

HIGH RATIO RING & BUSHING MOUNTS

High Ratio ring and bushing isolators are versatile, low cost mounts that can satisfy many vibration control problems. They are rugged, low-cost isolators easily installed that provide superior vibration isolation over standard ring and bushing isolators. High ratio ring and bushing mounts are ideal for mounting engines, generators, pumps or other rotating equipment in harsh off-road or industrial applications. They are offered standard in neoprene rubber, other materials are available upon request.

Features:

- Compact, lightweight Design
- Fail-safe design when used with snubbing washers
- Efficiently isolates vibration in all directions

Low profile mounts are available in four sizes with load ratings from 40 to 2,100 lbs.

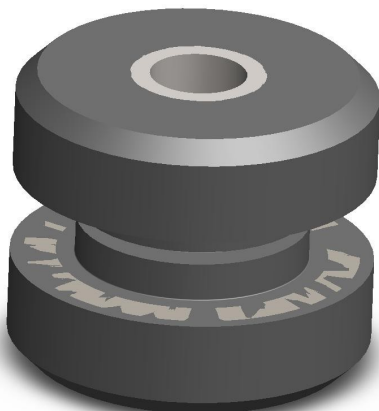
- 2421 Size: Load ratings from 40 to 300 lb
- 2419 Size: Load ratings from 130 to 630 lb
- 2417 Size: Load ratings from 210 to 1330 lb
- 2420 Size: Load ratings from 270 to 2100 lb



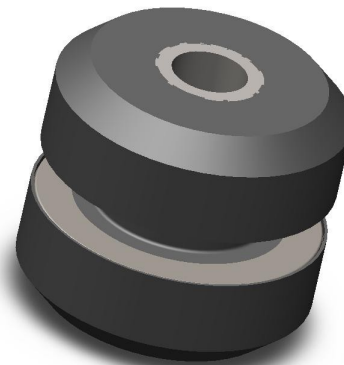
VIB2421



VIB2419



VIB2420



VIB2417

VIB2421 VIBRATION MOUNTS

PRODUCT SPECIFICATIONS

Operating Temperature: -20 to +220 F
 Maximum Transmissibility at Resonance: 10.0
 Load Capacity: 40 – 300 lb
 Axial-Radial Stiffness Ratio: 1:1.5
 Part Weight:
 Materials: Elastomer: Neoprene
 Tube: DOM Tubing, ASTM A513, type V, class 1026
 or equivalent



Assembly	Max Axial Load	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	lbs		Hz	lb/in	N/mm	lb/in
VIB2421-11	40	15	1000	175	500	88
VIB2421-12	90		2000	350	1000	175
VIB2421-13	140		3000	525	1500	263
VIB2421-14	250		5000	877	2500	439
VIB2421-15	300		7500	1316	3750	658

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

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

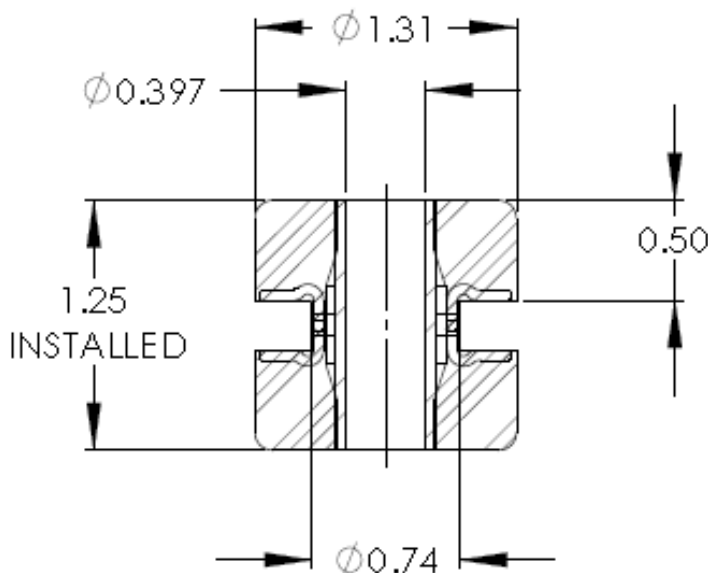
Where:

