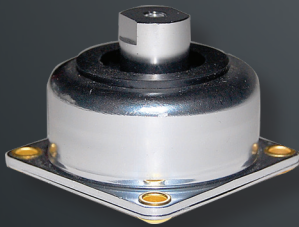
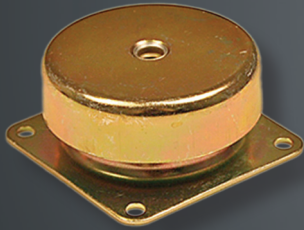
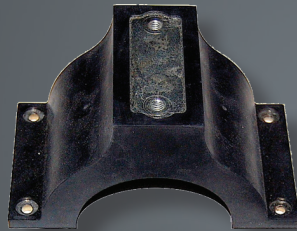


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Polymer Technologies Inc. is always at the forefront of innovation with our engineers developing high quality, custom shock & vibration isolation materials at our Massachusetts based Elastomeric Solutions Division. Our Elastomeric Solutions Division has been integral in the design and development of Duraflex®, a proprietary rubber compound. Duraflex® is an ultra-high fatigue-life rubber that exhibits high abrasion resistance, high tensile strength, and excellent bond strength to metal, making it the perfect rubber compound to use in industrial tires, trucking applications, engine mounts, and even military equipment. To add to its value, DuraFlex® also obtained the lowest temperature rise known to exist on the Goodrich Flexometer Test, a milestone that no other manufacturer has been able to obtain and something our engineers pride themselves upon.

Polymer Technologies is also the developer and manufacturer of noise absorption materials, acoustic barriers, damping pads, filtration foam, gasketing materials, and thermal insulation.

For more information about how DuraFlex® Rubber or any of our other custom solutions can be used in your application, please contact our sales team at www.polytechinc.com/contact

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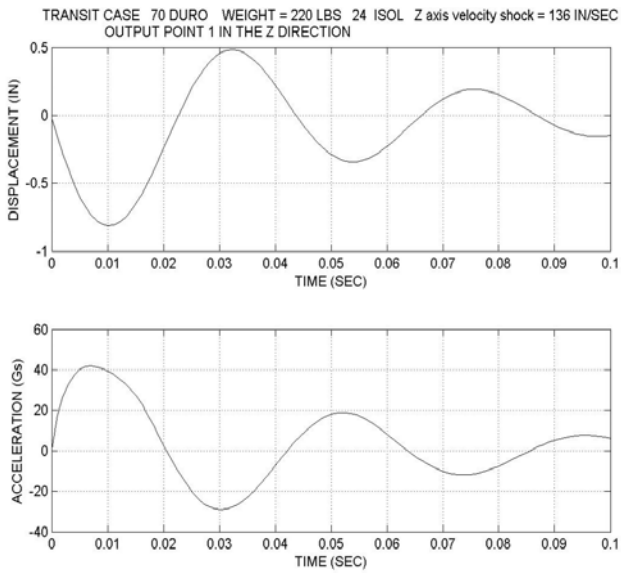
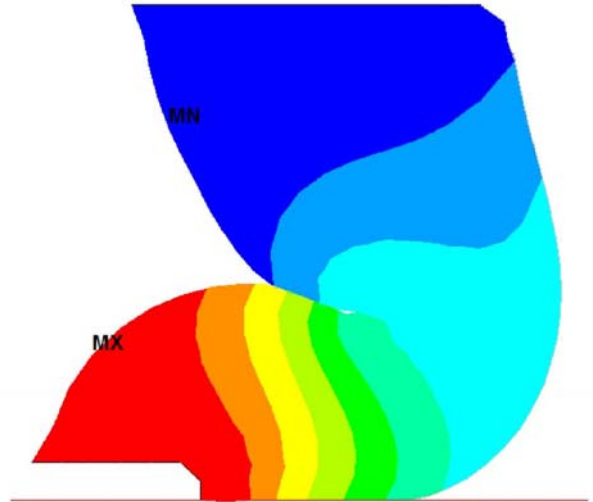
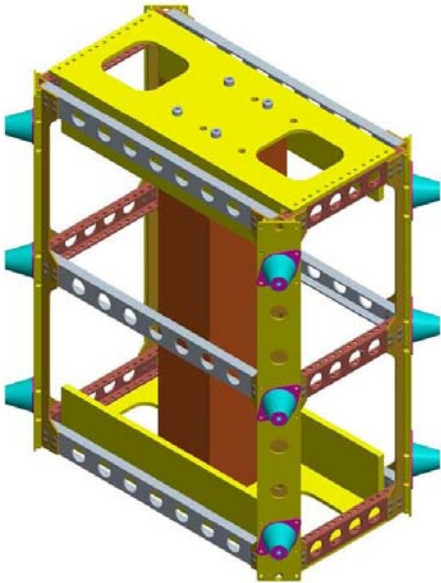
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ENGINEERING GUIDE



Engineering Guide

Introduction

Mechanical vibrations and shock are present in peoples everyday life. These disturbances can range from small office vibrations to heavy ballistic shock and the adverse effect of this disturbance depend on the fragility level of the equipment.

These vibration environments can range in levels from simple foot traffic in an office environment or heavy seismic disturbances that can effect sensitive equipment such microchip equipment etching, where any adverse vibration can effect the accuracy of the machine.

Other external vibration produced by vehicles, trucks, trains, air conditioners, generators, pumps, etc., can cause adverse responses in sensitive machinery or equipment and produce negative or erroneous results.

In the office environment disturbances from fans and AC units can transmit noise and vibrations to the surrounding structure and produce an unhealthy level of noise and fatigue in the work environment.

Non stationary products subject equipment to much higher shock and vibration that stationary applications. Vibrations from engines, pumps and equipment are present in air, sea and on the road as well as shock and vibration effects from the medium they travel on.

Some of the disturbances from rough roads, impart severe transients shock and vibration to the vehicles traveling on them. In addition to rough seas, naval ships are also subjected to very severe mechanical shock from depth charges and other explosions.

Disturbance elimination techniques from shock and vibration isolators have been designed to provide protection to all types of equipment.

Three main elements:

1. The equipment that needs to be isolated.
2. The support structure that connect the isolator to the equipment.
3. The resilient member or the vibration and shock isolator.

If the equipment is the source of the vibration or shock, the isolator should be designed to reduce the force transmitted from the equipment to the support structure. This is illustrated in **Figure 1**, where M represents the mass of equipment, which is the vibrating source, and K is the spring or isolator, which is located between the mass and the support structure,

If the support structure is the source of the vibration or shock, the purpose of the isolator is to reduce the disturbance transmitted from the support structure to the equipment. An example would be protecting delicate measuring instruments from vibrating floors. This illustrated in **Figure 2**, where M represents the mass of a instrument which is protected by the isolator K from a vibrating floor.

In each case, the principle of isolation is the same. The isolator, a resilient element, stores the incoming energy like a spring based on a discreet time interval like a (dashpot) which reduces the disturbance to the equipment or support structure.

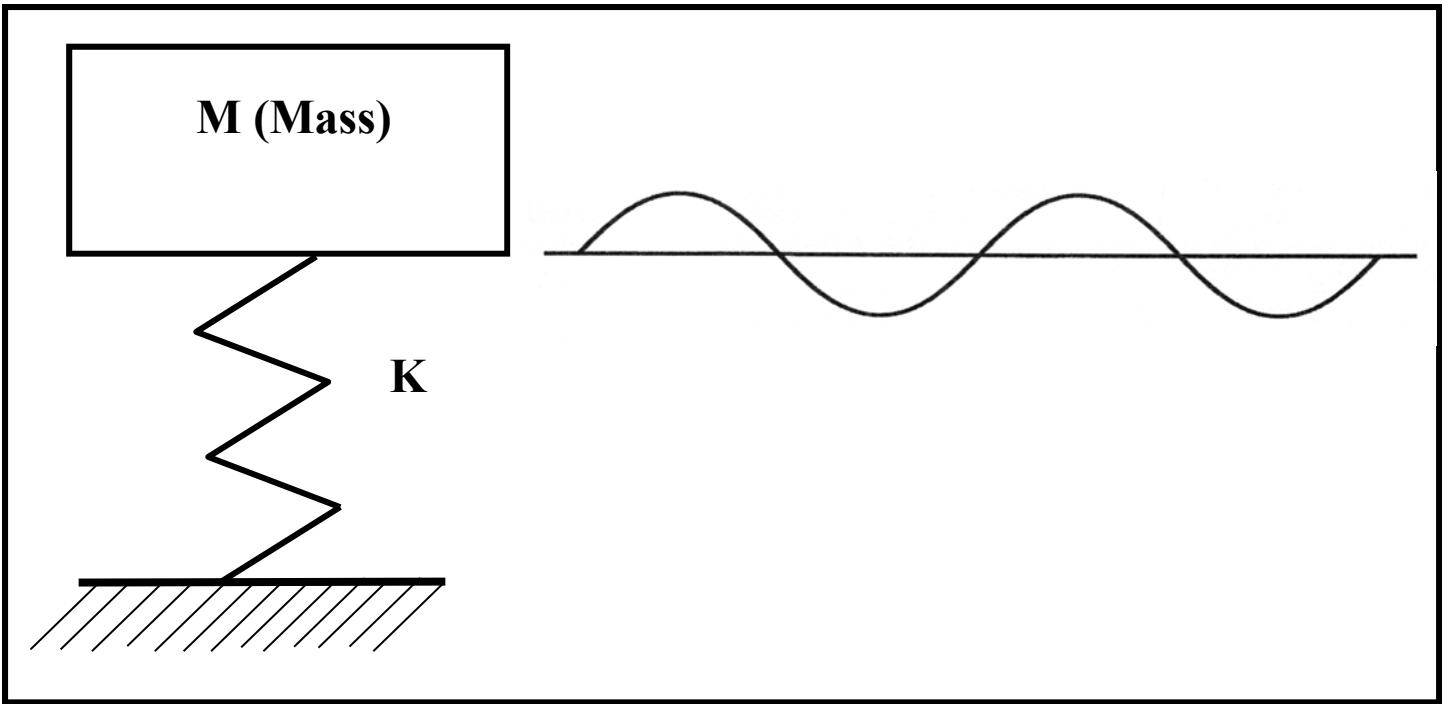


Figure 1. Schematic of a single degree of freedom dynamic system where the mass, M , is the vibratory source.

