

**INCH-POUND**

MS27291G  
 20 August 2009  
 SUPERSEDING  
 MS27291F  
 6 February 2004

**DETAIL SPECIFICATION SHEET****SUPPORT, CABLE, ELECTRICAL CONNECTOR**

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

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.

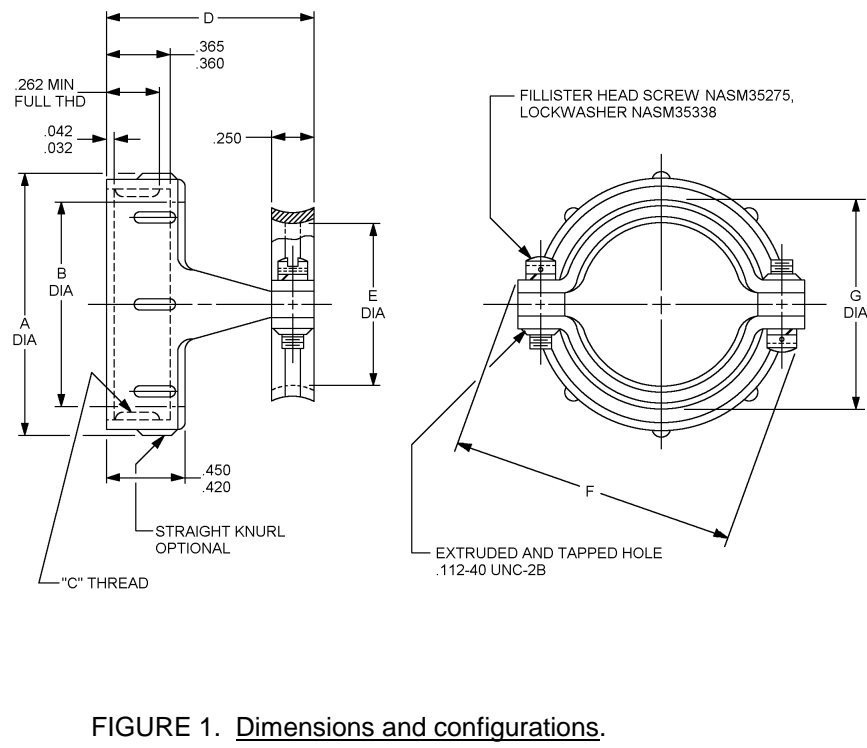


FIGURE 1. Dimensions and configurations.

## MS27291G

| MS PIN      | For use<br>with connector<br>class | Shell size | A<br>max<br>dia | B<br>dia<br>$\pm .005$ |
|-------------|------------------------------------|------------|-----------------|------------------------|
| MS27291-1   | R, F                               | 10         | .731            | .459                   |
| MS27291-101 | G                                  | 10         | .731            | .459                   |
| MS27291-2   | R, F                               | 12         | .919            | .636                   |
| MS27291-201 | G                                  | 12         | .919            | .636                   |
| MS27291-3   | R, F                               | 14         | .981            | .698                   |
| MS27291-301 | G                                  | 14         | .981            | .698                   |
| MS27291-4   | R, F                               | 16         | 1.106           | .823                   |
| MS27291-401 | G                                  | 16         | 1.106           | .823                   |
| MS27291-5   | R, F                               | 18         | 1.231           | .941                   |
| MS27291-501 | G                                  | 18         | 1.231           | .941                   |
| MS27291-6   | R, F                               | 22         | 1.481           | 1.191                  |
| MS27291-601 | G                                  | 22         | 1.481           | 1.191                  |
| MS27291-13  | R, F                               | 8          | .606            | .334                   |
| MS27291-701 | G                                  | 8          | .606            | .334                   |
| MS27291-14  | R, F                               | 20         | 1.356           | 1.066                  |
| MS27291-801 | G                                  | 20         | 1.356           | 1.066                  |
| MS27291-15  | R, F                               | 24         | 1.606           | 1.316                  |
| MS27291-901 | G                                  | 24         | 1.606           | 1.316                  |

FIGURE 1. Dimensions and configurations – Continued.

