AC6292

Miniature slip ring capsule - circuit configuration for commercial and military applications

Description
A slip ring capsule can be used in any electromechanical system that requires unrestrained, occasional or continuous rotation while transferring power and/or data.

Miniature slip ring capsule assemblies economically address both critical space and weight limitations. Each assembly includes the rotor, brush blocks, frame, ball bearings and dust cover.

These slip rings can be configured with spacing between rings of 0.006 inch and brush diameters no larger than a human hair. Existing designs are available or we can custom design slip rings to meet your specific requirement.

Features
• Center-to-center adjacent ring spacings as small as 0.015 inch can be obtained
• 80 rings packaged in a self-contained envelope 2.0 inches long and .68 inch barrel diameter
• Gold-on-gold sliding contact technology
• Up to 40 rpm operation
• Low noise; as low as 15 milliohm per circuit pair
• Long life; several million total revolutions have been obtained

Benefits
• Precise, tight packaging capabilities for meeting stringent design criteria
• Proprietary plating techniques provide improved reliability, longer life and increased efficiency
• Unique signal handling performance to minimize noise and increase speed
• Other configurations are available from 16 to 95 circuits
• We also manufacture commercial slip rings from 6 to 56 circuits

Typical Applications
• Gimbaled pitch, roll and yaw axes of inertial navigation systems
• Unmanned Aerial Vehicles (UAV)
• Airborne camera platforms
## AC6292 Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Size</td>
<td>30 AWG / 26 AWG</td>
</tr>
<tr>
<td>Dielectric Strength</td>
<td>500 VAC (test)</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>1000 megohms</td>
</tr>
<tr>
<td>Circuit Resistance</td>
<td>0.54 ohms (leads @ 24 in.)</td>
</tr>
<tr>
<td>Starting Torque</td>
<td>240 gm cm</td>
</tr>
<tr>
<td>Noise</td>
<td>30 milliohms max.</td>
</tr>
<tr>
<td>Rotational Speed</td>
<td>40 rpm max.</td>
</tr>
<tr>
<td>Lead Length</td>
<td>24 inches each end</td>
</tr>
</tbody>
</table>

## AC6292 Dimensions

*Dimensions in inches*