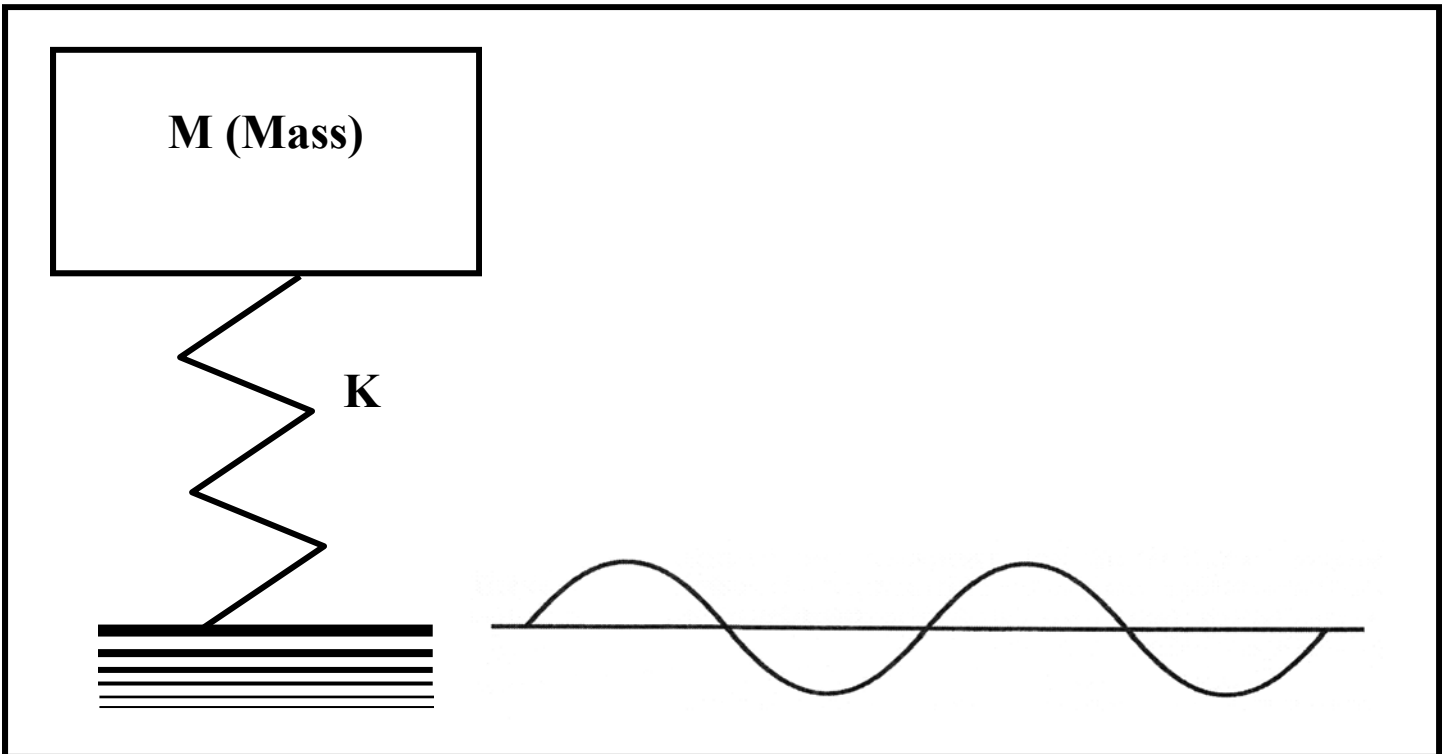


Figure 2. Schematic of a single degree of freedom dynamic system where the floor is the vibratory source.

TERMS AND DEFINITIONS

In order to fully understand vibration and shock theory there are a number of terms and definitions that should be understood. The terms and definitions are basic and easily understood to maximize the effectiveness of this engineering guide.

A vibration isolator and a shock isolator are not always mutually exclusive, but for the purposes of analysis must be treated separately. For all practical purposes the environmental conditions will dictate the design of the isolator. A heavy shock will more than likely have a different design than an office vibration environment.

Before any selection of a vibration or shock isolator can be made, the engineer should have a basic understanding of the following definitions, terms and equations:

VIBRATION

A magnitude (force, displacement, or acceleration) which oscillates about some specified reference where the magnitude of the force, displacement, or acceleration is alternately smaller and greater than the reference. Vibration is commonly expressed in terms of frequency (cycles per second or Hz) and amplitude, which is the magnitude of the force, displacement, or acceleration. The relationship of these terms is illustrated in **Figure 3**.

FREQUENCY

Frequency may be defined as the number of complete cycles of oscillations which occur per unit of time.

$$\text{Frequency} = f = \frac{\text{cycles}}{\text{second}} (\text{cps}) = \text{Hertz (Hz)}$$

PERIOD

The time required to complete one cycle of vibration.

$$\text{Period} = \lambda = \frac{1}{f}$$

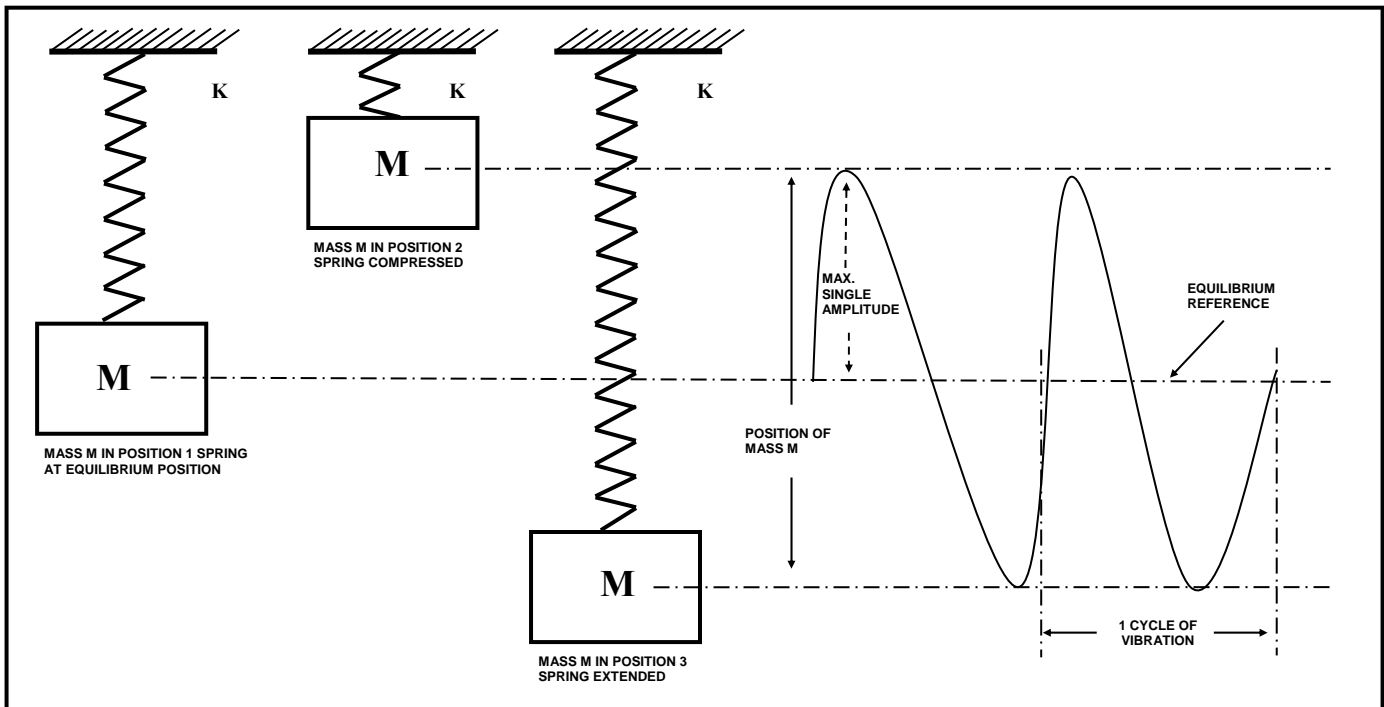


Figure 3. A Schematic of oscillating spring mass system and vibratory responses.

FORCING FREQUENCY

The number of oscillations per unit time of a force or displacement applied to a system.

$$\text{Forcing Frequency} = f_d$$

NATURAL FREQUENCY

Natural frequency may be defined as the number of oscillations that a system will carry out per unit time if displaced from its equilibrium position and allowed to vibrate freely. Where K is the spring stiffness and M is the mass and W is the weight. (See Figure 3)

$$f_n = \frac{1}{2\pi} \sqrt{\frac{K}{M}} \quad \text{Eq.1}$$

$$f_n = \frac{1}{2\pi} \sqrt{\frac{Kg}{W}} \quad \text{Eq.2}$$

$$f_n = 3.13 \sqrt{\frac{K}{W}} \quad \text{Eq.3}$$

Natural frequency in terms of static deflection Δs :

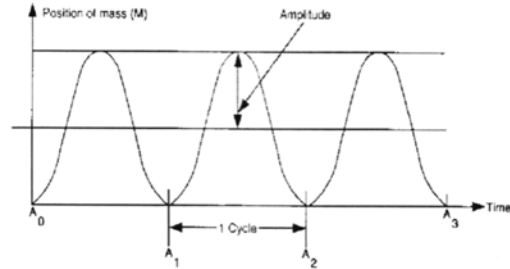
$$f_n = 3.13 \sqrt{\frac{1}{\Delta s}} \quad \text{Eq.4}$$

Equations 1 through 4 all neglect the effects of damping. When damping is considered, Equation 2 becomes where C/CC is damping ratio which is specific to the material or structure of damping being used:

$$f_n = \frac{1}{2\pi} \sqrt{\frac{Kg}{W} \left[1 - \left(\frac{C}{C_c} \right)^2 \right]} \quad \text{Eq.5}$$

AMPLITUDE

The amplitude of a sinusoidal vibration as displacement, velocity, or acceleration is the zero to peak value corresponding to the maximum value of a vibration time-history. (See Figure 3).



DISPLACEMENT

Displacement is an amount of movement that specifies the change of the position of a body to an equilibrium position.

VELOCITY

Velocity is a time rate of change of displacement with respect to a frame of reference.

ACCELERATION

Acceleration is a time rate of change of velocity with respect to a frame of reference. These values of acceleration changed with both latitude and elevation based on the point of reference. These values are measured in G 's = 386 In/Sec^2 , 32 Ft/Sec^2 or 9.8 M/Sec^2 which is the standard measured used for the acceleration due to gravity.

DEFLECTION

Deflection is the distance an elastic body or spring will move when subjected to a force, F.

SPRING STIFFNESS

The ratio of the force applied divided by the distance or deflection traveled.

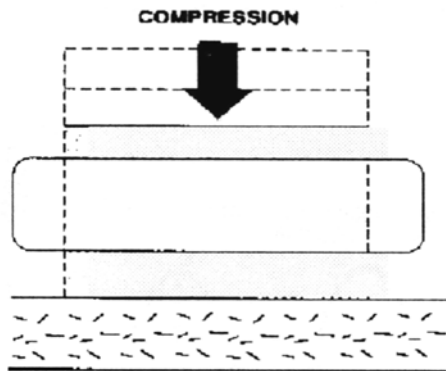
$$K = \frac{\text{Force}}{\text{Deflection}} = \frac{\text{lb}}{\text{in}} \quad \text{Eq.6}$$

ELASTIC CENTER

The elastic center is defined as a single point at which the stiffness of an isolator or series of isolators can be represented by a single stiffness value.

COMPRESSION

A deformation caused by squeezing the layers of an object in a direction perpendicular to the layers.



DAMPING

Damping is when energy is dissipated in a vibratory system. There are three types of damping generally encountered: coulomb, hysteresis and viscous.

COULOMB DAMPING

If the damping force is constant and is independent of the velocity of the system, the system is said to have coulomb damping.

HYSTERESIS (Material) DAMPING

Damping which results from the molecular motion of the structure of a material when that material is subjected to a velocity is referred to as hysteresis damping. Elastomers are examples this type of damping.

VISCOUS DAMPING

If a particle encounters a force which its magnitude is proportional to the magnitude of the velocity of that particle in an opposite direction, the particle is said to be viscously damped. This is the easiest type of damping to model mathematically. All of the equations in this text book via a dashpot are based on use of a viscous damping coefficient.

DAMPING COEFFICIENT

Damping for material is expressed by its damping coefficient.

$$\text{Damping coeff.} = C = \frac{\text{lb.sec}}{\text{in}}$$

CRITICAL DAMPING

A system is critically damped when it is displaced from its original position and returns to its initial static position without any rebounding. The damping coefficient for critical damping can be calculated using:

$$C_c = 2\sqrt{KM} \quad \text{Eq.7}$$

DAMPING FACTOR

The non-dimensionless ratio which defines the amount of damping in a system.

$$\text{Damping factor} = \frac{C}{C_c} = \zeta$$

DUROMETER (HARDNESS)

A numerical value which measures the resistance to the penetration of the durometer meter indenter point; value may be taken immediately or after a very short specified time.

FRAGILITY

Is the highest level vibration or shock that a system can stand without any equipment failure.

“G” LEVEL

A dimensionless value of the shock acceleration level divided the acceleration due to gravity.

