

INCH-POUND

MS24266P
 7 August 2015
 SUPERSEDING
 MS24266N
 20 August 2009

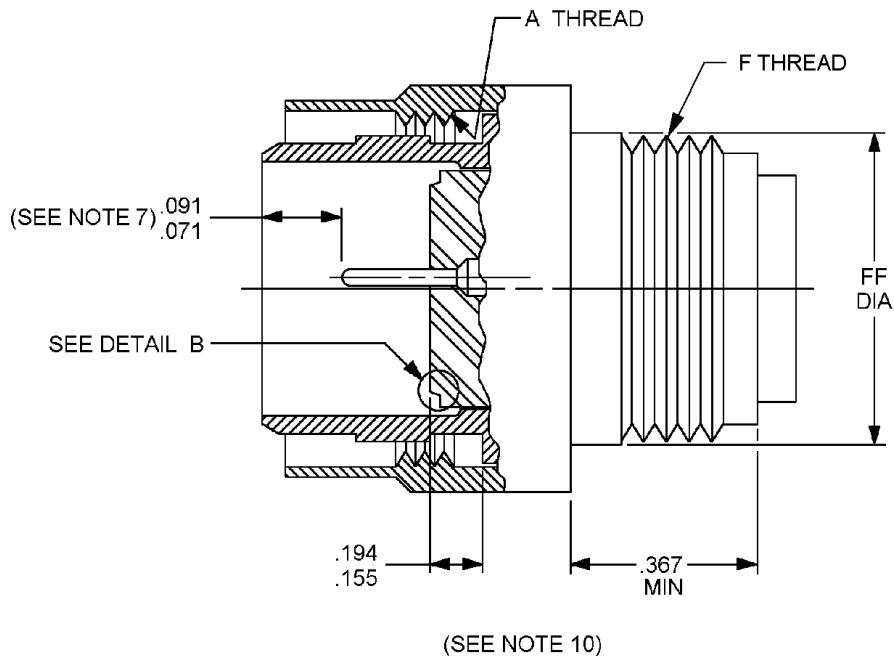
DETAIL SPECIFICATION SHEET

CONNECTORS, PLUG, ELECTRICAL, STRAIGHT,
 MINIATURE, CLASSES E, F, G AND R

Inactive for new design after 14 November 1977.
 For new design, use MIL-DTL-83723, series III.

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-26500.