Fn: Natural Frequency at actual load (Hz)

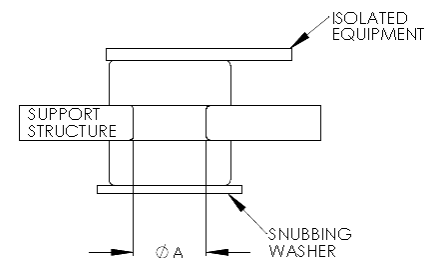
Fnn: Nominal Natural Frequency (Hz)

Pr: Rated load

Pa: Actual load



TYPICAL INSTALLATION



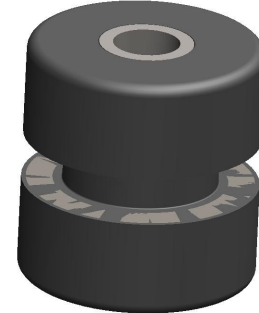
Ø A = 0.75

T = 0.375 (Support Structure Thickness)

VIB2419 VIBRATION MOUNTS

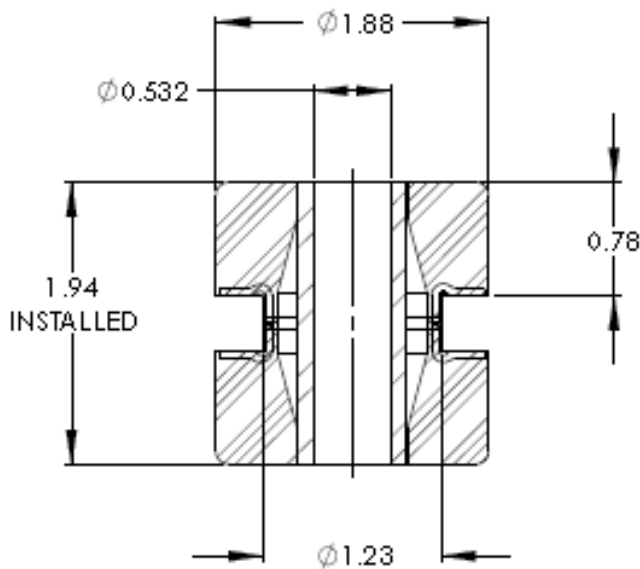
PRODUCT SPECIFICATIONS

Operating Temperature: -20 to +220 F
 Maximum Transmissibility at Resonance: 10.0
 Load Capacity: 130 – 630 lb
 Axial-Radial Stiffness Ratio: 1:1
 Part Weight:
 Materials: Elastomer: Neoprene
 Tube: DOM Tubing, ASTM A513, type V, class 1026
 or equivalent

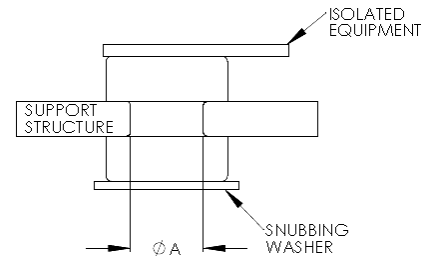


Assembly	Max Axial Load	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	lbs		Hz	lb/in	N/mm	lb/in
VIB2419-11	130	12	1860	326	744	130
VIB2419-12	175		2500	438	1000	146
VIB2419-13	240		3400	596	1360	175
VIB2419-14	380		5400	947	2160	379
VIB2419-15	630		9000	1579	3600	632

*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:
 Fn: Natural Frequency at actual load (Hz)
 Fnn: Nominal Natural Frequency (Hz)
 Pr: Rated load
 Pa: Actual load



TYPICAL INSTALLATION

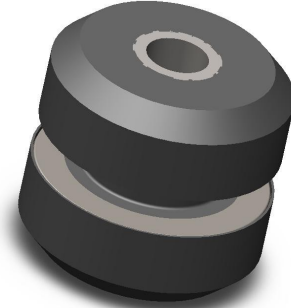


Ø A = 1.25
 T = 0.563 (Support Structure Thickness)

