Amphenol has combined the reliability of D38999 connectors with the high-current RADSOK & Temper-Grip contact designs.

The Amphenol Tri-Power Connectors incorporate the proven design of the MIL-DTL-38999 Series III Tri-Start connectors with Amphenol RADSOK & Temper-Grip high current contacts. This newly designed product is the future of power connectors enabling customers to choose contacts ranging from 70 to 250 amps (240 to 1000 amps per connector) allowing more current carrying capability than comparably sized Mil-DTL-5015 & Mil-DTL-22992 Connectors.
### BUILD A PART NUMBER:

<table>
<thead>
<tr>
<th></th>
<th></th>
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<td>RF</td>
<td>21</td>
<td>AH</td>
<td>P</td>
<td>B</td>
<td>B65</td>
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<td>06</td>
<td>Plug</td>
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<td>07</td>
<td>Jam Nut Receptacle</td>
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<td></td>
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</table>

#### 1. Connector Type*
- **MP**: Tri-Power with RADSOK up to 175°C
- **TV**: Tri-Power with Temper-Grip up to 200°C

#### 2. Shell Style
- **00**: Wall Mount Receptacle
- **06**: Plug
- **07**: Jam Nut Receptacle

#### 3. Service Class
- **RS**: Nickel plated, corrosion resistant steel, firewall capability, 500 hour salt spray, 200°C, EMI shielding -65dB @ 10GHz specification min.
- **RF**: Electroless nickel plated aluminum, optimum EMI shielding effectiveness -65dB @ 10GHz specification min., 48 hour salt spray
- **RW**: Corrosion resistant olive drab cadmium plated aluminum, 500 hour extended salt spray, EMI -50dB @ 10GHz specification min.
- **DT**: Durmalon: Gray non-reflective finish, RoHS compliant cad & Hexavalent Chromium free. 500 hours extended salt spray, EMI -50dB @ 10GHz specification min.
- **DZ**: Black Zinc-Nickel alternative to cadmium. Corrosion resistant, 500 hour salt spray, conductive, EMI shielding -50db @ 10 GHz specification min*

#### 4. Shell Size
- **21**: MIL Shell Size G
- **25**: MIL Shell Size J
- **25L**: -See Drawing
- **33**: -See Drawing
- **37**: -See Drawing*

#### 5. Insert Arrangement
*See drawings to the right*

#### 6. Contact Type
- **P**: Pin Contacts
- **S**: Socket Contacts

#### 7. Alternate Positions

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>Key &amp; keyway arrangement identification letter</th>
<th>AR® or AP® BSC</th>
<th>BR® or BP® BSC</th>
<th>CR® or CP® BSC</th>
<th>DR® or DP® BSC</th>
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<td>A</td>
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<td>170</td>
<td>200</td>
<td>310</td>
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<td></td>
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<td></td>
<td>C</td>
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<td>140</td>
<td>200</td>
<td>257</td>
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<td></td>
<td>D</td>
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<td></td>
<td>E</td>
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<td>153</td>
<td>197</td>
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<td>25L, 33 and 37</td>
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<tr>
<td></td>
<td>E</td>
<td>79</td>
<td>153</td>
<td>188</td>
<td>272</td>
</tr>
</tbody>
</table>

#### 8. Contact Type
For TV (Tri-Power with Temper-Grip), add B65 to end of part number for socket connectors only.

* MP Series contains silver plated contacts, TV series are gold plated
MP07/TV07

SIZE 21-25

Coded Number | Shell Size | A + .010 - .005 | B Thread Class 2A | M ±.005 | P Hex +.017 - .016 | RR Thread | S +.011 -.010 | V Thread | L Max
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
MP/TV07RF-21( ) ( ) | 21 | .135 | 1.3750-0.1P-0.3L-TS | .878 | 1.688 | M38x1-6G.100R | 1.938 | M31x1-6g0.100R | 1.888
MP/TV07RF-25( ) ( ) | 25 | .135 | 1.6250-0.1P-0.3L-TS | .878 | 2.000 | M40x1-6G.100R | 2.188 | M37x1-6g0.100R | 1.888
MP/TV07RF-25L( ) ( ) | 25L | .188 | 1.6250-0.1P-0.3L-TS | 1.536 | 2.000 | M44x1-6G.100R | 2.188 | M37x1-6g0.100R | 2.600
MP/TV07RF-33( ) ( ) | 33 | .188 | 1.8750-0.1P-0.3L-TS | 1.536 | 2.250 | M50x1-6G.100R | 2.469 | M45x1-5-6g0.188R | 2.600
MP/TV07RF-37( ) ( ) | 37 | .188 | 2.1250-0.1P-0.3L-TS | 1.536 | 2.625 | M60x1-6G.100R | 2.828 | M50x1-5-6g0.188R | 2.600