## MS27291G

| MS PIN      | For use<br>with connector<br>class | Shell<br>size | "C"<br>Nom<br>UNEF-2B<br>thread | D<br>± .015 | E<br>dia<br>± .015 | F<br>max | G<br>dia<br>max. |
|-------------|------------------------------------|---------------|---------------------------------|-------------|--------------------|----------|------------------|
| MS27291-1   | R, F                               | 10            | .5625-24                        | .935        | .270               | .914     | .435             |
| MS27291-101 | G                                  | 10            | .5625-24                        | .935        | .270               | .914     | .435             |
| MS27291-2   | R, F                               | 12            | .750                            | .935        | .400               | 1.026    | .565             |
| MS27291-201 | G                                  | 12            | .750                            | .935        | .400               | 1.026    | .565             |
| MS27291-3   | R, F                               | 14            | .8125                           | 1.170       | .460               | 1.090    | .625             |
| MS27291-301 | G                                  | 14            | .8125                           | 1.170       | .460               | 1.090    | .625             |
| MS27291-4   | R, F                               | 16            | .9375                           | 1.170       | .610               | 1.250    | .775             |
| MS27291-401 | G                                  | 16            | .9375                           | 1.170       | .610               | 1.250    | .775             |
| MS27291-5   | R, F                               | 18            | 1.0625                          | 1.170       | .690               | 1.358    | .855             |
| MS27291-501 | G                                  | 18            | 1.0625                          | 1.170       | .690               | 1.358    | .855             |
| MS27291-6   | R, F                               | 22            | 1.3125                          | 1.170       | .940               | 1.604    | 1.105            |
| MS27291-601 | G                                  | 22            | 1.3125                          | 1.170       | .940               | 1.604    | 1.105            |
| MS27291-13  | R, F                               | 8             | .4375                           | .935        | .186               | .789     | .351             |
| MS27291-701 | G                                  | 8             | .4375                           | .935        | .186               | .789     | .351             |
| MS27291-14  | R, F                               | 20            | 1.1875                          | 1.170       | .816               | 1.481    | .981             |
| MS27291-801 | G                                  | 20            | 1.1875                          | 1.170       | .816               | 1.481    | .981             |
| MS27291-15  | R, F                               | 24            | 1.4375                          | 1.170       | 1.066              | 1.729    | 1.231            |
| MS27291-901 | G                                  | 24            | 1.4375                          | 1.170       | 1.066              | 1.729    | 1.231            |

FIGURE 1. Dimensions and configurations – Continued.

## MS27291G

| MS PIN      | For use<br>with<br>connector<br>class | Shell<br>size | A<br>max<br>dia. | B<br>dia<br>$\pm .005$ | "C"<br>-36NS2A<br>thread |
|-------------|---------------------------------------|---------------|------------------|------------------------|--------------------------|
| MS27291-702 | E                                     | 08            | .606             | .334                   | .4340                    |
| MS27291-102 | E                                     | 10            | .731             | .459                   | .5634                    |
| MS27291-202 | E                                     | 12            | .919             | .631                   | .7334                    |
| MS27291-302 | E                                     | 14            | .981             | .698                   | .8032                    |
| MS27291-402 | E                                     | 16            | 1.106            | .823                   | .9302                    |
| MS27291-502 | E                                     | 18            | 1.231            | .941                   | 1.0362                   |
| MS27291-802 | E                                     | 20            | 1.356            | 1.066                  | 1.1611                   |
| MS27291-602 | E                                     | 22            | 1.481            | 1.191                  | 1.2862                   |
| MS27292-902 | E                                     | 24            | 1.606            | 1.316                  | 1.1111                   |

| MS PIN      | For use<br>with class<br>connector | Shell<br>size | D<br>$\pm .015$ | E<br>dia.<br>$\pm .015$ | F<br>max | G<br>dia<br>max |
|-------------|------------------------------------|---------------|-----------------|-------------------------|----------|-----------------|
| MS27291-702 | E                                  | 08            | .935            | .186                    | .769     | .351            |
| MS27291-102 | E                                  | 10            | .935            | .270                    | .914     | .435            |
| MS27291-202 | E                                  | 12            | .935            | .400                    | 1.026    | .565            |
| MS27291-302 | E                                  | 14            | 1.170           | .460                    | 1.090    | .625            |
| MS27291-402 | E                                  | 16            | 1.170           | .610                    | 1.250    | .775            |
| MS27291-502 | E                                  | 18            | 1.170           | .690                    | 1.358    | .855            |
| MS27291-802 | E                                  | 20            | 1.170           | .816                    | 1.481    | .981            |
| MS27291-602 | E                                  | 22            | 1.170           | .940                    | 1.604    | 1.105           |
| MS27292-902 | E                                  | 24            | 1.170           | 1.066                   | 1.729    | 1.231           |

FIGURE 1. Dimensions and configurations – Continued.