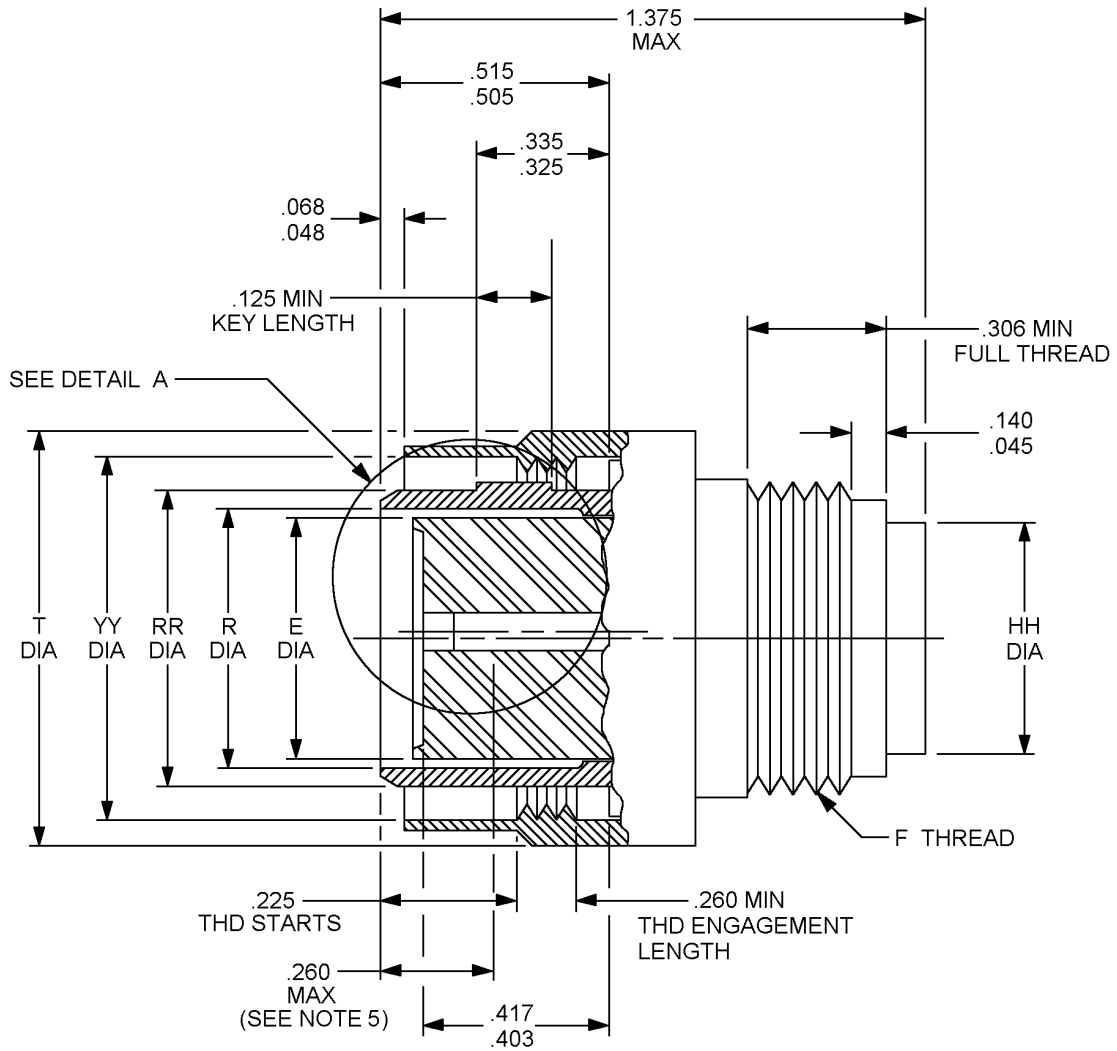


STYLE P (PIN INSERT) FOR CLASSES F, G, R AND E

FIGURE 1. Plug, threaded coupling, type T.



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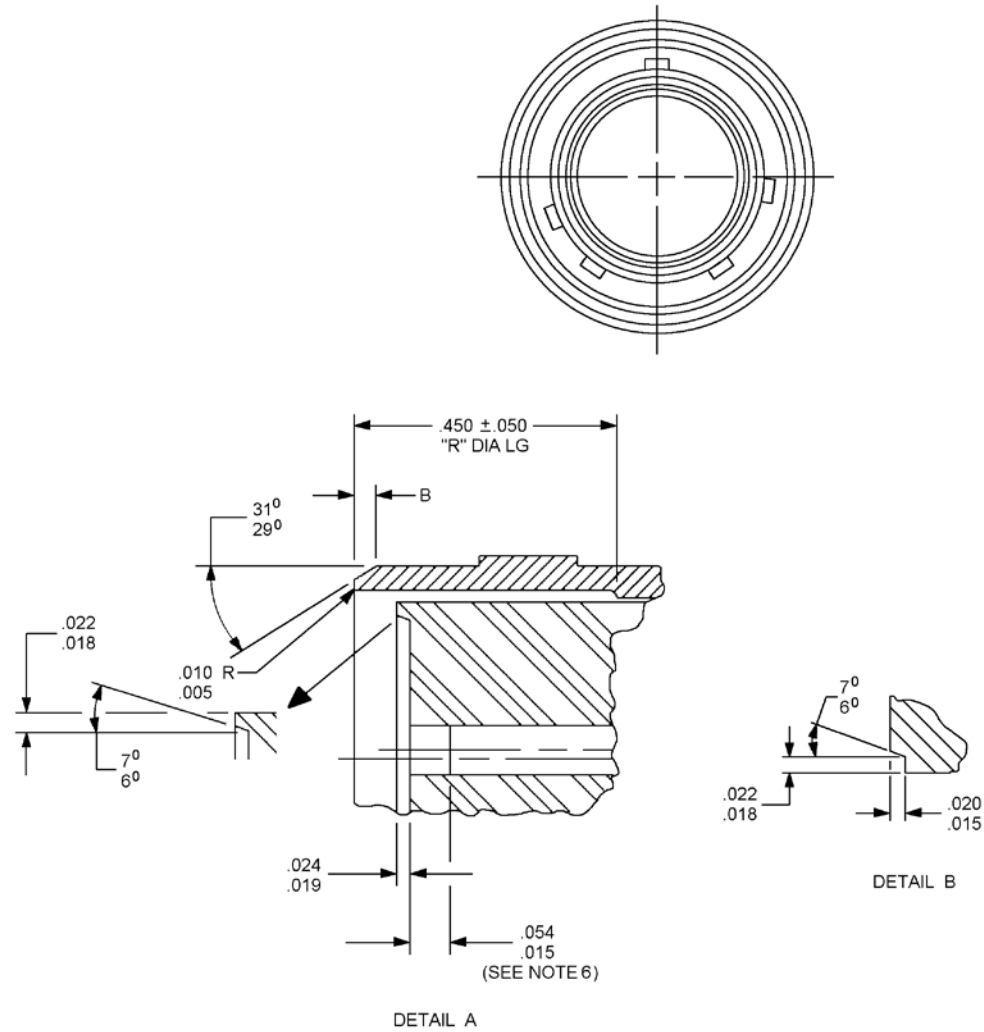


(SEE NOTE 10)

STYLE S (SOCKET INSERT), CLASSES F, G, R AND E

FIGURE 1. Plug, threaded coupling, type T – Continued.

