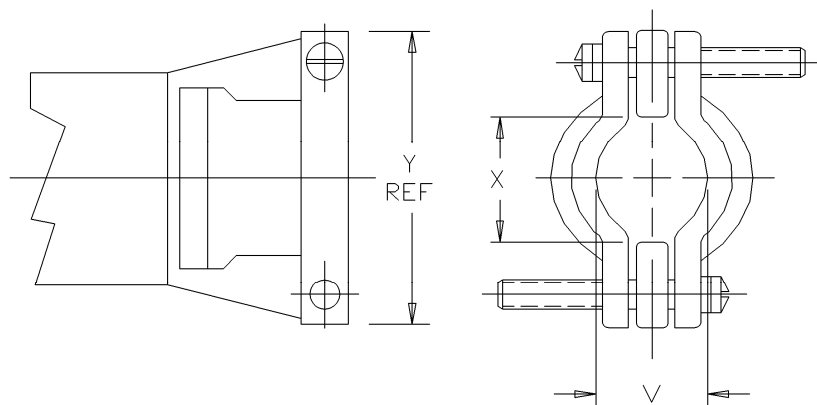
CLASS E

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

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CLASS F. BUSHING INSTALLED



| | |
|--------|-------|
| Inches | mm |
| .430 | 10.92 |

CLASS F. BUSHING REMOVED

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

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| Shell size | L max over-all length | X dia min open | Y max | V max closed |
|------------|-----------------------|----------------|------------------|-----------------|
| 8 | 2.413 (61.29) | .234 (5.94) | .828 (21.03) | .187 (4.75) |
| 10 | | .297 (7.54) | .891 (22.63) | |
| 12 | | .422 (10.72) | 1.016 (25.81) | |
| 14 | | .547 (13.89) | 1.141 (28.98) | |
| 16 | 2.528 (64.21) | .609 (15.47) | 1.203 (30.56) | .356 (9.04) |
| 18 | | .734 (18.64) | 1.469 (37.31) | |
| 20 | 2.753 (69.93) | .922 (23.42) | 1.656 (42.06) | .519 (13.18) |
| 22 | | | | |
| 24 | 2.830 (71.88) | .984 (24.99) | 1.750 (44.45) | .657 (16.69) |

CLASS F

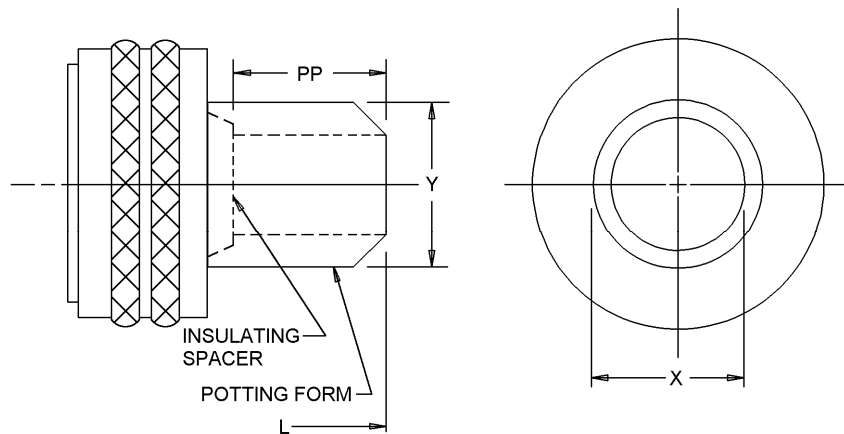
FIGURE 1. Plug, dimensions, classes E, F and P - Continued.