SIZE 25L-37

MP07/TV07

Coded Number | Shell Size | A + .010 - .005 | B Thread Class 2A | M ±.005 | P Hex +.017 - .016 | RR Thread | S +.011 -.010 | V Thread | L Max
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
MP/TV07RF-25L( ) ( ) | 25L | .188 | 1.6250-0.1P-0.3L-TS | 1.536 | 2.000 | M44x1-6G.100R | 2.188 | M33x1-6g0.100R | 2.600
MP/TV07RF-33( ) ( ) | 33 | .188 | 1.8750-0.1P-0.3L-TS | 1.536 | 2.250 | M50x1-6G.100R | 2.469 | M45x1-5-6g0.188R | 2.600
MP/TV07RF-37( ) ( ) | 37 | .188 | 2.1250-0.1P-0.3L-TS | 1.536 | 2.625 | M60x1-6G.100R | 2.828 | M50x1-5-6g0.188R | 2.600
### MP06/TV06

**SIZE 21-25**

**MP/TV06RW-21-(  )**
- Shell Size: 21
- B Thread Class: 2A
- Ø Q Max: 1.625
- V Thread: 9
- L Min: Full Thread
- T Max: .280
- M31X 1-6g0.100R
- T Max: 1.888

**MP/TV06RW-25-(  )**
- Shell Size: 25
- B Thread Class: 2A
- Ø Q Max: 1.750
- V Thread: 9
- L Min: Full Thread
- T Max: .280
- M31X 1-6g0.100R
- T Max: 1.888

**MP/TV06RW-25L-(  )**
- Shell Size: 25L
- B Thread Class: 2A
- Ø Q Max: 1.875
- V Thread: 9
- L Min: Full Thread
- T Max: .280
- M37X 1-6g0.100R
- T Max: 2.579

**MP/TV06RW-33-(  )**
- Shell Size: 33
- B Thread Class: 2A
- Ø Q Max: 1.875
- V Thread: 9
- L Min: Full Thread
- T Max: .280
- M45X 1-5-6g0.188R
- T Max: 2.579

**MP/TV06RW-37-(  )**
- Shell Size: 37
- B Thread Class: 2A
- Ø Q Max: 2.203
- V Thread: 9
- L Min: Full Thread
- T Max: .594
- M50X 1-5-6g0.188R
- T Max: 2.579

**SIZE 25L-37**

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**Matt Simonds**  •  Office: +1 (607) 563-5218  •  Email: msimonds@amphenol-aaoo.com

amphenol-aerospace.com  •  amphenolmao.com
**MP00/TV00**

**SIZE 21-25**

![Diagram of MP00/TV00 Size 21-25]

**SIZE 25L-37**

![Diagram of MP00/TV00 Size 25L-37]

---

### MP00/TV00

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<th>Shell Size</th>
<th>B Thread Class 2A</th>
<th>L Max</th>
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<th>R1</th>
<th>R2</th>
<th>S +.011 -.010</th>
<th>Ø T +.008 -.006</th>
<th>TT +.008 -.006</th>
<th>V Thread</th>
<th>AA Panel Thickness</th>
<th>L Min Full Threaded</th>
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<td>.882</td>
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<td>.062-.125</td>
<td>.594</td>
</tr>
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</table>
RADSOK® & TEMPER-GRIP TECHNOLOGY ADVANTAGES
Socket Contact Options

RADSOK
LOW CONTACT ENGAGEMENT/SEPARATION FORCES
The hyperbolic lamella socket contact construction distributes normal forces over a high percentage of mating pin surface. This creates a smooth, even engagement effort. This force distribution also contributes to excellent performance in vibration applications with resistance to typical fretting corrosion.

LOW CONTACT RESISTANCE
The large interface area between the socket lamella and pin surface results in very low contact resistance, enabling the RADSOK® contacts’ high current rating compared to traditional power contact designs.

HIGH MATING CYCLE DURABILITY
RADSOK contacts with typical silver plating finishes have demonstrated survival of 20,000 mating cycles. Even with continuous exposure to harsh environmental abuse (salt, sand, and high humidity), RADSOK contacts have been tested to maintain low contact resistance beyond 10,000 mating cycles.

Temper-grip
HIGH TEMPERATURE CAPABILITY
For use in high temperature (200 C+) applications, the Temper-grip socket has been tested to maintain current capability in high temperature situations where standard mil-spec socket contacts can begin to relax.

“NAPKIN-RING” TECHNOLOGY
Proven design utilizing a stainless steel napkin ring to prevent the beryllium copper tines from “relaxing” at higher temperatures and maintaining a greater area of true contact in all situations to decrease resistance.

<table>
<thead>
<tr>
<th>Socket Contact Options</th>
<th>RADSOK Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Amps</td>
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<tr>
<td>8</td>
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<td>4</td>
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<td>0</td>
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