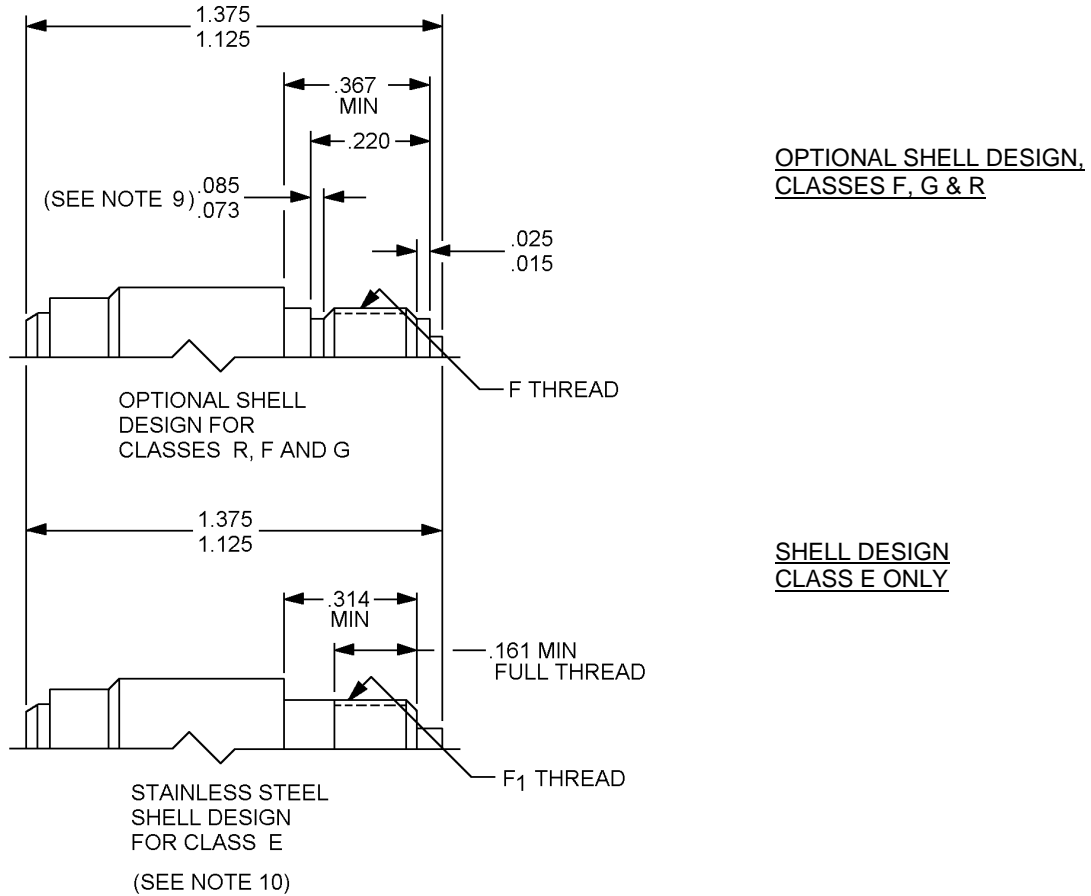
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| Inches | mm | Inches | mm | Inches | mm | Inches | mm |
|--------|------|--------|------|--------|------|--------|-------|
| .005 | 0.13 | .045 | 1.14 | .140 | 3.56 | .367 | 9.32 |
| .010 | 0.25 | .048 | 1.22 | .180 | 4.57 | .403 | 10.24 |
| .015 | 0.38 | .050 | 1.27 | .194 | 4.93 | .417 | 10.59 |
| .018 | 0.46 | .054 | 1.37 | .225 | 5.72 | .450 | 11.43 |
| .019 | 0.48 | .068 | 1.73 | .260 | 6.60 | .505 | 12.83 |
| .020 | 0.51 | .071 | 1.80 | .306 | 7.77 | .515 | 13.08 |
| .022 | 0.56 | .091 | 2.31 | .325 | 8.26 | 1.375 | 34.92 |
| .024 | 0.61 | .125 | 3.18 | .335 | 8.51 | | |

FIGURE 1. Plug, threaded coupling, type T – Continued.

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| Inches | mm | Inches | mm | Inches | mm |
|--------|------|--------|------|--------|-------|
| .015 | 0.38 | .161 | 4.09 | .367 | 9.32 |
| .025 | 0.66 | .220 | 5.59 | 1.125 | 28.58 |
| .073 | 1.85 | .314 | 7.98 | 1.375 | 34.92 |
| .085 | 2.16 | | | | |

NOTES:

1. Dimensions are in inches. Unless otherwise specified, tolerance on decimals is $\pm .005$.
2. Metric equivalents are given for information only.
3. All diameters to be concentric with each other within .015 T.I.R.
4. All diameters in the same plane to be concentric with each other within .004 T.I.R.
5. Distance between end of shell and the point at which a gauge pin having the same basic diameter as the mating contact and a square face, engages socket contact spring.
6. Dimensions on pin and socket contact locations and end of shell to insert faces apply when contacts are placed in inserts for inspection or application.

