CUP STYLE MOUNTS

Cup style mounts are compact, low profile, extremely rugged mounts suitable for vibration and shock applications in the most severe environments. Their fail-safe, all-attitude construction and a choice of elastomer materials makes them suitable for a wide range of uses. Equipment may be mounted from cup style mounts in any orientation (attitude) while achieving equal shock and vibration performance. Cup style mounts are ideal for applications on military ground vehicles, aircraft, aerospace and electronics racking systems.

Features:

- Fail-safe all attitude design
- Compact, lightweight Design
- 1:1 Axial to Radial spring rate
- Gradually increasing spring rate

Cup style mounts are available in two sizes:

- 701 size: 4 load ratings from 20 to 100 lb
- 702 size: 4 load ratings from 50 to 250 lb

Applicable Specifications
MIL-STD-810
MIL-STD-167
MIL-E-5400
MIL-M-17185
Solutions for shock, vibration, noise, and sealing challenges

GREENE RUBBER COMPANY

VIB701 CUP MOUNTS

PRODUCT SPECIFICATIONS

Operating Temperature:
-40 to +180 F (Natural Rubber)
-67 to +300 F (Silicone)
-65 to +280 F (Universal)

Maximum Transmissibility at Resonance:
10.0 (Natural Rubber)
4.0 (Silicone)
6.0 (Universal)

Load Capacity: 20 – 100 lb
Axial-Radial Stiffness Ratio: 1:1
Part Weight: 6 oz. (STL), 3 oz (AL)
Materials: Pedestal & Cup: Steel per ASTM A1008, Zinc plated per ASTM B633 Type II, Class SC3
Core: Steel per ASTM A108, Zinc plated per ASTM B633 Type II, Class SC3

<table>
<thead>
<tr>
<th>Load Rating Vibration</th>
<th>Load Rating Shock</th>
<th>Part No. Natural</th>
<th>Part No. Silicone</th>
<th>Part No. Universal</th>
<th>Axial Natural Frequency</th>
<th>Dynamic Spring Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>lbs</td>
<td>lbs</td>
<td>VIB1701-1</td>
<td>VIB3701-1</td>
<td>VIB5701-1</td>
<td>Hz</td>
<td>lb/in</td>
</tr>
<tr>
<td>20</td>
<td>14</td>
<td>VIB1701-1</td>
<td>VIB3701-1</td>
<td>VIB5701-1</td>
<td>25</td>
<td>1276</td>
</tr>
<tr>
<td>30</td>
<td>24</td>
<td>VIB1701-2</td>
<td>VIB3701-2</td>
<td>VIB5701-2</td>
<td>25</td>
<td>1914</td>
</tr>
<tr>
<td>70</td>
<td>38</td>
<td>VIB1701-3</td>
<td>VIB3701-3</td>
<td>VIB5701-3</td>
<td>25</td>
<td>4466</td>
</tr>
<tr>
<td>100</td>
<td>60</td>
<td>VIB1701-4</td>
<td>VIB3701-4</td>
<td>VIB5701-4</td>
<td>25</td>
<td>6380</td>
</tr>
</tbody>
</table>

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:

\[ F_n = F_{nn} \sqrt{P_a / P_r} \]

Where:

- \( F_n \): Natural Frequency at actual load (Hz)
- \( F_{nn} \): Nominal Natural Frequency (Hz)
- \( P_r \): Rated load
- \( P_a \): Actual load

- Threaded versions are indicated with a “T” (ex. VIB3701-1T)
- Aluminum versions are indicated with an “L”
Solutions for shock, vibration, noise, and sealing challenges

**VIB702 CUP MOUNTS**

**PRODUCT SPECIFICATIONS**

Operating Temperature:  
-40 to +180 F (Natural Rubber)  
-67 to +300 F (Silicone)  
-65 to +280 F (Universal)

Maximum Transmissibility at Resonance:  
10.0 (Natural Rubber)  
4.0 (Silicone)  
6.0 (Universal)

Load Capacity: 50 – 250 lb
Axial-Radial Stiffness Ratio: 1:1
Part Weight: 1 lb
Materials: Pedestal & Cup: Steel per ASTM A1008, Zinc plated per ASTM B633 Type II, Class SC3
Core: Steel per ASTM A108, Zinc plated per ASTM B633 Type II, Class SC3

<table>
<thead>
<tr>
<th>Load Rating Vibration</th>
<th>Load Rating Shock</th>
<th>Part No. Natural</th>
<th>Part No. Silicone</th>
<th>Part No. Universal</th>
<th>Natural Frequency (Vibration) Hz</th>
<th>Dynamic Spring Rate lb/in</th>
<th>N/mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>lbs</td>
<td>lbs</td>
<td>VIB1702-1</td>
<td>VIB3702-1</td>
<td>VIB5702-1</td>
<td>22</td>
<td>2470</td>
<td>438</td>
</tr>
<tr>
<td>50</td>
<td>30</td>
<td>VIB1702-2</td>
<td>VIB3702-2</td>
<td>VIB5702-2</td>
<td></td>
<td>4940</td>
<td>876</td>
</tr>
<tr>
<td>100</td>
<td>50</td>
<td>VIB1702-3</td>
<td>VIB3702-3</td>
<td>VIB5702-3</td>
<td></td>
<td>7410</td>
<td>1314</td>
</tr>
<tr>
<td>150</td>
<td>80</td>
<td>VIB1702-4</td>
<td>VIB3702-4</td>
<td>VIB5702-4</td>
<td></td>
<td>12350</td>
<td>2190</td>
</tr>
<tr>
<td>250</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Fn at max rated load and .036 inch DA input
To correct for loads lower than rated load use:
F_n = F_{nom} * \sqrt{P_r / P_a}
Where:
F_n: Natural Frequency at actual load (Hz)
F_{nom}: Nominal Natural Frequency (Hz)
P_r: Rated load
P_a: Actual load

- Threaded versions are indicated with a “T” (ex. VIB3701-1T)
- Aluminum versions are indicated with an “L” (ex. VIB3701-1TL)