ISOLATION

The protection of equipment from vibration or shock. The percentage of isolation required is a function of the fragility of the equipment.

LOAD DEFLECTION CURVE

The measured and recorded displacement of a mounting plotted versus an applied load.

RANDOM VIBRATION

Non-sinusoidal vibration characterized by the excitation of a broad band of frequencies at random levels simultaneously.

RESONANCE

When the forcing frequency equals the natural frequency of a system, this condition is known as resonance.

SET

Is the amount of permanent deformation that is never recovered after removal of a load. It may be in shear or compression.

SHEAR

A deformation caused by sliding layers of an object past each other in a direction parallel to the layers.

TRANSMISSIBILITY

Defined as the ratio of the dynamic output to the dynamic input.

$$T = \frac{1 + \left(2 \frac{f_d}{f_n} \cdot \frac{C}{C_c}\right)^2}{\sqrt{\left(1 - \frac{f_d^2}{f_n^2}\right)^2 + \left(2 \frac{f_d}{f_n} \cdot \frac{C}{C_c}\right)^2}} \quad \text{Eq.8}$$

For negligible damping ($C/C_c=0$), T becomes:

$$T = \left| \frac{1}{1 - \left(\frac{f_d}{f_n}\right)^2} \right| \quad \text{Eq.9}$$

When resonance occurs, $f_d/f_n = 1$ and $C/C_c =$ any value, T is at its max and Equation 8 becomes:

$$T_{\max} = \frac{1}{2 \frac{C}{C_c}} \quad \text{Eq.10}$$

SHOCK

Movement in which there is a sharp and abrupt change in velocity. Examples of this are an explosion or a package falling to the ground.

SHOCK PULSE

A shock pulse is the transmission of kinetic energy to a system which happens in a very short time. This pulse is then followed by a natural decay in motion. Shock pulses are normally displayed graphically as acceleration vs. time curves. See **Figure 11**

SHOCK TRANSMISSION

This can be calculated with the following equation:

$$\text{Shock transmittance } d = G_T$$
$$G_T = \frac{V (2\pi f_n)}{386} = \frac{v(f_n)}{61.4} \quad \text{Eq.11}$$

In this equation, V is the instantaneous velocity of the shock and f_n is the natural frequency of the system.

The dynamic linear deflection of an isolator under the shock pulse can be determined by the use of the following equation:

$$\Delta D = \frac{V}{2\pi f_n} \quad \text{Eq.12}$$

Design Considerations

VERTICAL VIBRATION

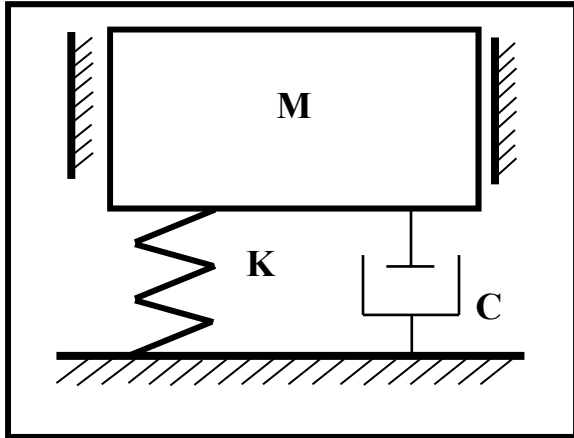


Figure 4. Schematic of the simplest form of an isolator, a spring, K , and a viscous damper, C , supporting the equipment mass, M .

The isolator may be best understood by first reducing it to its simplest form. The system of **Figure 4** includes a rigid body mass M supported by a spring K that is constrained to move only in vertical direction without any rotation. A dashpot C is arranged in parallel with the spring between the support and the mass. The mounted equipment is represented by the mass M , while the spring and dashpot represent the visco-elastic properties of a conventional isolator. The simple system shown in **Figure 4** is said to be a single-degree-of-freedom system because it can only move in a positive or negative vertical direction.

Isolation is maintained by the proper relationship between the disturbing frequency and the system's natural frequency. The natural frequency, or more properly, the natural frequency of the system consists of isolator and mounted equipment.

$$f_n = \frac{1}{2\pi} \sqrt{\frac{Kg}{W} \left[1 - \left(\frac{C}{Cc} \right)^2 \right]} \quad (\text{Eq.6})$$

A critical damped system returns to its original position without any oscillation if displaced; it has no natural frequency, $C=C_c$ in **Equation 6**.

In most real life circumstances the value of the damping coefficient C is relatively small. The influence of damping on the natural frequency may then be neglected. Setting the damping coefficient C equal to zero, the system becomes an undamped single-degree-of-freedom system, and the undamped natural frequency given by:

$$f_n = \frac{1}{2\pi} \sqrt{\frac{Kg}{W}} \quad (\text{Eq.2})$$

Static deflection often is used to define the characteristics of an isolator. Static deflection is the deflection of the isolator under the static load of the mounted equipment.

Referring to **Equation 2** and substituting $g = 386 \text{ in/sec}^2$, $W/K = \Delta_s$, the following expression is obtained for natural frequency in terms of static deflection:

$$f_n = 3.13 \sqrt{\frac{1}{\Delta_s}} \quad (\text{Eq.4})$$

A graphic portrayal of **Equation 4** is given in **Figure 5**. It thus appears possible to determine the natural frequency of a single-degree-of-freedom system by measuring only the static deflection.

This is true under two circumstances

- 1) The spring must have a linear load vs. deflection curve.
- 2) The static to dynamic stiffing factor must be one. The isolator must have the same stiffness statically as it does dynamically.

The dynamic modulus of elasticity of elastomeric materials is higher than the static modulus. Since the modulus is higher dynamically the natural frequency of the isolator is thus somewhat greater than that calculated on the basis of the static deflection alone.

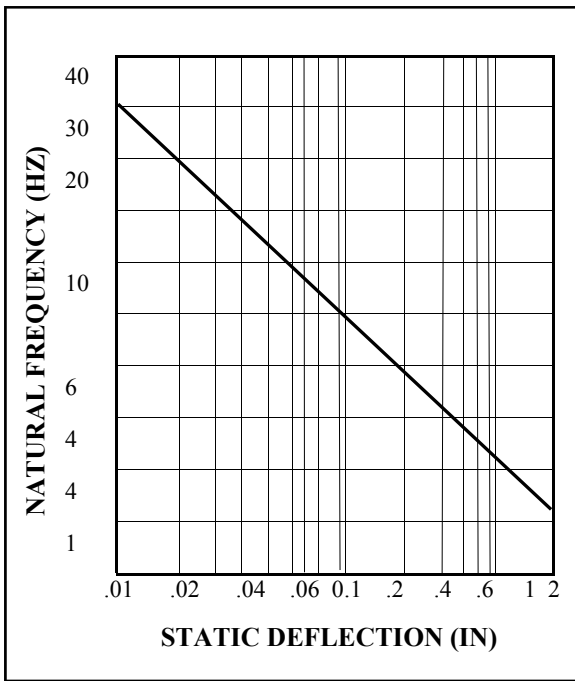


Figure 5. Graph of the natural frequency and static deflection of a linear, single-degree-of-freedom system.

The dynamic stiffness and natural frequency may be determined when the isolator is vibrated based on a known load and calculating the dynamic stiffness from **Equation 2**.

The efficiency of isolators in reducing vibration is indicated by the transmissibility of the system. **Figure 6** illustrates a typical transmissibility curve for an equipment of weight W supported on an isolator with stiffness K and damping coefficient C which is subjected to a vibration disturbance of frequency f_d . When the system is excited at its natural frequency, the system will be in resonance and the disturbance forces will be amplified rather than reduced. Therefore, it is very desirable to select the proper isolator so that its natural frequency will be excited as little as possible in service and will not coincide with any critical frequencies of the equipment.

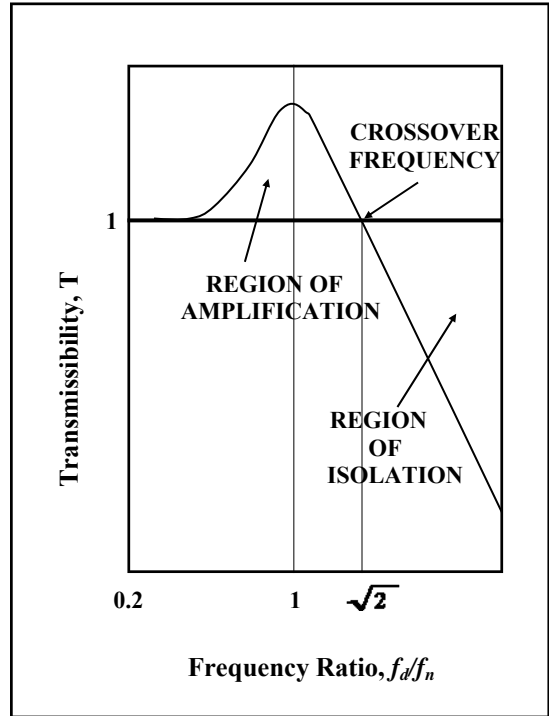


Figure 6. Transmissibility curve for an isolated system where f_d = disturbing frequency and f_n = system natural frequency.

In **Figure 6**, when the ratio of the disturbing frequency f_d over the natural frequency f_n is less than $\sqrt{2}$ then the transmissibility is greater than 1, or the equipment experiences amplification.

$$f_d / f_n \leq \sqrt{2}, T \geq 1$$

isolation begins when:

$$f_d / f_n = \sqrt{2} \text{ (at this point } T = 1 \text{)}$$

$$f_d / f_n > \sqrt{2}, T < 1$$

DAMPING

The majority of isolators have varying degrees of damping levels depending on the material used and the construction of the isolator. **Table 1** shows the various levels of damping factor C/C_c in different materials. Damping is important when the isolation system is operating near resonance because it helps to reduce transmissibility. An air compressor mounted on steel springs which possess very little damping, upon start up and shut down the disturbing frequency of the compressor will at some point correspond with the natural frequency of the spring-mass system. With lightly damped system, the forces from the compressor to the support will be very large and the transmissibility will be very high. If an elastomeric isolator which has a higher degree of damping, amplification at resonance would be much less, but there are always trade off.

| Material | Approx. Damping Factor C/C_c | T_{max} (approx.) |
|--------------------------------|--------------------------------|---------------------|
| Steel Spring | 0.005 | 100 |
| Elastomers: | | |
| Natural Rubber | 0.05 | 10 |
| Neoprene | 0.05 | 10 |
| Butyl | 0.12 | 4.0 |
| Hi Damp Silicone | 0.15 | 3.5 |
| Polybutadiene | 0.11 | 4.5 |
| SBR | 0.08 | 6.0 |
| Friction Damped Springs | | |
| Metal Mesh | 0.12 | 4.0 |
| Air Damping | 0.17 | 3.0 |
| Felt and Cork | 0.06 | 8.0 |

Table 1. Damping factors for materials commonly used for isolators

The correlation between a high damped and a lightly damped system is shown in **Figure 8**. This figure shows that as damping is increased, isolation efficiency is reduced in the isolation region. While high values of damping cause significant reduction of transmissibility at resonance, its effect in the isolation region is only a small increase in transmissibility.

The curves which relate f_n , f_d , transmissibility and damping are shown in **Figure 8**.