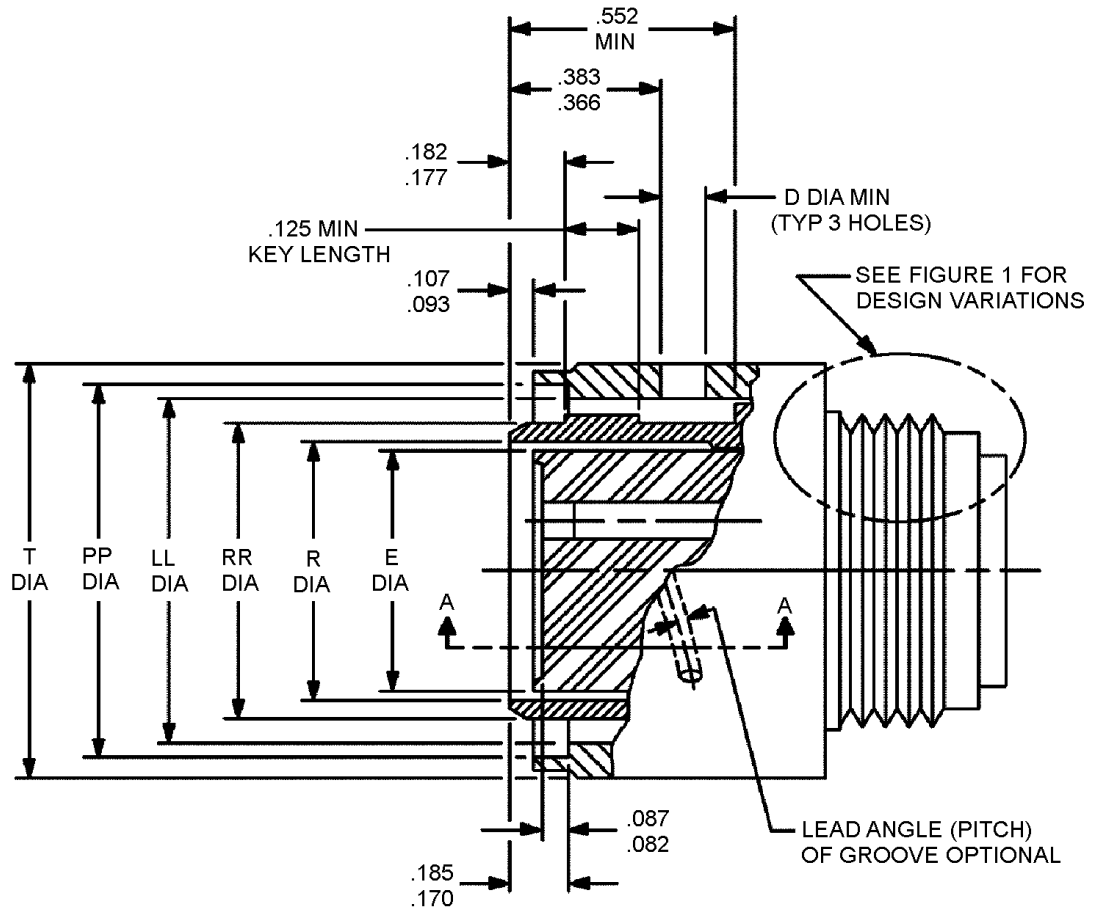
FIGURE 1. Plug, threaded coupling, type T – Continued.

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7. Dimensions .071 may reduce to .056 minimum under pressures caused by molded cable assemblies or sharp cable bends.
8. Use tool MIL-I-81969/17 to assemble contacts into this connector, and use tool MIL-I-81969/19 to remove contacts from this connector.
9. Thread relief groove is optional on shell. When groove is omitted the length of full thread from front of shell will be .221 minimum.
10. Environment resistant (classes F and R) plugs, type T aluminum shell material. Grounding environment resistant (class G) plugs, type T aluminum shell material. Environment resistant (class E) plugs, type T stainless steel shell material.
11. True position (T.P.) tolerances specified are for maximum material conditions (M.M.C.).
12. Application note: For new design, use MIL-DTL-83723. Note: MIL-DTL-83723, series III, specifies accessory threads and accessories that are not fully compatible with MIL-DTL-26500 connectors. Recommend using MIL-DTL-26500 cable clamps with these connectors.

FIGURE 1. Plug, threaded coupling, type T – Continued.

