DETAIL SPECIFICATION SHEET
CONNECTORS, ELECTRICAL, MODULAR, INSERT, BOTTOM

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-C-28754.

FIGURE 1. Dimensions and configurations.
FIGURE 1. Dimensions and configurations – Continued.
### MIL-DTL-28754/51B

| Inches | mm  | Inches | mm  | Inches | mm  | Inches | mm  | Inches | mm  | Inches | mm  | Inches | mm  |
|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|
| .001   | .03 | .015   | .38 | .065   | 1.65| .110   | 2.79| .145   | 3.68| .31    | 7.9 |        |     |        |     |
| .002   | .05 | .020   | .51 | .075   | 1.90| .114   | 2.90| .167   | 4.24| .397   | 10.08|        |     |        |     |
| .003   | .08 | .021   | .53 | .085   | 2.16| .115   | 2.92| .177   | 4.50| .403   | 10.24|        |     |        |     |
| .005   | .13 | .024   | .61 | .092   | 2.34| .119   | 3.02| .220   | 5.59| .44    | 11.2 |        |     |        |     |
| .009   | .23 | .030   | .76 | .095   | 2.41| .120   | 3.05| .228   | 5.79| .46    | 11.7 |        |     |        |     |
| .010   | .25 | .040   | 1.02| .096   | 2.44| .122   | 3.10| .240   | 6.10| 1.20   | 30.95|        |     |        |     |
| .012   | .30 | .050   | 1.27| .100   | 2.54| .123   | 3.12| .250   | 6.35| 2.031  | 51.59|        |     |        |     |
| .014   | .36 | .055   | 1.40| .104   | 2.64| .127   | 3.23| .29    | 7.4 | 2.037  | 51.74| 2.11   | 53.6|

**NOTES:**

1. Dimensions are in inches.
2. Metric equivalents are given for information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are ± .005 (.13 mm) for three place decimals, ± .01 for two place decimals and ± 2° for angles.
4. Break sharp edges .005 (.13 mm) maximum.
5. Contact numbers 21 and 40, and “bottom” shall be marked in white characters, .300 inch high maximum.
6. Gold plating on termination area shall be 20 millionths minimum.

**FIGURE 1. Dimensions and configurations – Continued.**

**REQUIREMENTS:**

Dimensions and configuration: See figure 1.

Material: Polyphenylene sulfide in accordance with ASTM D4067, PPS000G40A43042E11, or diallyl phthalate in accordance with ASTM D5948, type SDG-F, GDI-30F, GII-30F, or SIG-F.

Insulation sleeve material: Optional.

Part or Identifying Number (PIN): M28754/51- (dash number from table I).

This insert to be used with MIL-DTL-28754/31.
TABLE I. Dash numbers.

<table>
<thead>
<tr>
<th>Dash no.</th>
<th>Wire accommodation</th>
<th>Contact style</th>
<th>Wire size</th>
<th>Termination tool</th>
<th>Plating</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Flat conductor cable</td>
<td>I</td>
<td>22-24</td>
<td>CE-1404200 or FC6900</td>
<td>SnPb</td>
</tr>
<tr>
<td>02</td>
<td>Single round wires</td>
<td>II</td>
<td>24-30</td>
<td>CE-1404200 or FC6900</td>
<td>Au</td>
</tr>
<tr>
<td>03</td>
<td>Multiple round wire cable</td>
<td>II</td>
<td>20-30</td>
<td>AA-400</td>
<td>Au</td>
</tr>
<tr>
<td>04</td>
<td>Single round wires</td>
<td>II</td>
<td>24-30</td>
<td>CE-1404200 or FC6900</td>
<td>SnPb</td>
</tr>
</tbody>
</table>

1/ Raychem part numbers or equivalent.

First article testing: Perform the applicable tests as specified in MIL-C-28754 and the appendix thereto.

Changes from previous issue. The margins of this specification 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-C-28754, this document references the following:

MIL-DTL-28754/31
ASTM D4067
ASTM D5948

CONCLUDING MATERIAL

Custodians: Preparing activity:
Army – CR DLA - CC
Navy – AS (Project 5935-2015-202)
Air Force – 85
DLA - CC

Review activities:
Army – AR, MI
Navy – MC
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 https://assist.dla.mil/.