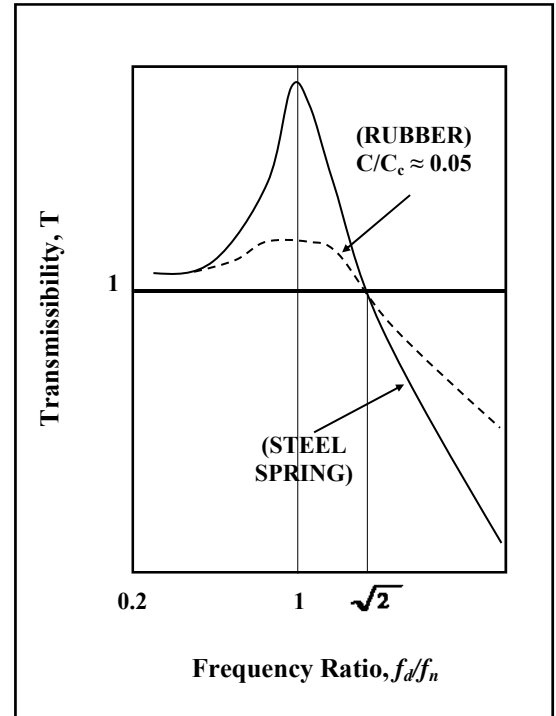


Figure 7. Typical transmissibility curves for highly and lightly damped systems.

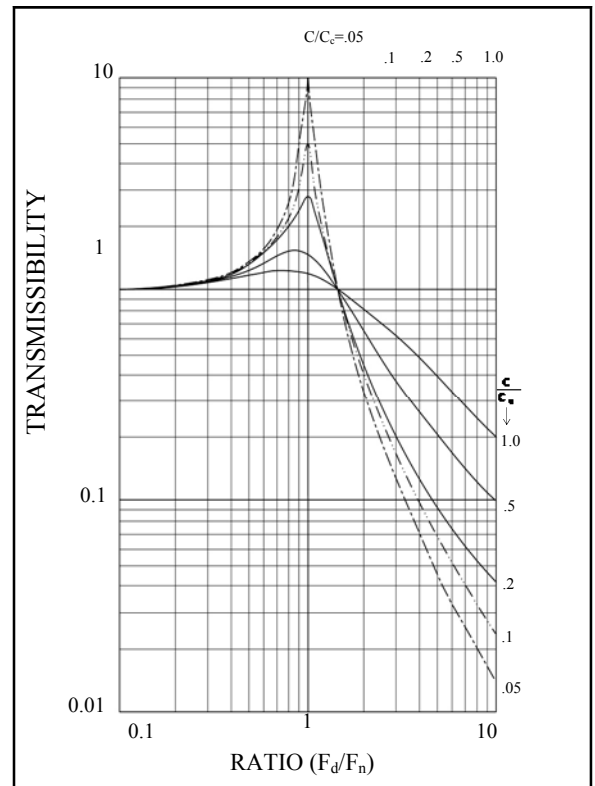


Figure 8. Family of transmissibility curves for a single degree of freedom system.

SHOCK

Shock is normally a transient event while vibration is a steady-state condition. A shock input is normally characterized by its peak amplitude in g's and a period that is normally expressed in milliseconds. The shock pulse will typically have a prescribed shape to it that is normally in the form of a half sine, sawtooth, etc., random shaped waveforms are shown in **Figure 9**.

There are a number of different types of shock pulses encountered in the real world. There are different shock tests that are associated with the environment that the equipment will encounter during its lifetime. Equipment installed in aircraft and helicopters is normally tested on a free-fall shock machine which will generate either a half-sine or sawtooth shaped pulse with a typical period of 11 milliseconds at 15 G input. Large shock pulses due to explosive shocks are 6-millisecond sawtooth at 100 g's. Navy vessels the normal test will be the hammer blow specified in MIL-S-901, which exhibits a velocity shock of approximately 100 in./sec. Transit cases or shipping containers are normally tested by dropping the container on a concrete floor. These drop tests can be done to simulate dropping the equipment on edge, flat side and corner drops. These types of tests simulate the shock pulse which will be encountered in the environment of the equipment.

The attenuation of shock inputs is very different from that of a vibration input. The shock isolator is characterized as an energy absorbing device, with a very steep wave front that is absorbed by the isolator. This energy is stored in the isolator and released at the natural frequency of the spring-mass damper system.

The most common equations for predicting shock isolation are in **Figure 9**, for determining the velocity, and **Equation 11**, for calculating transmitted accelerations.

The two methods for solving shock problems are valid as long as two criteria are met:

- 1) The shock pulse is fully defined, acceleration levels, the time history and the shape of the curve; and
- 2) The isolation system must respond to the shock event in the linear portion of the load verse deflection curve.

STRUCTURE-BORNE NOISE

By today's standard equipment and products are required to run faster and produce more at a very high rate. These higher rates cause higher noise and vibration to occur and must be dealt with to reduce overall fatigue of the components. High frequency vibrations can occur by this rapid movement of these mechanical or electromechanical components and cause structures that they are mounted to vibrate and produce noise. The best way to reduce the noise and vibration is to de-couple the vibration from the structure by using an elastomeric material. The elastomeric material will absorb the mechanical vibration forces to the structure and therefore reduce the overall noise. Constrained Layer Damping products can be applied to structures to reduce the overall noise signature very effectively. CLDM and other damping products have high levels of inherent damping and can be produced in various shapes

| PROPERTIES | NATURAL RUBBER | NEOPRENE | HI-DAMP®SILICONE | POLYBUTADIENE |
|---|----------------|-----------|------------------|---------------|
| Adhesion to Metal | Excellent | Excellent | Good | Very Good |
| Tensile Strength | Excellent | Excellent | Good | Excellent |
| Tear Resistance | Good | Good | Fair | Good |
| Compression Set Resistance | Good | Fair | Fair | Good |
| Damping Factor C/C _c (approx.) | 0.05 | 0.05 | 0.15 | 0.12 |
| Operating Temperature (max) | 200F | 200F | 300F | 200F |
| Stiffness Increase (approx.)@ -65F | 10X | 10X | <2X | 2X |
| Oil Resistance | Poor | Good | Fair | Fair |
| Ozone Resistance | Poor | Good | Excellent | Fair |
| Resistance to Sunlight Aging | Poor | Very Good | Excellent | Good |
| Resistance to Heat Aging | Fair | Good | Excellent | Good |
| Cost | Low | Low | High | Moderate |

NONLINEAR ISOLATORS

Up to now we have assumed that all the isolation systems have a linear response, thus their load versus deflection curves are linear in shape. The theory is sound, most systems have steady state vibrations where amplitudes are small. Non-linear systems are used where the reverse is true: high transit vibration levels or high shock loads are present and space constraints are a premium. The level of isolation is proportional to the isolator's ability to accommodate the required deflection due to a heavy static load with an imposed high transit shock. Linear isolators require a high level of deflection to absorb the same transit condition than non-linear isolators and this space may not be available in the application. There are a couple of different techniques that can be applied to produce a non-linear isolation system.

- 1) The first is to increase the stiffness of the isolator in proportion as the deflection increases. The amount of deflection will be limited, and produce a higher G level imparted to the equipment.
- 2) The second method is to design the isolator to buckle as shown in **Figure 10**. The isolator is stiff as the linear portion of the curve and then has a relatively constant load over the higher deflection ranges. Since isolators are an energy absorbing device, the style isolator can store more energy for a given deflection based on the area under the load versus deflection curve.

Isolators and Materials

Isolators can be produced from a variety of materials that are both elastomeric and also combinations of spring with other mediums like air or friction. Each selection of materials should be chosen by the designer in accordance with the application and environmental conditions.

ELASTOMERIC ISOLATORS

Elastomers make excellent shock absorbing isolators because the damping level can be tailored to the application and they have high energy absorbing capacity. Elastomers can be molded using a typical rubber molding technique and constructed in numerous shapes to achieve both linear and non-linear isolators to achieve the appropriate shock isolation.

Drift or Creep is a negative occurrence with all elastomeric isolators and must be taken into account when designing isolators. The maximum static strain varies widely, but it may be taken as a conservative limitation that elastomers should not be continuously strained more than 10 to 15% in compression, nor more than 25 to 50% in shear. These rules of thumb are often used to determine the maximum load capacity of a given isolator.

In spite of the limitations of elastomeric materials used in isolators, the overall advantages far outweigh the disadvantages and make elastomers the most highly desirable type of resilient media for isolators.

SPRINGS

Metal springs can be used as vibration isolators. In some cases, these types of isolators work well. Springs lack damping and experience extremely violent motions that occur at resonance. (see "Damping" section and **Figure 8**).

SPRING-FRICTION DAMPER

To add damping in coil springs, friction dampers can be designed in parallel with the load-carrying spring. These types of isolators are widely used in practice. An example of this is illustrated in **Figure 11**.

The friction damped spring setup is composed of a set of split circular shoes that have a spring that separates the shoes at a fixed normal force that is applied against the wall of a round aluminum housing. There are two sets of springs that are used to support the static load. The normal force is provided by the weight of the equipment, and damping results from the sliding during horizontal excitations. Transmissibility values of about 2 to 2.5:1 are exhibited by using this type of spring/damper combination.

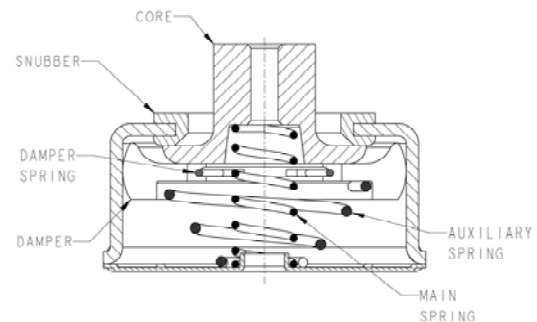


Figure 11. Isolator using friction damped spring.

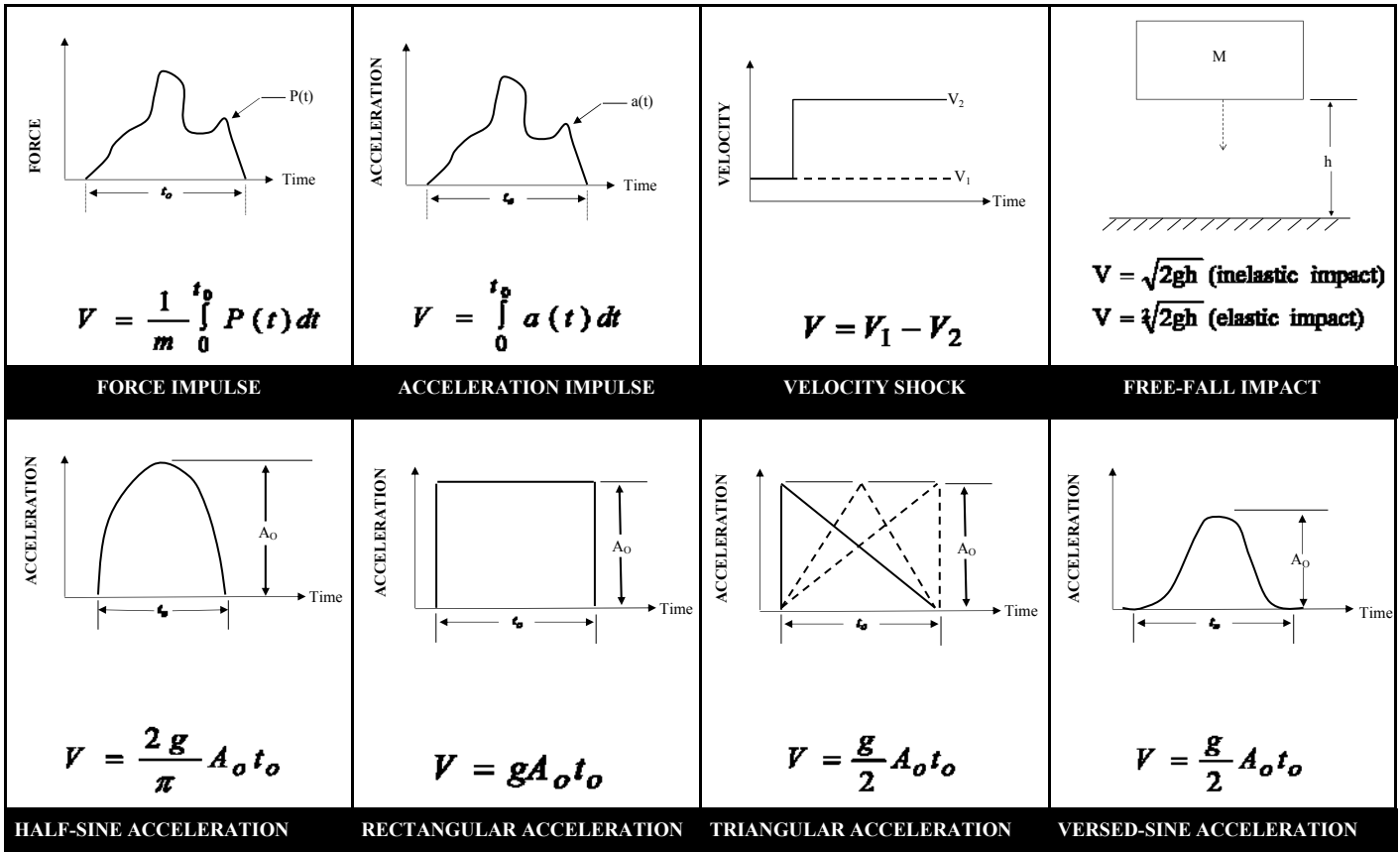


Figure 9. Shock excitation and the velocity change, V , associated with each shock pulse

SPRINGS WITH AIR DAMPING

An additional method of adding damping to a spring is by use of an air chamber or balloon with an orifice that meters the air flow. An example of this type of isolator is illustrated in **Figure 12**. A spring is located within the interior of an elastomeric balloon. The air chamber formed at the top of the balloon with a cap which contains an orifice or the force flow metering.