VIB2417 VIBRATION MOUNTS

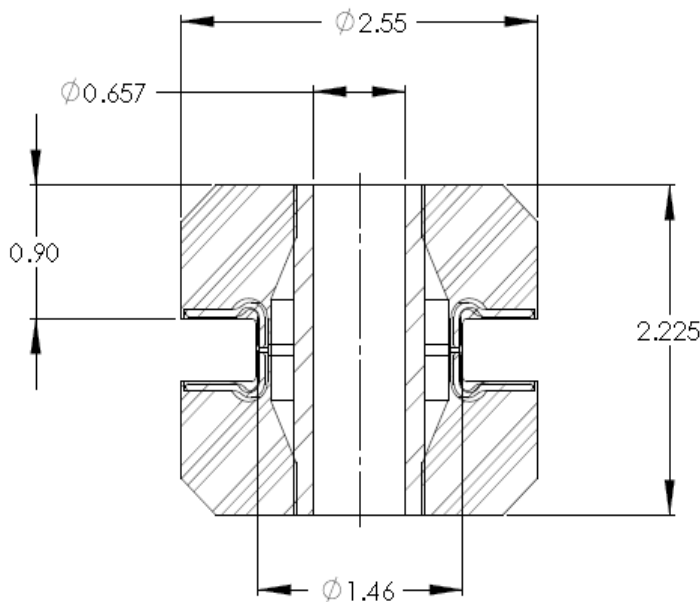
PRODUCT SPECIFICATIONS

Operating Temperature: -20 to +220 F
 Maximum Transmissibility at Resonance: 10.0
 Load Capacity: 210 – 1330 lb
 Axial-Radial Stiffness Ratio: 1:1
 Part Weight:
 Materials: Elastomer: Neoprene
 Tube: DOM Tubing, ASTM A513, type V, class 1026
 or equivalent

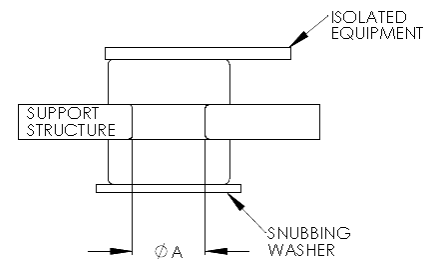


Assembly	Max Axial Load	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	lbs	Hz	lb/in	N/mm	lb/in	N/mm
VIB2417-11	210	11	2500	439	720	125
VIB2417-12	350		4100	720	1200	206
VIB2417-13	490		5800	1018	1660	290
VIB2417-14	860		10100	1772	2886	506
VIB2417-15	1330		15600	2737	4460	782

*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:
 Fn: Natural Frequency at actual load (Hz)
 Fnn: Nominal Natural Frequency (Hz)
 Pr: Rated load
 Pa: Actual load



TYPICAL INSTALLATION

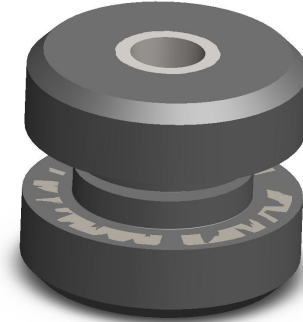


Ø A = 1.50
 T = 0.532 (Support Structure Thickness)