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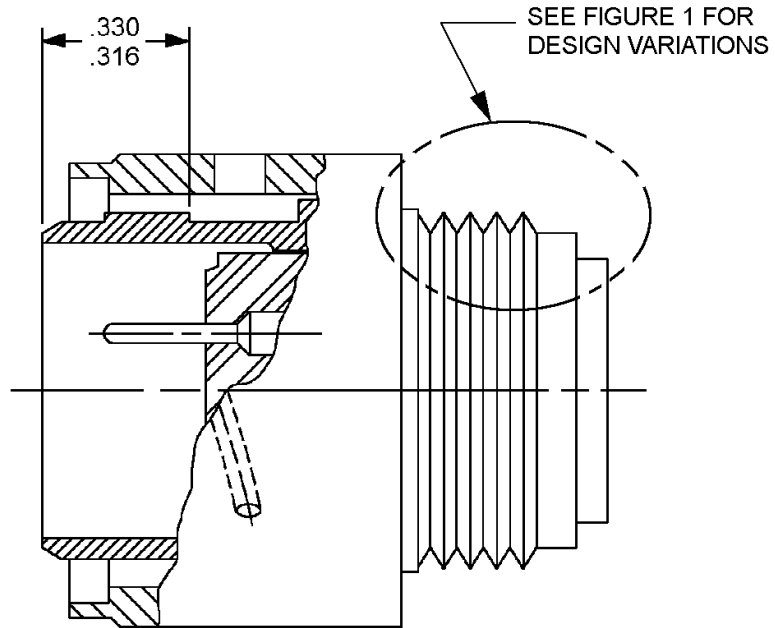
(SEE NOTE 10)

STYLE S
SOCKET INSERT

STYLE S (SOCKET INSERT) FOR CLASSES F, G, R AND E

FIGURE 2. Plug, bayonet coupling, type B.

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(SEE NOTE 10)

STYLE P
PIN INSERT

STYLE P (PIN INSERT) FOR CLASSES F, G, R AND E

| Inches | mm | Inches | mm | Inches | mm |
|--------|------|--------|------|--------|-------|
| .004 | 0.10 | .107 | 2.71 | .330 | 8.38 |
| .005 | 0.13 | .125 | 3.18 | .366 | 9.30 |
| .082 | 2.08 | .177 | 4.50 | .383 | 9.73 |
| .087 | 2.21 | .188 | 4.78 | .552 | 14.02 |
| .093 | 2.36 | .316 | 8.03 | | |

FIGURE 2. Plug, bayonet coupling, type B – Continued.

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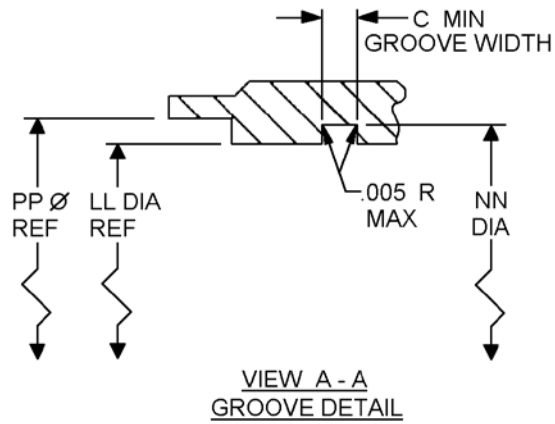
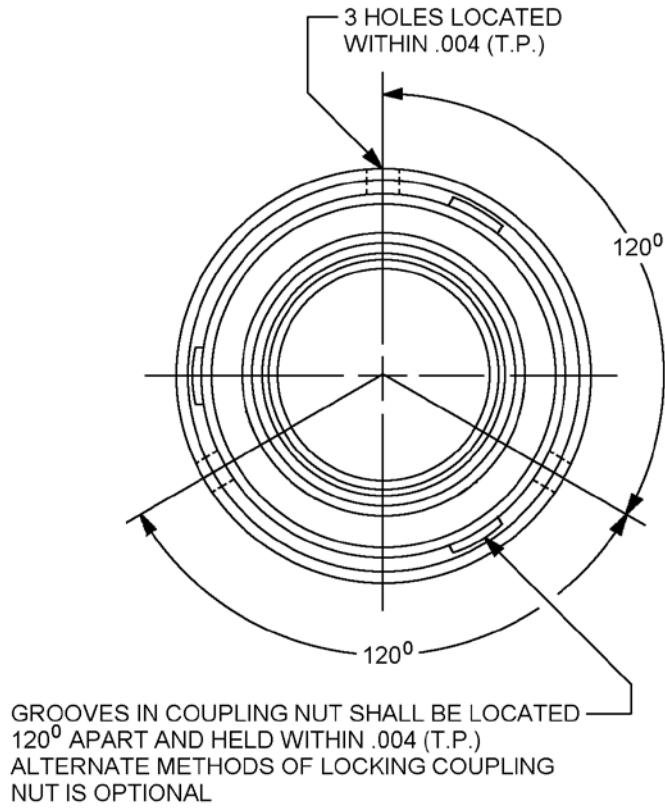


FIGURE 2. Plug, bayonet coupling, type B – Continued.

