DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, CIRCULAR, RECEPTACLE, THREADED, WALL MOUNTING FLANGE, REMOVABLE CRIMP CONTACTS, FIBER OPTIC TERMINI, TIGHT TOLERANCE, SERIES III, SHELL SIZE 25, METRIC

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-38999.

FIGURE 1. Receptacle, fiber optic.
### Dimensions

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Shell size code</th>
<th>P ± 0.20</th>
<th>PP ± 0.20</th>
<th>R1 (see note 2)</th>
<th>R2 (see note 3)</th>
<th>S ± 0.30</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>J</td>
<td>3.91</td>
<td>6.15</td>
<td>38.10</td>
<td>34.93</td>
<td>46.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Shell size code</th>
<th>V + 0.00</th>
<th>W</th>
<th>Z max</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>J</td>
<td>20.07</td>
<td>3.20/2.10</td>
<td>31.50</td>
</tr>
</tbody>
</table>

FIGURE 1. Receptacle, fiber optic – Continued.
### Keying Dimensions

<table>
<thead>
<tr>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.065</td>
<td>0.025</td>
<td>0.30</td>
<td>0.012</td>
<td>3.91</td>
<td>0.154</td>
<td>31.50</td>
<td>1.24</td>
</tr>
<tr>
<td>0.076</td>
<td>0.003</td>
<td>0.406</td>
<td>0.016</td>
<td>6.15</td>
<td>0.242</td>
<td>34.93</td>
<td>1.375</td>
</tr>
<tr>
<td>0.127</td>
<td>0.005</td>
<td>1.600</td>
<td>0.063</td>
<td>12.7</td>
<td>0.5</td>
<td>35.839</td>
<td>1.41</td>
</tr>
<tr>
<td>0.13</td>
<td>0.0051</td>
<td>2.10</td>
<td>0.083</td>
<td>13.2</td>
<td>0.52</td>
<td>38.10</td>
<td>1.5</td>
</tr>
<tr>
<td>0.20</td>
<td>0.008</td>
<td>3.200</td>
<td>0.126</td>
<td>20.07</td>
<td>0.79</td>
<td>46.0</td>
<td>1.81</td>
</tr>
<tr>
<td>0.254</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
1. Dimensions are in millimeters. Inch-pound equivalents are given for general information only.
2. Front or rear panel mounting
3. Front panel mounting only.

**FIGURE 1.** Receptacle, fiber optic – Continued.
MIL-DTL-38999/61

REQUIREMENTS

Dimensions and configuration: See figure 1.

Interface dimensions shall conform to MIL-DTL-38999.

The connectors described by this slash sheet shall meet all applicable requirements of MIL-DTL-38999.

The connectors described by this slash sheet are non-plated stainless steel connectors.

This connector mates with MIL-DTL-38999/60.

Insert arrangements shall be in accordance with MIL-STD-1560.

Connector accessories shall be in accordance with SAE-AS85049.

Fiber Optic Termini shall be in accordance with MIL-PRF-29504/4 and /5.

Electrical contacts shall be in accordance with MIL-C-39029.

Shell size 25 keying dimensions shall be in accordance with figure 1.

Coupling torque shall be in accordance with MIL-DTL-38999 for series III, except that it shall not exceed 130 pound-force inch (14.69 Newtons-meter) when all size 16 cavities are filled with MIL-PRF-29504/4 and /5 termini.

Firewall barrier requirements are not applicable for these connectors.

Qualifications: The connectors described by this slash sheet shall meet the applicable qualification requirements of MIL-DTL-38999, series III, except all size 16 cavities shall be filled with fiber optic termini.

For groups A and B conformance inspections, the high precision dimensions shall be inspected 100% or verified during in-process inspections.

The connectors described by this slash sheet shall be supplied without electrical contacts or fiber optic termini. The design shall specify the contacts and termini separately.

Connectors where a pin contact is specified in the Part or Identifying Number (PIN) (for example: M38999/60KJ29AN or M38999/60KJ29PN) should be supplied with a pin contact insert (see figure 1). Also, connectors where a socket contact is specified in the PIN (for example: M38999/60KJ29BN or M38999/60KJ29SN) should be supplied with a socket contact insert (see figure 1).
PIN example (M38999/61KJ29AN):

M prefix  
Specification sheet number  
Class  
Shell size code  
Insert arrangement  
Contact style  
Polarizing positions  
N is required for normal position

NOTE: The term PIN is equivalent to the term (part number, identification number, and type designator) which was previously used in this specification.

Referenced documents. In addition to MIL-DTL-38999, this document references the following:

MIL-DTL-38999/60  
MIL-C-39029  
MIL-STD-1560  
MIL-PRF-29504/4  
MIL-PRF-29504/5  
SAE-AS85049

CONCLUDING MATERIAL

Custodians:  
Army – CR  
Navy – AS  
Air Force – 11  
DLA – CC

Preparing activity:  
DLA – CC  
(Project 5935-4769-000)

Review activities:  
Army – AR, MI  
Navy – EC, MC, OS  
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.