Under excitations the air volume in the balloon passes through a predetermined sized orifice by which damping is closely controlled. Transmissibility's generally under 3.5-4:1 result with this type of design.

Air-damped springs have some significant advantages over similar friction damped designs with respect to isolating low-level inputs.

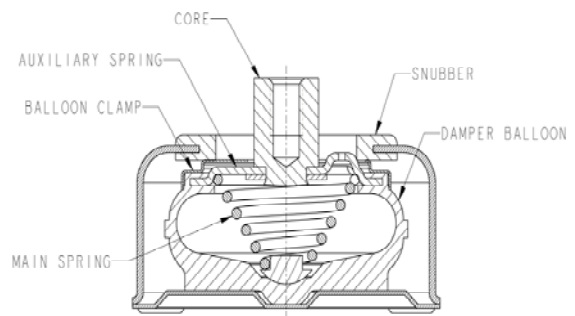


Figure 12. Isolator using air damped spring.

With friction damping, the friction force is constant. The damping ratio is effectively increased when the input levels are decreased. Referring to **Figure 8**, increasing the damping ratio decreases the level of isolation.

Friction Damped isolators are suited well for higher vibration levels where air damped systems are well suited for low level vibrations.

WIRE MESH DAMPING

Metal mesh isolators are used when there are high temperature extremes or other environmental factors, damping can be added to a load carrying spring by use of metal mesh inserts. When dynamic loads are applied, the wire mesh strands rub on each other and create friction and thus heat energy is dissipated creating damping. Transmissibility's under 6:1 are generally exhibited by the wire mesh damper.

Figure 13. Isolator with wire mesh load carrying pad.

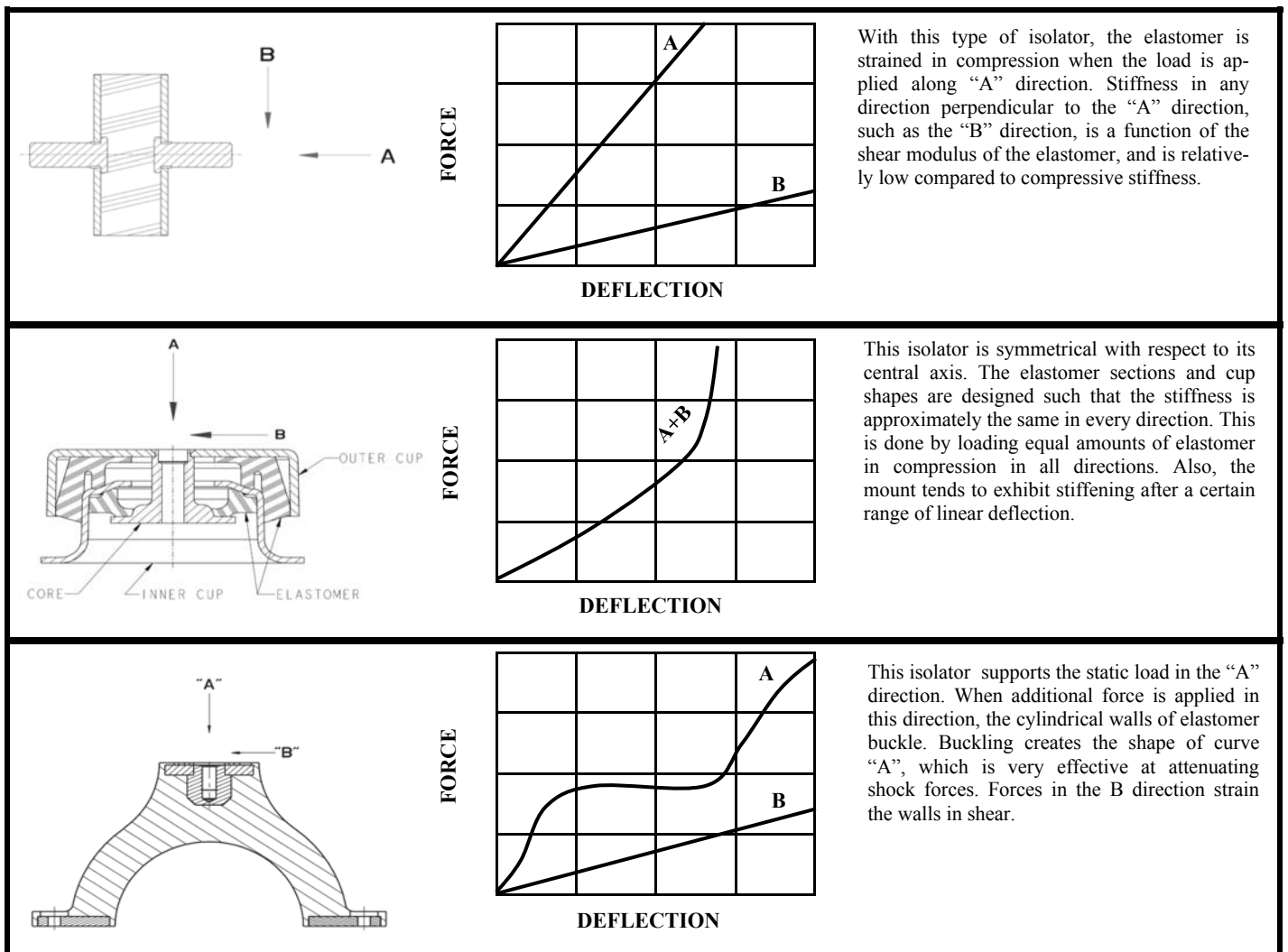


Figure 10. Force vs. Deflection curves for some typical elastomeric isolators.

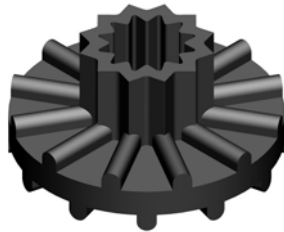
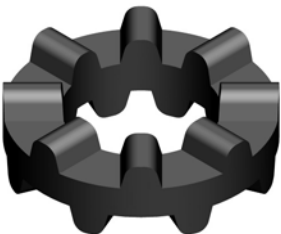
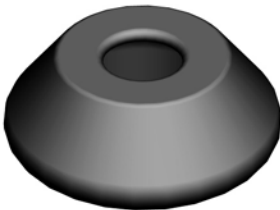
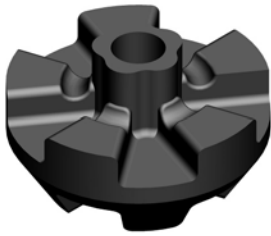
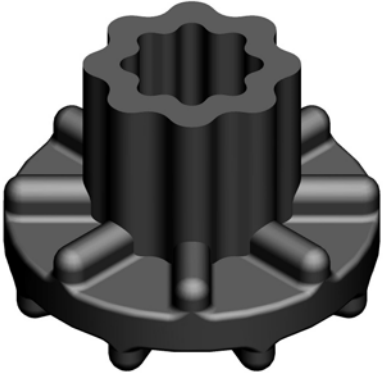
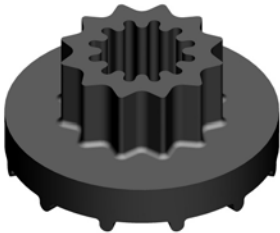
PRODUCT MATRIX

The following two pages contain a product matrix of vibration and shock isolators that are used in various applications. We have shown some typical applications where these vibration and shock isolators are used. These are typical applications and the actual measured inputs may be different, the data should be reviewed to insure the proper isolator is selected for the specific application.

| Product | P/N | Axial Load Range (lbs.) | Natural Frequency (Hz) | Axial/Radial Stiffness Ratio | Standard Structural Material |
|---|--------------------------------|-------------------------|------------------------|------------------------------|------------------------------|
| Cupmounts | 2100, 1870, 1871, 1872 & 1873 | 5-1800 | 20-45 | 1:1 | Zinc Plated Steel |
| Armor Flex™ Mount Series | 2131, 2132, 2133 | 990-1750 | 8-10 | 1:1 | Zinc Plated Steel |
| Friction Style Mounts | 1772 & 1773, 1900, 1901 & 1902 | .4-40 | 7-10 | 4:1 | Aluminum |
| Can Style Mounts | 1766 & 1767 & 1769 | 1-80 | 15-50 | 1:1 | Zinc Plated Steel, Stainless |
| SEM Series | SEM100 & SEM500 | 2.5-10 | 12-25 | 2:1 | Aluminum |
| High Deflection Mounts | 1829 | 5-15 | 12-20 | 1:1 | Aluminum |
| High Deflection Mounts | 1824 | 12-30 | 25-40 | 2.5:1 | Aluminum |
| High Deflection Mounts | 1825 | 5-20 | 10-15 | 1:1.5 | Aluminum |
| High Deflection Mounts | 1975 | 45-150 | 12-25 | 2:1 | Zinc Plated Steel |
| High Deflection Mounts | 1774 & 1775 Series | 60-260 | 8-10 | 4:1 | Zinc Plated Steel |
| Low Profile Mounts | 1830 & 1831 Series | 4.50-10 | 25-40 | 1:1 | Aluminum, Zinc Plated Steel |
| Fail-Safe Compression Mounts | 1751-1757 Series | 100-1780 | 10-20 | 1:1 | Zinc Plated Steel |
| Fail-Safe Compression Mounts | 1804 & 1805 Series | 50-420 | 10-20 | 6:1 | Zinc Plated Steel |
| Ring & Bushing Mounts | 1761-1765 Series | 40-4560 | 10-20 | 1:1 | Zinc Plated Steel |
| Bushing Series | 2061-2065 Series | 40-4560 | 10-20 | 1:1 | Zinc Plated Steel |
| Center Bond Series | EP2001-2012 | 75-2400 | 10-20 | Varies | Zinc Plated Steel |
| Platform Mounts | EP3001-3156 | 3-90 | 8-10 | 1:1 | Zinc Plated Steel |
| Cylindrical Mounts | EP1000-1830 | 3-560 | 8-20 | Varies | Zinc Plated Steel |
| All Elastomer Ring & Bushing Mount Series | 1815-1827 Series | 1-350 | 20-45 | Varies | N/A |
| All Elastomer Ball Mount Series | 1893 Series | .9-3.5 | 10-20 | 1:1 | N/A |
| Dome Mounts | 1961 Series | 375-1425 | 10-15 | 1:1 | Zinc Plated Steel |
| Fluid Mount | 1962, 1969, 2006 | 3-17 | 8-10 | Axial Only | Stainless Steel |
| English Air Isolators | 3001-3008 | 100-19200 | 3-15 | Axial Only | Steel |
| Metric Air Isolators | 3009-3015 | 100-7500 | 3-15 | Axial Only | Steel |
| SquishyFlex™ Mounts | 2182, 2183, 2184 | 110-2200 | 8-10 | 1:2.5: .75 | Zinc Plated Steel |
| Sandwich Mounts | 2205, 2206, 2207 | 210-4190 | 10-20 | | Zinc Plated Steel |