## MS27291G

| Inches | mm    | Inches | mm    | Inches | mm    |
|--------|-------|--------|-------|--------|-------|
| .032   | .081  | .61    | 15.49 | 1.026  | 26.06 |
| .042   | 1.07  | .625   | 15.87 | 1.0362 | 26.32 |
| .186   | 4.72  | .636   | 16.15 | 1.0625 | 26.99 |
| .25    | 6.35  | .69    | 17.53 | 1.066  | 27.07 |
| .262   | 6.65  | .698   | 17.73 | 1.09   | 27.69 |
| .27    | 6.85  | .731   | 18.57 | 1.105  | 28.06 |
| .334   | 8.48  | .7334  | 18.63 | 1.106  | 28.09 |
| .351   | 8.91  | .75    | 19.05 | 1.1111 | 28.22 |
| .36    | 9.14  | .775   | 19.68 | 1.1611 | 29.49 |
| .365   | 9.27  | .789   | 20.04 | 1.17   | 29.72 |
| .4     | 10.16 | .8032  | 20.4  | 1.875  | 30.16 |
| .42    | 10.67 | .8125  | 20.64 | 1.191  | 30.25 |
| .434   | 11.02 | .823   | 20.9  | 1.231  | 31.27 |
| .435   | 11.05 | .855   | 19.68 | 1.25   | 31.75 |
| .4375  | 11.11 | .914   | 23.21 | 1.2862 | 32.67 |
| .45    | 11.43 | .919   | 23.34 | 1.3125 | 33.33 |
| .459   | 11.66 | .9302  | 23.63 | 1.356  | 34.44 |
| .46    | 11.68 | .935   | 23.75 | 1.358  | 34.49 |
| .5634  | 14.31 | .94    | 23.87 | 1.481  | 37.62 |
| .565   | 14.35 | .941   | 23.9  | 1.604  | 40.74 |
| .606   | 15.39 | .981   | 24.92 | 1.606  | 40.79 |
|        |       |        |       | 1.729  | 43.29 |

## NOTES:

1. Dimensions are in inches. Metric equivalent are given for information only.
2. Unless otherwise specified, tolerances are .005 for three place decimals and .02 for two place decimals.
3. All threads are in accordance with FED-STD-H28.
4. Remove all burrs and sharp edges.

FIGURE 1. Dimensions and configurations – Continued.

## MS27291G

### REQUIREMENTS

Dimensions and configurations: See figure 1.

#### Materials:

Cable strap; aluminum alloy in accordance with SAE-AMS-QQ-A-367 or ASTM-B209 or stainless steel type, 300 or 216 series. Cable strap for use with class R and F connectors. For aluminum alloy, anodize in accordance with MIL-A-8625 or suitable hard anodizing process to meet the performance requirements of MIL-DTL-26500 and MIL-DTL-83723. For stainless steel the finish shall be black oxide or equivalent. Cable strap for use with class G connectors; for stainless steel, chromium plating in accordance with SAE-AMS-QQ-C-320, class 2a, type II, .0002 minimum thickness.

Cable support; aluminum alloy in accordance with ASTM-B85/B85M composition 13, A13, A380, or 380. Cable support use with class R and F connectors; for aluminum alloy, in accordance with MIL-A-8625 or suitable hard anodizing process to meet the performance requirements of MIL-DTL-26500 and MIL-DTL-83723. Cable support for use with class G connectors; for aluminum alloy, chromium plating in accordance with SAE-AMS-QQ-C-320, class 2a, type II, .0002 minimum thickness.

Part or Identifying Number (PIN): MS27291-1.

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-26500, this document references the following:

MIL-A-8625  
MIL-DTL-83723  
FED-STD-H28  
SAE-AMS-QQ-C-320  
SAE-AMS-QQ-A-367  
NASM35275  
NASM35338  
ASTM-B85/B85M  
ASTM-B209

MS27291G

CONCLUDING MATERIAL

Custodians:  
Air Force - 85  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-2009-122)

Review activities:  
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>.