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NOTES:

1. Dimensions are in inches. Unless otherwise specified, tolerance on decimals is $\pm .005$.
2. Metric equivalents are given for information only.
3. All diameters to be concentric with each other within .015 T.I.R.
4. All diameters in the same plane to be concentric with each other within .004 T.I.R.
5. Distance between end of shell and the point at which a gauge pin having the same basic diameter as the mating contact and a square face, engages socket contact spring.
6. Dimensions on pin and socket contact locations and end of shell to insert faces apply when contacts are placed in inserts for inspection or application.
7. Dimension .071 may reduce to .056 minimum under pressures caused by molded cable assemblies or sharp cable bends.
8. Use tool MIL-I-81969/17 to assemble contacts into this connector, and use tool MIL-I-81969/19 to remove contacts from this connector.
9. Thread relief groove is optional on shell. When groove is omitted the length of full thread from front of shell will be .221 minimum.
10. Environment resistant (classes F and R) plugs, type B, aluminum shell material. Grounding environment resistant (class G) plugs, types B,-aluminum shell material. Environment resistant (class E) plugs, types B,-stainless steel shell material.
11. True position (T.P.) tolerances specified are for maximum material conditions (M.M.C.).
12. Application note: For new design, use MIL-DTL-83723. Note: MIL-DTL-83723, series III, specifies accessory threads and accessories that are not fully compatible with MIL-DTL-26500 connectors. Recommend using MIL-DTL-26500 cable clamps with these connectors.

FIGURE 2. Plug, bayonet coupling, type B – Continued.

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| Shell size | A UNEF-2B coupling | B | C min | D min dia | E max insert dia | F UNEF-2A access thd |
|------------|--------------------------|---------------|----------------|-----------------|---------------------------|-------------------------------|
| 8 | .5625-24 (14.27) | .025 (.66) | .079 (2.01) | .079 (2.01) | .318 (8.08) | .4375-28 (11.10) |
| 10 | .6875-24 (17.45) | .031 (.79) | .094 (2.39) | .094 (2.39) | .394 (10.01) | .5625-24 (14.27) |
| 12 | .875-20 (22.22) | .031 (.79) | .094 (2.39) | .094 (2.39) | .564 (14.33) | .750-20 (19.05) |
| 14 | .9375-20 (23.80) | .031 (.79) | .094 (2.39) | .094 (2.39) | .633 (16.08) | .8125-20 (20.62) |
| 16 | 1.0625-10 (26.97) | .031 (.79) | .094 (2.39) | .094 (2.39) | .760 (19.30) | .9375-20 (23.80) |
| 18 | 1.1875-18 (30.15) | .031 (.79) | .094 (2.39) | .094 (2.39) | .866 (22.00) | 1.0625-18 (26.97) |
| 20 | 1.3125-18 (33.32) | .031 (.79) | .094 (2.39) | .094 (2.39) | .991 (25.17) | 1.1875-18 (30.15) |
| 22 | 1.4375-18 (36.50) | .031 (.79) | .094 (2.39) | .094 (2.39) | 1.1161 (28.35) | 1.3125-18 (33.32) |
| 24 | 1.5625-18 (39.67) | .031 (.79) | .094 (2.39) | .094 (2.39) | 1.241 (31.52) | 1.4375-18 (36.50) |

| Shell size | F ₁ -36NS-2A (class E, only) | F ₁ pitch dia (class E, only) | FF max dia |
|------------|---|--|---------------|
| 8 | .4340 | .4151/.4114 (10.544/10.450) | .437 (11.10) |
| 10 | .5634 | .5454/.5415 (13.853/13.754) | .562 (14.27) |
| 12 | .7334 | .7154/.7115 (18.171/18.072) | .750 (19.50) |
| 14 | .8032 | .7841/.7806 (19.961/19.827) | .812 (20.62) |
| 16 | .9302 | .9110/.9074 (23.134/23.048) | .938 (23.82) |
| 18 | 1.0362 | 1.0171/1.0134 (25.834/25.740) | 1.062 (26.97) |
| 20 | 1.1611 | 1.1431/1.1385 (29.034/28.918) | 1.182 (30.02) |
| 22 | 1.2862 | 1.2670/1.2633 (32.182/32.088) | 1.312 (33.32) |
| 24 | 1.4111 | 1.3931/1.3885 (35.385/35.268) | 1.432 (36.37) |

FIGURE 3. Plug, dimensions.