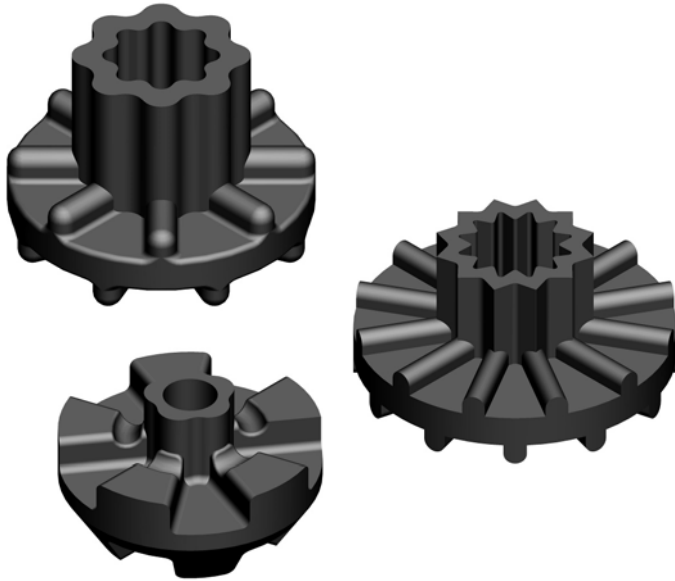
| Standard Resilient Material | Primary Application | Major Attributes | |
|------------------------------------|---|---|---|
| Neoprene, Silicone, Natural Rubber | Aircraft, Missiles, Military Vehicles | Low-Profile, Rugged, High-Shock |  |
| Neoprene | Marine, Construction | Low Profile, Rugged |  |
| Friction Damped Springs | Aircraft, Helicopters, Naval Marine, Electronics | Friction-Damped |  |
| Hi Damped Silicone | Aircraft, Missiles, Military Vehicles, Marine | Low-Profile, Rugged, Fail-Safe |  |
| Neoprene | Business, Agricultural, Construction, Marine | Low-Profile, Buckling Design |  |
| Hi Damped Silicone, Neoprene | Military Electronics, Military Aircraft, Helicopters, Military Vehicles | Buckling |  |
| Hi Damped Silicone, Neoprene | Military Electronics, Military Aircraft, Helicopters, Military Vehicles | Buckling |  |
| Hi Damped Silicone | Helicopters, HUMVEE | Buckling |  |
| Neoprene, Polybutadiene | Industrial Machinery, Naval marine, Labs | Buckling |  |
| Neoprene | Industrial Machinery, Labs | Buckling |  |
| Hi-Damped Silicone | Military Electronics, Military Aircraft, Helicopters, Military Vehicles | Low-Profile, All Attitude |  |
| Neoprene | Business, Agricultural, Construction, Marine | Rugged, All Attitude |  |
| Neoprene | Business, Agricultural, Construction, Marine | Rugged, All Attitude, Low Profile |  |
| Neoprene | Industrial Machinery, Agricultural, Construction, Marine | Rugged, All Attitude, Fail-Safe |  |
| Neoprene | Industrial Machinery, Agricultural, Construction, Marine | Rugged, All Attitude, Fail-Safe, Easy Installation |  |
| Neoprene | Industrial Machinery, Agricultural, Construction, Marine | Rugged, All Attitude, Fail-Safe, Easy Installation |  |
| Neoprene | Industrial Machinery, Agricultural, Construction, Marine | All Attitude, Easy Installation |  |
| Natural Rubber | Business, Agricultural, Construction, Marine | Very Low-Cost |  |
| Natural Rubber | Industrial Machinery, Agricultural, Construction, Marine | All Elastomer |  |
| Neoprene | Business, Agricultural, Construction, Marine | Light Loads, Low-Cost |  |
| Neoprene | Industrial Machinery, Agricultural, Construction, Marine | Rugged, All Attitude, Fail-Safe, Easy Installation |  |
| Hi-Damped Silicone | Military Electronics, Military Aircraft, Helicopters, Military Vehicles | Low-Profile, Very Hi-Damped |  |
| Neoprene | Industrial Machinery, Agricultural, Construction, Marine | Low frequency, very high load range English Threads |  |
| Neoprene | Industrial Machinery, Agricultural, Construction, Marine | Low frequency, very high load range Metric Threads |  |
| Neoprene | Marine, Construction | Rugged, All Steel, Fail-Safe |  |
| Neoprene | Industrial, Marine | Rugged, Compact |  |

ALL ELASTOMER ISOLATORS



All Elastomer Ring & Bushing Mount Series

Low cost, easily installed elastomeric isolators that protect against shock and vibration



Applications

- Pumps
- Electric motors
- Fans & blowers
- HVAC
- Communications equipment
- Business machines
- Electronics

Load Range

- 1815/1816 = 4 load ratings to 12 lbs. max.
- 1818/1819 = 4 load ratings to 35 lbs. max.
- 1821/1822 = 4 load ratings to 75 lbs. max.
- 1826/1827 = 4 load ratings to 350 lbs. max.

Attributes

- Available in four sizes
- Low-cost but effective isolation
- Ribbed design aids in isolation
- Can be installed in parallel or series for greater load capacity or deflection

Specifications

- Natural Frequency—See tables
- Transmissibility at resonance—10:1
- Resilient Element—Natural Rubber
- Standard materials—None
- Weight—1826 = 3.37 oz. (all other parts weigh less than 1.0 oz.)

Elastomeric Data

- Natural rubber elastomer is compatible with most industrial and commercial environments and has an operating temperature range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$). Special materials are available upon special order.

All Elastomer Ring & Bushing Mount Series: 1815/1816

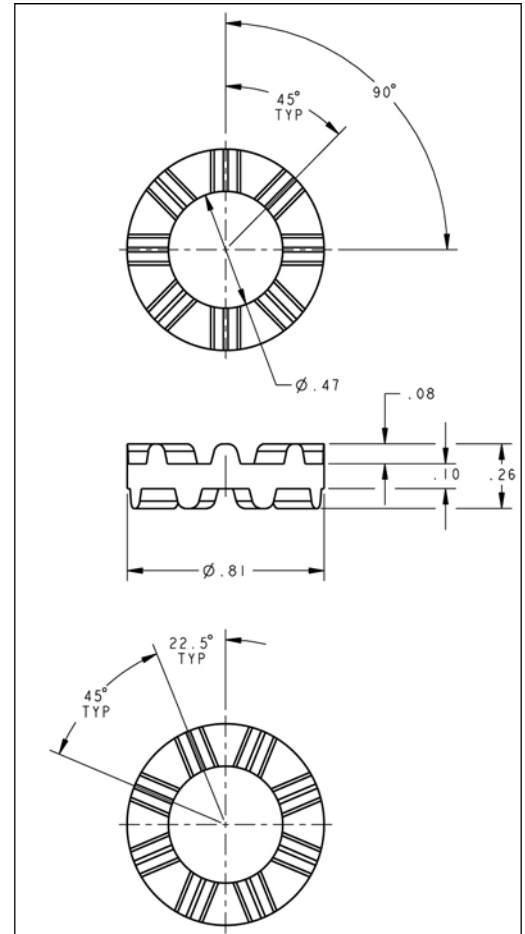
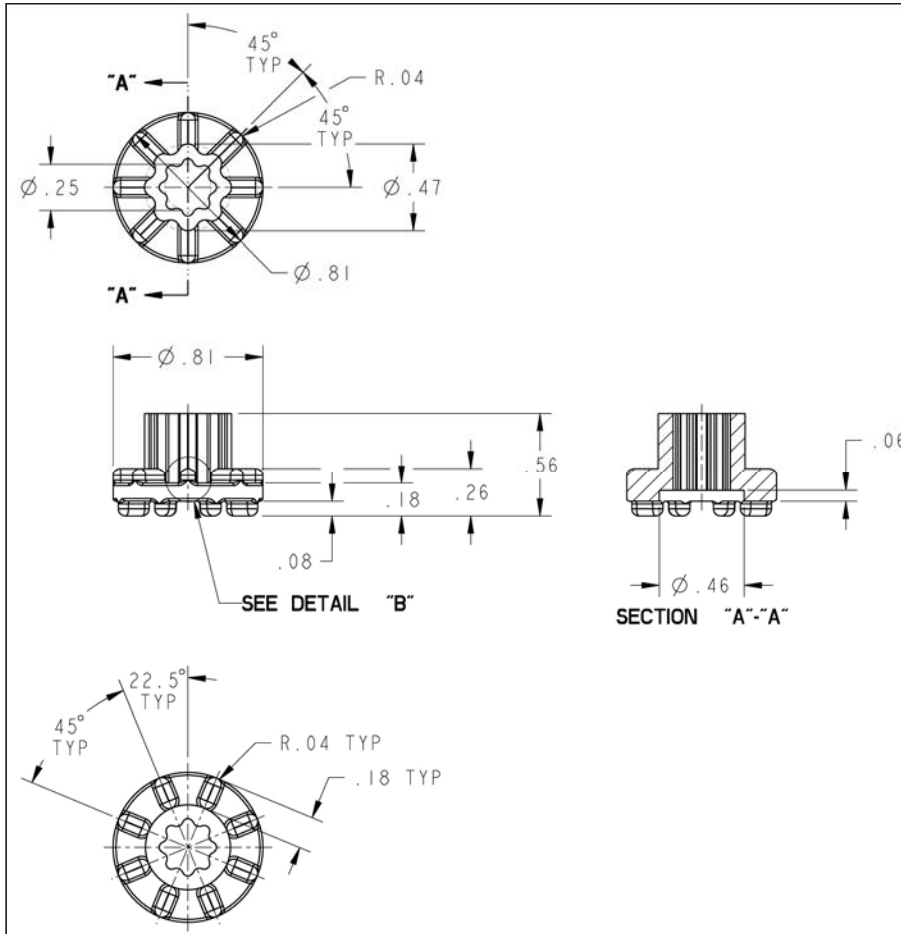
Dimension and Performance Characteristics

| RECOMMENDED LOAD LIMITS FOR RING & BUSHING ASSEMBLY | | | | | |
|---|------|---------------------|------------------|-------------------------------|----------------|
| Part # | Size | Minimum Load (lbs.) | Max. Load (lbs.) | Standard Material / Durometer | FN at max load |
| 1815/1816 -1 | 1 | 1 | 4 | Neoprene 30 | 16 |
| 1815/1816 -2 | 1 | 2 | 6 | Neoprene 40 | 16.5 |
| 1815/1816 -3 | 1 | 3 | 8 | Neoprene 50 | 21 |
| 1815/1816 -4 | 1 | 5 | 12 | Neoprene 60 | 19 |

Dimensional
tolerance $\pm .03''$

1815 (Bushing)

1816 (Ring)



