

Holder Type-All Attitude, High Performance Mounts

Holder type mounts are shock and vibration isolators designed for the protection of sensitive equipment in severe dynamic environments. Specifically designed for high performance in challenging aerospace applications, they are efficient, lightweight and extremely durable. They are suitable for all attitude mounting, are fail-safe and provide protection in all axes. They are designed to produce natural frequencies in the range of 20 — 25 Hz in an ambient temperature range of –65 to + 300 °F. The silicone elastomer blend used in the construction of holder type mounts produces excellent damping characteristics resulting in a maximum amplification at resonance of 4.0 for all sizes under typical environmental conditions.

Holder type mounts employ a robust construction that is capable of withstanding 30G 11ms half sine shock pulses without failure. They are capable of withstanding repeated 15G shock pulses and can isolate vibration at static accelerations up to 5 G.

They are available in 3 sizes with load ratings from 1 to 100 lbs. Series VIB3710, VIB3720 and VIB3722 are designed for base mounting. While sizes VIB3711, VIB3721 and VIB3723 are inverted for internal configurations.

Features:

- · Lightweight, low-profile design
- · Efficiently isolates vibration in all directions
- 1:1 Axial to Radial spring rate
- Fail-safe construction

Holder type mounts are available in three sizes:

- 3722/3723 size: 5 load ratings from 1 to 7 lb
- 3720/3721 size: 3 load ratings from 10 to 20 lb
- 3710/3711 size: 5 load ratings from 23 to 100 lb

Applicable Military Specifications:

MIL-STD-810



VIB3720/VIB3721 Series



VIB3722/VIB3723 Series



VIB3710/VIB3711 Series



Dynamic

Radial

Spring Rate

N/

mm

10

19

29

48

67

VIB3722/VIB3723 Series

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F Maximum Transmissibility at Resonance: 4.0

Load Capacity: 1.0 - 7 lb Axial-Radial Stiffness Ratio: 1:1

Part Weight: 1.0 oz. Materials & Finish:

Holder—Aluminum alloy 6061-T6 per ASTM B221, Anodized and dyed Grey per MIL-A-8625

Elastomer—Silicone

Core-2024-T4 per QQ-A-225/6, Alodine per MIL-

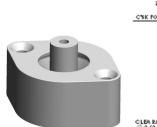
C- 5541 Class 1A, Gold

Washer— 2024-T0 per QQ-A-250/4, Alodine per MIL-C-5541 Class 1A. Gold

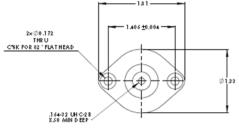
VIB3723-1 VIB3722-2 2.0 99 17 VIB3723-2 VIB3722-3 22 3.0 148 26 VIB3723-3 VIB3722-5 5.0 247 43 VIB3723-5 VIB3722-7 7.0 346 61 VIB3723-7

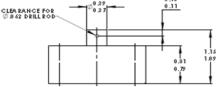
Part No.

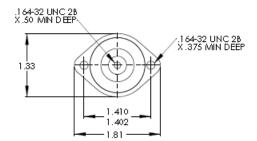
VIB3722-1



VIB3722

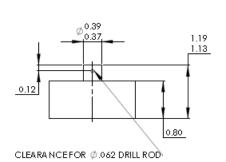








VIB3723



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

 $F_n = F_{nn} * \sqrt{P_r/P_a}$

Where:

F_n: Natural Frequency at actual load (Hz)

F_{nn}: Nominal Natural Frequency (Hz)

Performance Characteristics

Axial

Natural

Frequency

Hz

Dynamic

Axial Spring

Rate

N/mm lb/in

54

109

163

272

381

9

lb/in

49

Max.

Static

Load

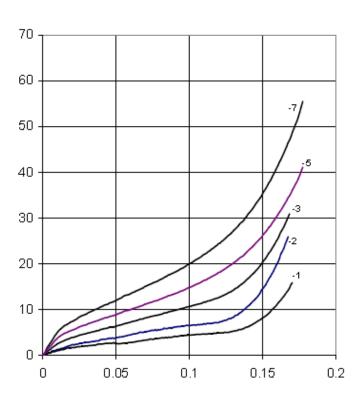
(Axial)

Lbs

1.0

Pr: Rated load

Pa: Actual load





VIB3720/VIB3721 Series

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F Maximum Transmissibility at Resonance: 4.0