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| Shell size | HH max grommet dia | LL dia + .005 (0.12) - .000 (0.00) | NN min dia | PP min dia | R min dia |
|------------|--------------------|--|------------------|------------------|------------------|
| 8 | .328 (8.33) | .539 (13.69) | .632 (16.05) | .632 (16.05) | .352 (8.94) |
| 10 | .420 (10.67) | .662 (16.81) | .760 (19.30) | .760 (19.30) | .428 (10.87) |
| 12 | .580 (14.73) | .832 (21.13) | .930 (23.62) | .930 (23.62) | .598 (15.19) |
| 14 | .664 (16.86) | .901 (22.88) | .999 (25.37) | .999 (25.37) | .667 (16.94) |
| 16 | .769 (19.53) | 1.028 (26.11) | 1.126 (28.60) | 1.126 (28.60) | .794 (20.17) |
| 18 | .902 (23.37) | 1.134 (28.80) | 1.232 (31.29) | 1.232 (31.29) | .900 (22.86) |
| 20 | 1.033 (26.24) | 1.261 (32.03) | 1.357 (34.47) | 1.357 (34.47) | 1.025 (26.04) |
| 22 | 1.152 (29.26) | 1.384 (35.15) | 1.482 (37.66) | 1.482 (37.66) | 1.150 (29.21) |
| 24 | 1.282 (32.56) | 1.511 (38.38) | 1.607 (40.82) | 1.607 (40.82) | 1.275 (32.38) |

FIGURE 3. Plug dimensions – Continued.

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| Shell size | RR dia + .000 (0.00) - .005 (0.12) | T max OD coupling nut | YY min dia |
|------------|--|-----------------------------|------------------|
| 8 | .424 (10.77) | .776 (19.71) | .583 (14.81) |
| 10 | .526 (13.36) | .906 (23.01) | .707 (17.96) |
| 12 | .696 (17.68) | 1.078 (27.38) | .895 (22.73) |
| 14 | .765 (19.43) | 1.141 (28.98) | .957 (24.31) |
| 16 | .892 (22.66) | 1.266 (32.16) | 1.084 (27.53) |
| 18 | .998 (25.35) | 1.375 (34.47) | 1.209 (30.71) |
| 20 | 1.123 (28.52) | 1.510 (38.35) | 1.334 (33.88) |
| 22 | 1.248 (31.70) | 1.625 (41.28) | 1.459 (37.06) |
| 24 | 1.373 (34.87) | 1.760 (44.70) | 1.584 (40.23) |

NOTES:

1. Dimensions are in inches. Unless otherwise specified, tolerance on decimals is $\pm .005$.
2. Metric equivalents are given for general information only.
3. All diameters to be concentric with each other within .015 T.I.R.
4. All diameters in the same plane to be concentric with each other within .004 T.I.R.
5. Distance between end of shell and the point at which a gauge pin having the same basic diameter as the mating contact and a square face, engages socket contact spring.
6. Dimensions on pin and socket contact locations and end of shell to insert faces apply when contacts are placed in inserts for inspection or application.
7. Dimension .071 may reduce to .056 minimum under pressures caused by molded cable assemblies or sharp cable bends.
8. Use tool MIL-I-81969/17 to assemble contacts into this connector, and use tool MIL-I-81969/19 to remove contacts from this connector.
9. Thread relief groove is optional on shell. When groove is omitted the length of full thread from front of shell will be .221 minimum.
10. Environment resistant (classes F and R) plugs, types B and T, aluminum shell material.
Grounding environment resistant (class G) plugs, types B and T, aluminum shell material.
Environment resistant (class E) plugs, types B and T, stainless steel shell material.
11. True position (T.P.) tolerances specified are for maximum material conditions (M.M.C).
12. Application note: For new design, use MIL-DTL-83723. Note: MIL-DTL-83723, series III, specifies accessory threads that are not fully compatible with MIL-DTL-26500 connectors. Recommend using MIL-DTL-26500 cable clamps with these connectors.

FIGURE 3. Plug, dimensions – Continued.