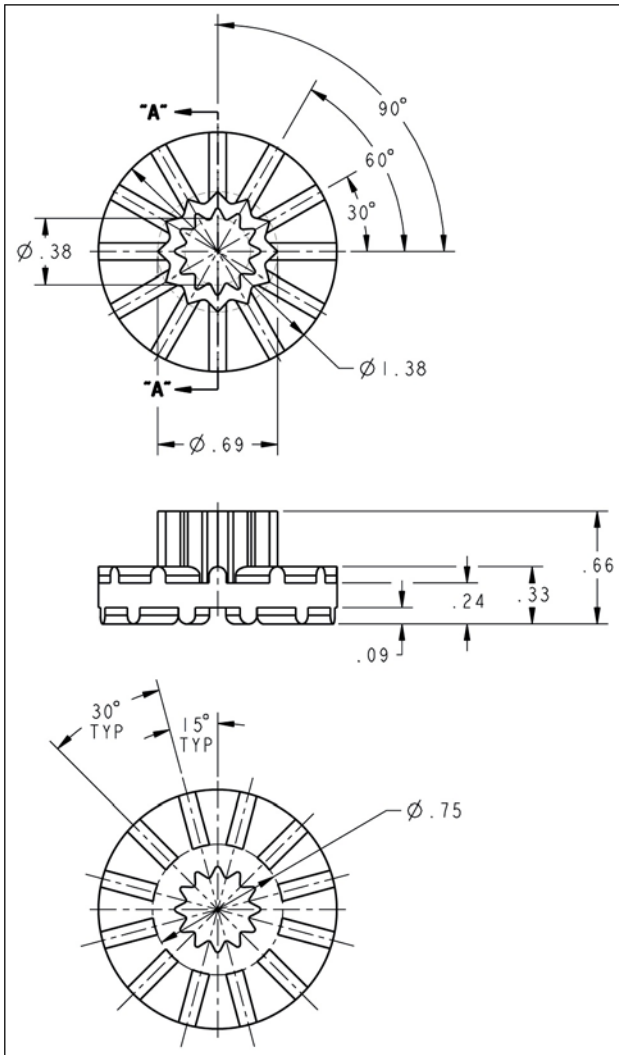
All Elastomer Ring & Bushing Mount Series: 1818/1819

Dimension and Performance Characteristics

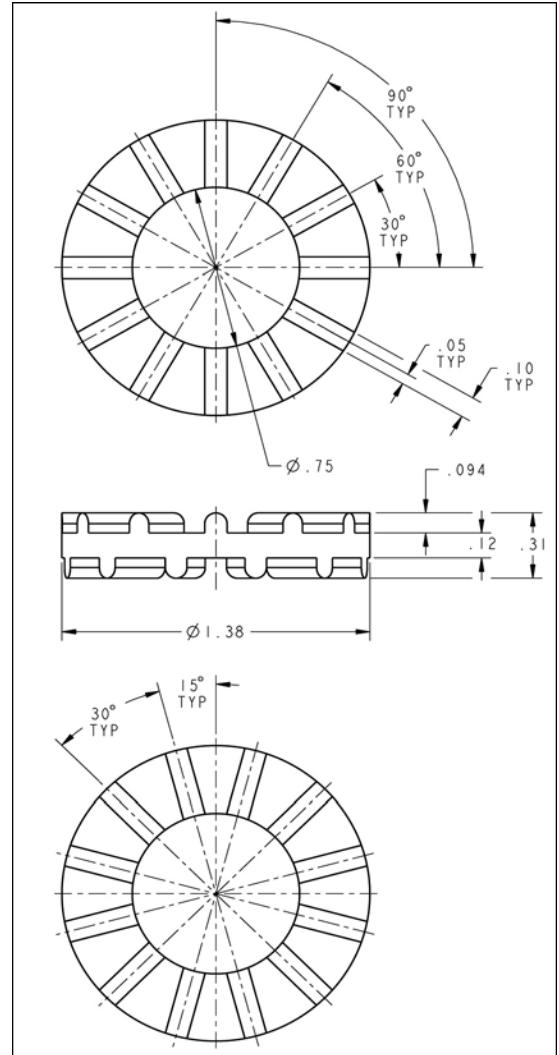
| RECOMMENDED LOAD LIMITS FOR RING & BUSHING ASSEMBLY | | | | | |
|---|------|---------------------|------------------|-------------------------------|----------------|
| Part # | Size | Minimum Load (lbs.) | Max. Load (lbs.) | Standard Material / Durometer | FN at max load |
| 1818/1819 -1 | 3 | 6 | 20 | Neoprene 30 | 14 |
| 1818/1819 -2 | 3 | 7 | 23 | Neoprene 40 | 15 |
| 1818/1819 -3 | 3 | 10 | 25 | Neoprene 50 | 19 |
| 1818/1819 -4 | 3 | 15 | 35 | Neoprene 60 | 19 |

Dimensional tolerance ±.03"

1818 (Bushing)



1819 (Ring)



All Elastomer Ring & Bushing Mount Series: 1821/1822

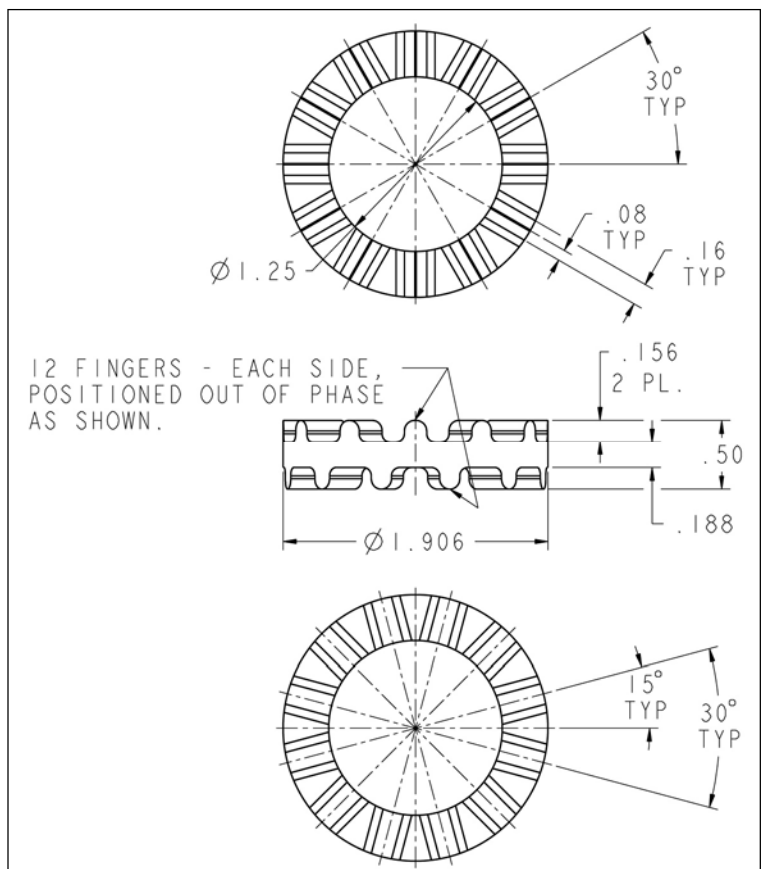
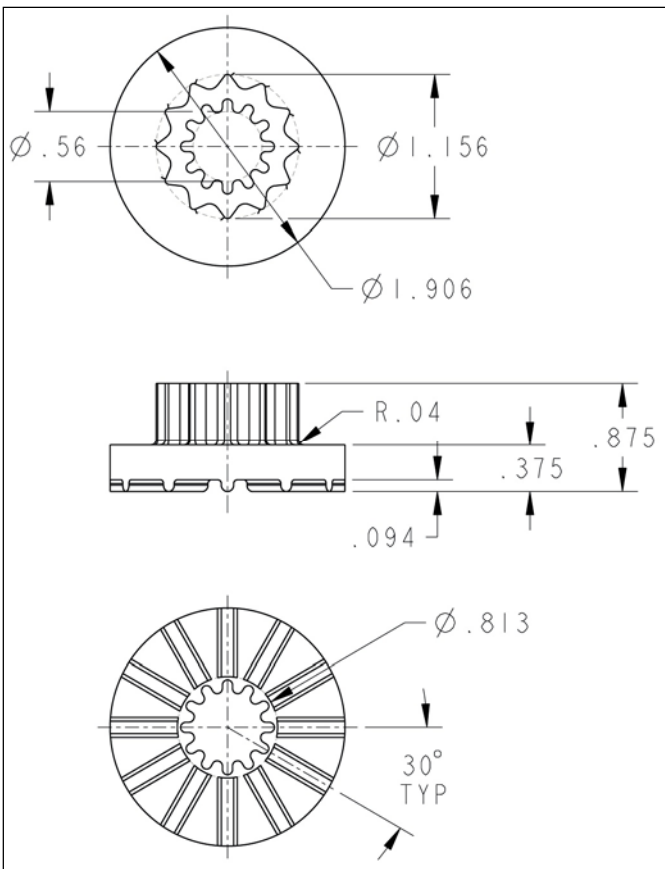
Dimension and Performance Characteristics

| RECOMMENDED LOAD LIMITS FOR RING & BUSHING ASSEMBLY | | | | | |
|---|------|---------------------|------------------|-------------------------------|----------------|
| Part # | Size | Minimum Load (lbs.) | Max. Load (lbs.) | Standard Material / Durometer | FN at max load |
| 1821/1822 -1 | 4 | 10 | 35 | Neoprene 30 | 10 |
| 1821/1822 -2 | 4 | 20 | 50 | Neoprene 40 | 11 |
| 1821/1822 -3 | 4 | 30 | 60 | Neoprene 50 | 12 |
| 1821/1822 -4 | 4 | 40 | 75 | Neoprene 60 | 14 |

Dimensional
tolerance $\pm .03$ "

1821 (Bushing)

1822 (Ring)



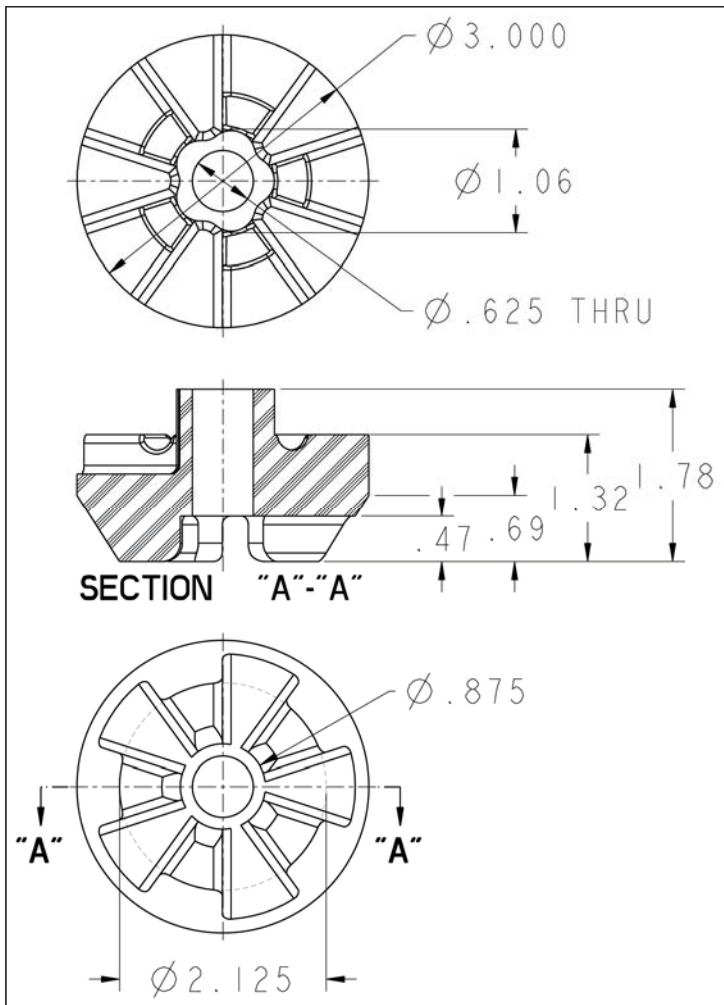
All Elastomer Ring & Bushing Mount Series: 1826/1827