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| Shell size | N (f) free $\pm .010$ | ZZ screw threads | YZ lock washers NASM35338 or NASM35333 |
|------------|-----------------------------|------------------------|---|
| 8 | .125 (3.18) | 6-32 UNC | NASM35338-98 or -41 NASM35333-105 or NASM35333-37 |
| 10 | .180 (4.57) | | |
| 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 NASM35333-38 |
| 20 | .625 (15.88) | | |
| 22 | .750 (19.05) | | |
| 24 | .800 (20.32) | | |

CLASS F

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

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| Shell size | L max over-all length | X dia min | Y dia max | PP min |
|------------|-----------------------|------------------|------------------|----------------|
| 8 | 1.750 (44.45) | .317 (8.05) | .608 (15.44) | .250 (6.35) |
| 10 | | .434 (11.02) | .734 (18.64) | |
| 12 | | .548 (13.92) | .858 (21.79) | |
| 14 | | .673 (17.09) | .984 (24.99) | |
| 16 | | .798 (20.27) | 1.110 (28.19) | |
| 18 | | .899 (22.83) | 1.234 (31.34) | |
| 20 | 1.892 (48.06) | 1.024 (26.01) | 1.360 (34.54) | |
| 22 | | 1.149 (29.18) | 1.484 (37.69) | |
| 24 | 1.953 (49.61) | 1.274 (32.36) | 1.610 (40.89) | |

CLASS P

NOTES:

1. Dimensions are in inches
2. Metric equivalents are given for information only.
3. 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.
4. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
5. For class F: Use MS3420 bushing if reduced opening is required. Lockwashers may be captivated.

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

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REQUIREMENTS:

Dimensions and configuration: See figure 1.

This connector mates with MS3120, MS3122, MS3124, MS3127 and MS3128.

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

Packing material shall meet the requirements of ASTM-D2000.

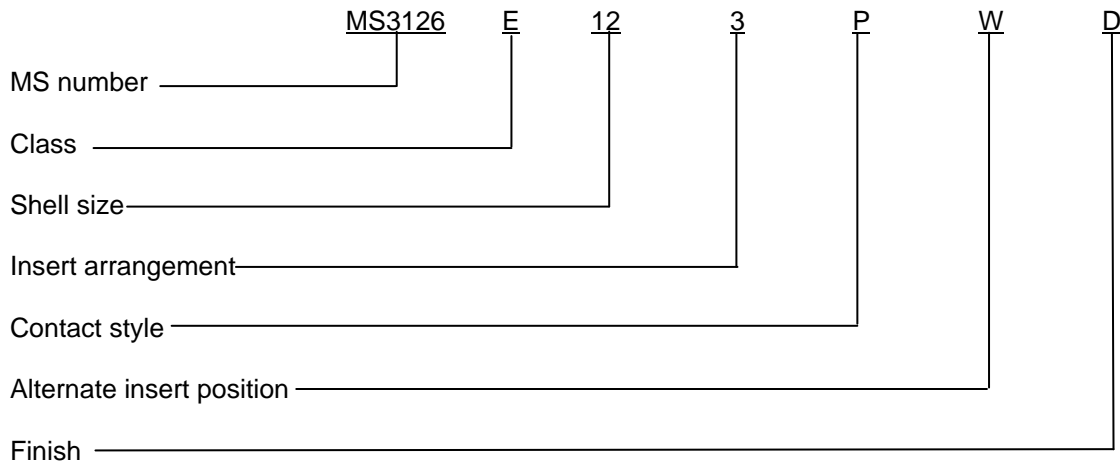
MS3476 is similar to MS3126 except for the following: MS3476 utilizes rear release contacts whereas connectors produced to this document utilize front release contacts.

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 and coupling ring - aluminum alloy.
- b. Bayonet pins – 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).

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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Referenced documents. In addition to MIL-DTL-26482, this document references the following:

MS3120
MS3122
MS3124
MS3127
MS3128
MS3420
MS3476
MIL-STD-1669
SAE-AS39029/31
SAE-AS39029/32
ASME Y14.5M
ASTM-D2000
NASM35333
NASM35338

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2008-131)

Review activities:

Army - AR, MI
Air Force – 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organization and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.