VIB2420 VIBRATION MOUNTS

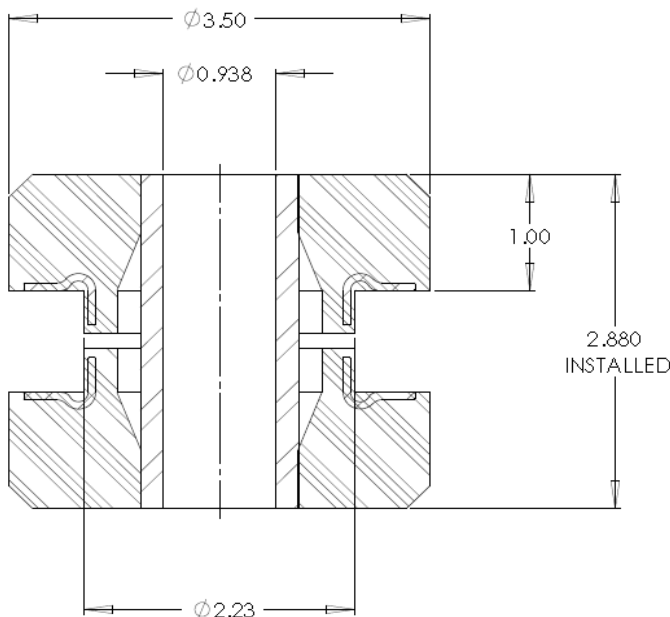
PRODUCT SPECIFICATIONS

Operating Temperature: -20 to +220 F
 Maximum Transmissibility at Resonance: 10.0
 Load Capacity: 270 – 2100 lb
 Axial-Radial Stiffness Ratio: 1:1
 Part Weight:
 Materials: Elastomer: Neoprene
 Tube: DOM Tubing, ASTM A513, type V, class 1026
 or equivalent

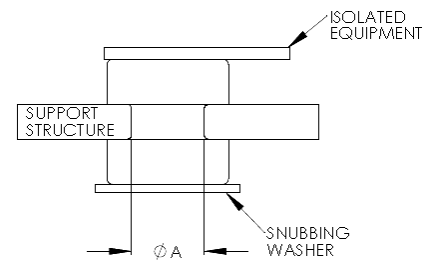


Assembly	Max Axial Load	Axial Natural Frequency	Dynamic Axial Spring Rate		Dynamic Radial Spring Rate	
	lbs	Hz	lb/in	N/mm	lb/in	N/mm
VIB2420-11	270	10	3000	526	750	132
VIB2420-12	510		5700	1000	1425	250
VIB2420-13	770		8500	1490	2125	373
VIB2420-14	1170		13000	2280	3250	570
VIB2420-15	2100		23300	4090	5825	1023

*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:
 Fn: Natural Frequency at actual load (Hz)
 Fnn: Nominal Natural Frequency (Hz)
 Pr: Rated load
 Pa: Actual load



TYPICAL INSTALLATION

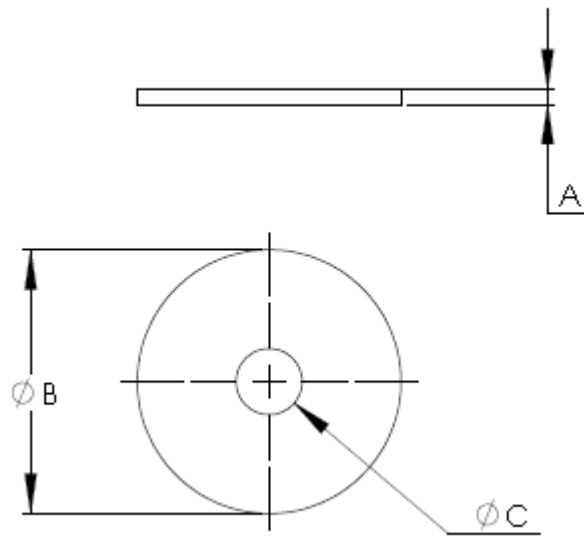


Ø A = 2.25
 T = 1.125 (Support Structure Thickness)

SNUBBING WASHERS

PRODUCT SPECIFICATIONS

Material: Steel per ASTM A1008/A1011
 Finish: Zinc plated per ASTM B633, Type II, Class FE/ZN 12



Size	A	B DIA	C DIA	PART NO.
VIB2421	.090	1.56	.391	W10044-1
VIB2419	.134	2.13	.532	W10044-2
VIB2417	.188	2.81	.657	W10044-3
VIB2420	.250	3.88	.938	W10044-4