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| Weight chart | | | Weight chart | | |
|------------------------------------|---------------|---------------|------------------------------------|---------------|---------------|
| Maximum connector weight in pounds | | | Maximum connector weight in pounds | | |
| Pin insert | | | Socket insert | | |
| MS PIN | Less contacts | With contacts | MS PIN | Less contacts | With contacts |
| MS24266R8T2PN | .028 | .030 | MS2466R8T2SN | .029 | .031 |
| MS24266R10T2PN | .040 | .042 | MS2466R10T2SN | .041 | .043 |
| MS24266R10T5PN | .039 | .043 | MS2466R10T5SN | .040 | .044 |
| MS24266R10T20PN | .040 | .044 | MS2466R10T20SN | .041 | .045 |
| MS24266R12T3PN | .055 | .060 | MS2466R12T3SN | .057 | .062 |
| MS24266R12T12PN | .053 | .063 | MS2466R12T12SN | .054 | .064 |
| MS24266R14T3PN | .059 | .069 | MS2466R14T3SN | .061 | .070 |
| MS24266R14T4PN | .059 | .074 | MS2466R14T4SN | .061 | .076 |
| MS24266R14T7PN | .059 | .072 | MS2466R14T7SN | .061 | .072 |
| MS24266R14T12PN | .059 | .072 | MS2466R14T12SN | .061 | .074 |
| MS24266R14T15PN | .059 | .073 | MS2466R14T15SN | .061 | .074 |
| MS24266R16T10PN | .072 | .090 | MS2466R16T10SN | .071 | .089 |
| MS24266R16T24PN | .071 | .091 | MS2466R16T24SN | .074 | .094 |
| MS24266R18T8PN | .081 | .110 | MS2466R 18T8SN | .084 | .112 |
| MS24266R18T11PN | .078 | .102 | MS2466R18T11SN | .082 | .105 |
| MS24266R18T14PN | .078 | .103 | MS2466R18T14SN | .082 | .107 |
| MS24266R18T31PN | .078 | .104 | MS2466R18T31SN | .082 | .107 |
| MS24266R20T16PN | .098 | .126 | MS2466R20T16SN | .101 | .129 |
| MS24266R20T25PN | .095 | .133 | MS2466R20T25SN | .099 | .136 |
| MS24266R20T28PN | .097 | .132 | MS2466R20T26SN | .099 | .133 |
| MS24266R20T39PN | .097 | .132 | MS2466R20T39SN | .099 | .133 |
| MS24266R20T41PN | .097 | .131 | MS2466R20T41SN | .099 | .133 |
| MS24266R22T12PN | .110 | .153 | MS2466R22T12SN | .117 | .156 |
| MS24266R22T19PN | .110 | .154 | MS2466R22T19SN | .117 | .150 |
| MS24266R22T32PN | .110 | .153 | MS2466R22T32SN | .117 | .160 |
| MS24266R22T55PN | .106 | .153 | MS2466R22T55SN | .112 | .157 |
| MS24266R24T43PN | .129 | .184 | MS2466R24T43SN | .134 | .188 |
| MS24266R24T57PN | .128 | .181 | MS2466R24T57SN | .133 | .185 |
| MS24266R24T61PN | .125 | .176 | MS2466R24T61SN | .131 | .181 |

FIGURE 4. Weights, plugs, threaded coupling type T, classes F, G and R.

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REQUIREMENTS:

Dimensions and configuration: See figures 1 through 4.

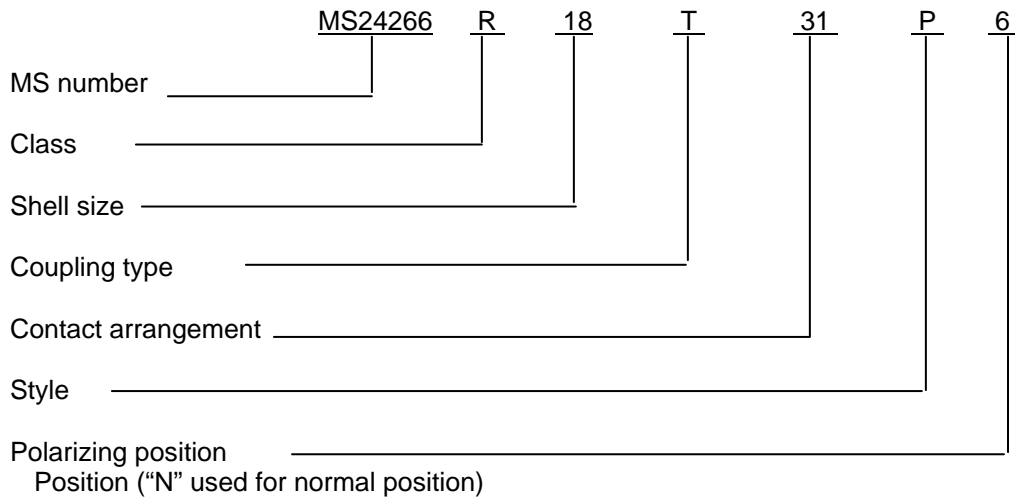
Connector mating: This connector mates with MS24264, MS24265, MS27034, MS27613 and MS27614. Dummy stowage receptacles for use with MS24266 include M83723/61-1 (coupling type T) and M83723/61-2 (coupling type B).

For insert arrangements and alternate insert keying position: See MIL-STD-1554.

For accessories used with this connector: See MIL-DTL-26500.

Contacts: In accordance with SAE-AS39029.

Part or Identifying Number (PIN) example:



Changes from previous issue. The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous issue were made. 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 and relationship to the previous issue.

Referenced documents. In addition to MIL-DTL-26500, this document references the following:

MIL-DTL-83723
MIL-I-81969/17
MIL-I-81969/19
MIL-STD-1554
MS24264
MS24265
MS27034
MS27613
MS27614
SAE-AS39029

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CONCLUDING MATERIAL

Custodians:

Army – AV
Air Force – 85
DLA – CC

Preparing activity:

DLA – CC

(Project 5935-2015-180)

Review activities:

Army - MI
Air Force – 99

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