Load Capacity: 10 – 20 lb Axial-Radial Stiffness Ratio: 1:1

Part Weight: 2.7 oz. Materials & Finish:

VIB3721

Holder—Aluminum alloy 6061-T6 per ASTM B221, Anodized and dyed Grey per MIL-A-8625

Elastomer—Silicone

Core—2024-T4 per QQ-A-225/6, Alodine per MIL-

C- 5541 Class 1A, Gold

Washer— 2024-T3 per QQ-A-250/4, Alodine per

MIL-C-5541 Class 1A, Gold

Performance Characteristics

Part No.	Max. Static Load (Axial)	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	Lbs	Hz	lb/in	N/mm	lb/in	N/ mm
VIB3720-10	10.0	22	494	86	445	78
VIB3721-10						
VIB3720-15	15.0		741	130	667	117
VIB3721-15						
VIB3720-20	20.0		968	173	889	156
VIB3721-20						

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

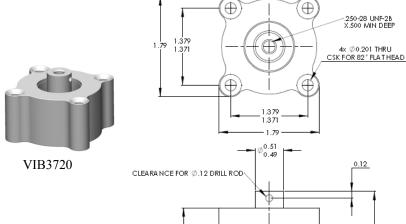
 $F_n = F_{nn} * \sqrt{P_r/P_a}$

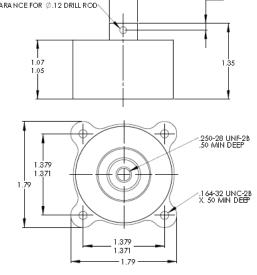
Where:

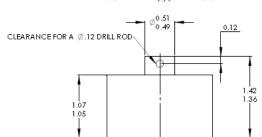
F_n: Natural Frequency at actual load (Hz) F_{nn}: Nominal Natural Frequency (Hz)

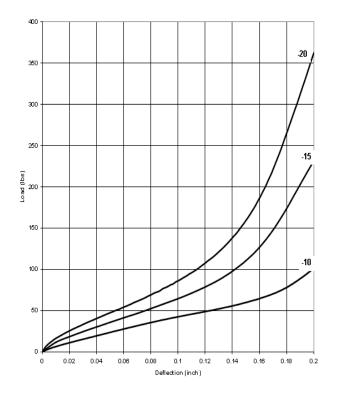
P_r: Rated load

Pa: Actual load











VIB3710/VIB3711 Series

PRODUCT SPECIFICATIONS

Operating Temperature: -65 to +300 F Maximum Transmissibility at Resonance: 4.0

Load Capacity: 23 - 100 lb Axial-Radial Stiffness Ratio: 1:1

Part Weight: 4.8 oz

6.5 oz (-5)

Materials & Finish:

Holder—Aluminum alloy 6061-T6 per QQ-A-250, Anodized and dyed Grey per MIL-A-8625

Elastomer—Silicone

Core—2024-T351 per QQ-A-225/6, Alodine per MIL-C-5541 Class 1A, Gold

Core (-5) -303 or 304 SST per AMS 5639 or 5640, Passivate per AMS 967

Plate— 2024-T3 per QQ-A-250/4, Anodized and dyed

Grey per MIL-A-8625

Performance Characteristics

Part No.	Max. Static Load (Axial)	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	Lbs	Hz	lb/in	N/mm	lb/in	N/ mm
VIB3710-1	23	20	939	164	845	148
VIB3711-1						
VIB3710-2	35		1428	250	1288	225
VIB3711-2						
VIB3710-3	50		2041	357	1838	321
VIB3711-3						
VIB3710-4	80		3265	571	2938	514
VIB3711-4						
VIB3710-5	100	21	4500	788	4050	709
VIB3711-5						

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

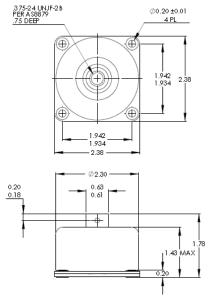
 $F_n = F_{nn} * \sqrt{P_r/P_a}$

Where:

F_n: Natural Frequency at actual load (Hz) F_{nn}: Nominal Natural Frequency (Hz)

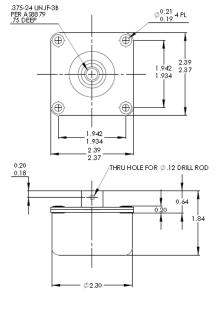
Pr: Rated load

Pa: Actual load









VIB3711



