SPRING MOUNTS — “H” Type

“H” Type spring mounts are rugged, low frequency vibration mounts specially designed to protect sensitive electronics in helicopter or propeller driven aircraft. They are fail-safe and use a friction-damped spring as a resilient element which gives them very consistent performance over a broad range of temperatures.

“H” Type spring mounts are intended for base mounting orientation only and will work at inclination angles up to 10°. They are fail-safe and capable of surviving a 30G 11ms half sine shock.

Features:
1. Fail-safe
2. Compact, lightweight Design
3. 4:1 Axial to Radial spring rate
4. Highly damped
5. Very low radial spring rate

Cup style mounts are available in two sizes:
- 724 size: 7 load ratings from 2 to 40 lb
- 726 size: 7 load ratings from 0.50 to 10 lb

Applicable Specifications
MIL-STD-810
MIL-STD-167
MIL-E-5400
MIL-C-172
VIB724 CUP MOUNTS

**Product Specifications**
Operating Temperature: -67 to +250 F
Maximum Transmissibility at Resonance: 2
Load Capacity: 2.0 – 40 lb
Part Weight: 3.6 oz.
Maximum Dynamic Input: 0.08 inch DA
Maximum Radial Travel: 0.286 inch
Materials & Finish:
- Cup: 5052 AL per QQ-A-250
  - Bright anodize per MIL-A-8625
- Base plate: 5052 AL per QQ-A-250
  - Clear anodize per MIL-A-8625
- Core: 6061 AL per QQ-A-225
  - Clear Anodize per MIL-A-8625
- Grommet: EPDM

**Performance Characteristics**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Load Rating (lbs)</th>
<th>Axial Natural Frequency (Hz)</th>
<th>Dynamic Axial Spring Rate</th>
<th>Dynamic Radial Spring Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
<td></td>
<td>lb/in</td>
</tr>
<tr>
<td>VIB724-1</td>
<td>2.0</td>
<td>4.0</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>VIB724-2</td>
<td>3.0</td>
<td>6.0</td>
<td></td>
<td>39</td>
</tr>
<tr>
<td>VIB724-3</td>
<td>5.0</td>
<td>10</td>
<td></td>
<td>65</td>
</tr>
<tr>
<td>VIB724-4</td>
<td>9.0</td>
<td>15</td>
<td></td>
<td>98</td>
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<tr>
<td>VIB724-5</td>
<td>14</td>
<td>20</td>
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<td>130</td>
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<td>VIB724-6</td>
<td>18</td>
<td>30</td>
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<td>196</td>
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<td>VIB724-7</td>
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<td>40</td>
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</tbody>
</table>

Variation | Approx. Under Min Load | Maximum Extended | Minimum Compressed
---|------------------------|------------------|------------------
STANDARD | 1.41 | 1.54 | 0.98
- L | 1.57 | 1.70 | 1.14

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:
F<sub>n</sub> = F<sub>nm</sub> * P<sub>r</sub> / P<sub>n</sub>
Where:
F<sub>n</sub>: Natural Frequency at actual load (Hz)
F<sub>nm</sub>: Nominal Natural Frequency (Hz)
P<sub>r</sub>: Rated load
P<sub>n</sub>: Actual load

**Thread ‘A’**

<table>
<thead>
<tr>
<th>Variation</th>
<th>Thread ‘A’</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>.250-20 UNC-2B x .375 Min Deep</td>
</tr>
<tr>
<td>- L</td>
<td>.250-20 UNC-2B x .562 Min Deep</td>
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</tbody>
</table>
VIB726 CUP MOUNTS

Product Specifications
Operating Temperature: -67 to +250 F
Maximum Transmissibility at Resonance: 2.0
Load Capacity: 0.5 – 10 lb
Part Weight: 2 oz.
Maximum Dynamic Input: 0.06 inch DA
Maximum Radial Travel: 0.218 inch
Materials & Finish:
  Cup: 5052 AL per QQ-A-250
  Bright anodize per MIL-A-8625
  Base plate: 5052 AL per QQ-A-250
  Clear anodize per MIL-A-8625
  Core: 6061 AL per QQ-A-225
  Clear Anodize per MIL-A-8625
Grommet: EPDM

Performance Characteristics

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Load Rating (lbs)</th>
<th>Axial Natural Frequency</th>
<th>Dynamic Axial Spring Rate</th>
<th>Dynamic Radial Spring Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
<td>Hz</td>
<td>lb/in</td>
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<tr>
<td>VIB726-1</td>
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<td>1.0</td>
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<td>VIB726-6</td>
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<td>30</td>
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<td>VIB726-7</td>
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</tbody>
</table>

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:
F_n = F_w * P_r / P_n
Where:
F_n: Natural Frequency at actual load (Hz)
F_w: Nominal Natural Frequency (Hz)
P_r: Rated load
P_n: Actual load

Variation  | Approx. Under Min Load | Maximum Extended | Minimum Compressed |
-----------|------------------------|------------------|--------------------|
STANDARD   | 1.375                  | 1.632            | 0.975              |
- L        | 1.562                  | 1.788            | 1.131              |

Variation  | Thread ‘A’                  |
-----------|-----------------------------|
STANDARD   | .164-32 UNC-2B x .500 Min Deep |
- L        | .164-32 UNC-2B x .500 Min Deep |