Dimension and Performance Characteristics

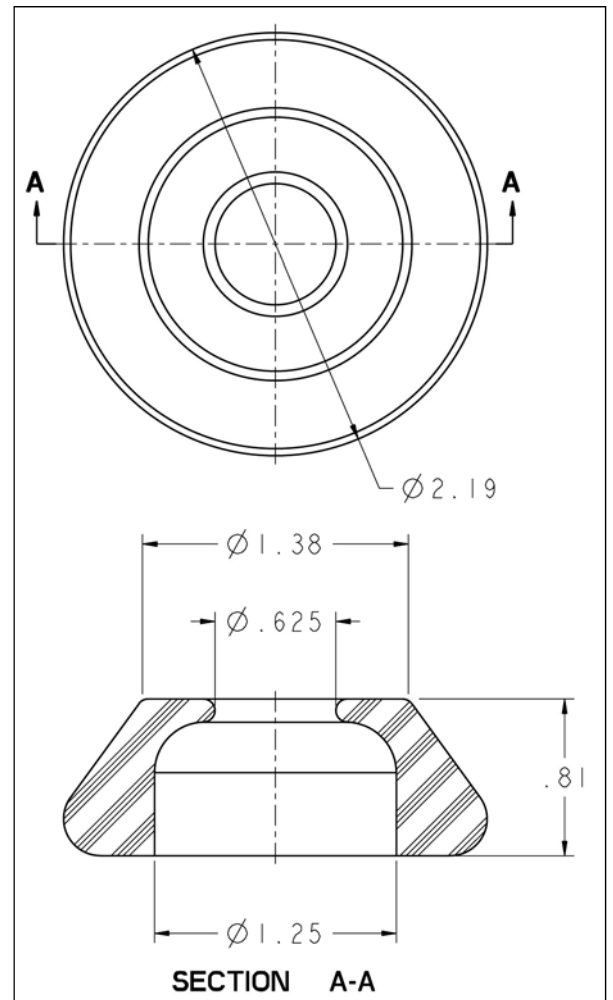
| RECOMMENDED LOAD LIMITS FOR RING & BUSHING ASSEMBLY | | | | | |
|---|------|---------------------|------------------|-------------------------------|----------------|
| Part # | Size | Minimum Load (lbs.) | Max. Load (lbs.) | Standard Material / Durometer | FN at max load |
| 1826/1827 -1 | 6 | 60 | 120 | Neoprene 30 | 7 |
| 1826/1827 -2 | 6 | 110 | 160 | Neoprene 40 | 7 |
| 1826/1827 -3 | 6 | 135 | 250 | Neoprene 50 | 7.5 |
| 1826/1827 -4 | 6 | 160 | 350 | Neoprene 60 | 8 |

Dimensional
tolerance $\pm .03''$

1826 (Bushing)

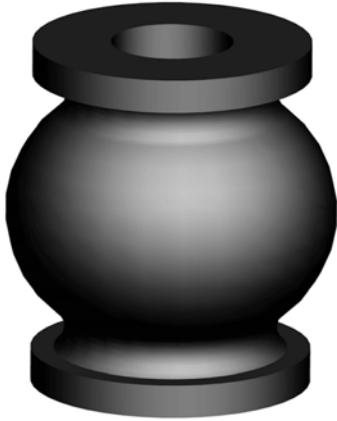


1827 (Ring)



Ball Mount Series

Low cost, low profile, easily installed elastomer mounts for vibration and structure borne noise control



Attributes

- Simple buckling design
- Effective on very light loads
- Fail-safe when installed with industry standard bolts, nuts and washers
- Can be installed in multiple configurations

Applications

- Electronic cabinet panels
- Electromechanical equipment
- Small appliance
- Medical equipment
- Lightweight devices
- Business machines

Benefits

- One-piece design
- Effective isolation for low frequency inputs
- Survives light shock applications
- Effective for isolation for structure borne noise

Load Range

- 1893-1 = load ratings to .7 lbs. max.
 - 1893-2 = load ratings to 1.2 lbs. max.
 - 1893-3 = load ratings to 1.6 lbs. max.
 - 1893-4 = load ratings to 2.6 lbs. max.
 - 1893-5 = load ratings to 3.2 lbs. max.
-

Specifications

- Natural Frequency—10-20 Hertz
 - Transmissibility at resonance—10 (Neoprene) /4.0 (Silicone)
 - Resilient Element—Neoprene or Hi-damp Silicone
 - Standard materials—None
 - Weight—See load range table
-

Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to most solvents, oils and ozone.
- Silicone elastomer has an operating temperature range of -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$)

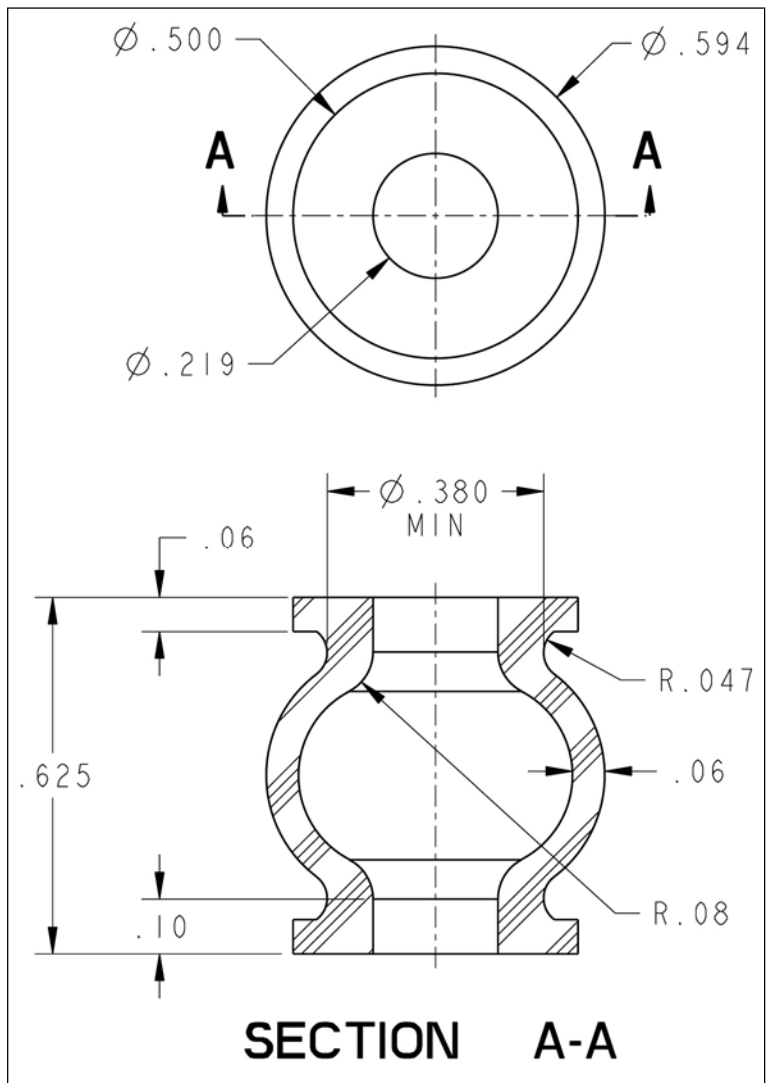
Ball Mount Series: 1893

Dimensions and Load Ranges

Axial to Radial Stiffness 3:1

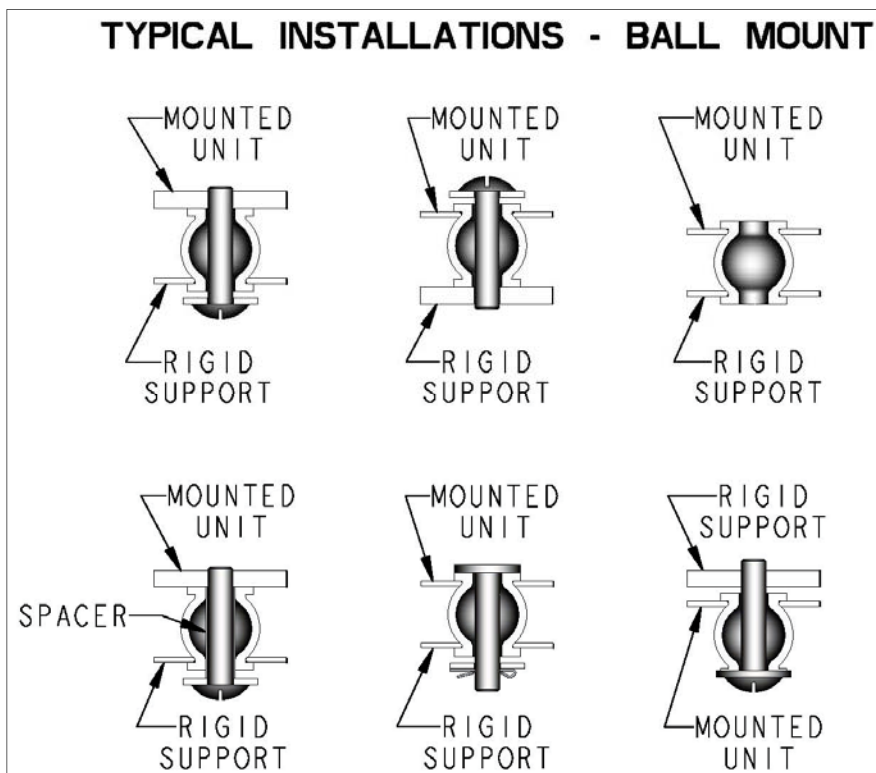
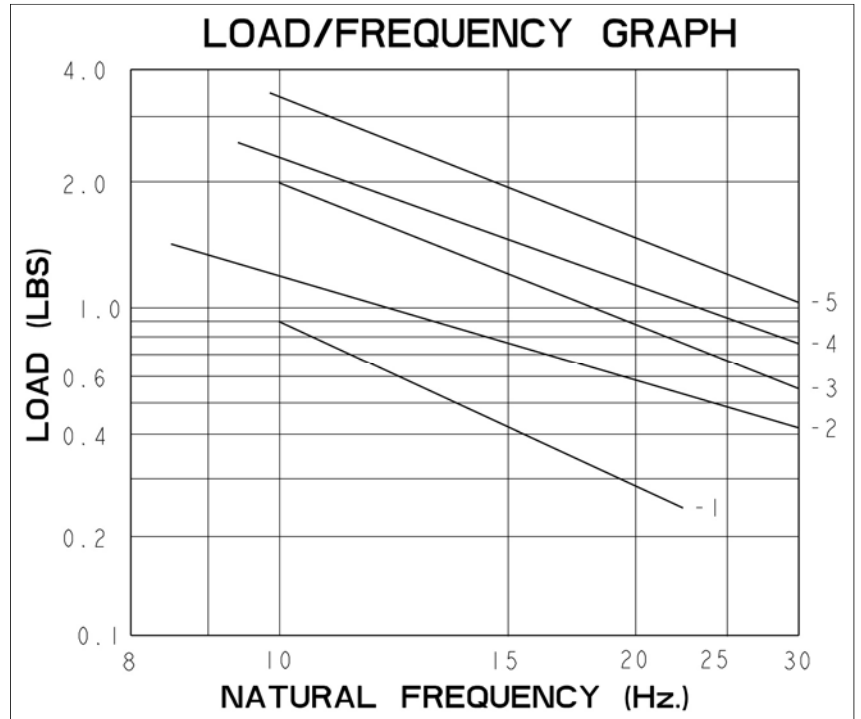
| Part Number | Standard Material / Durometer | Color Code | Static Load Range/Mount (lbs.) |
|-------------|-------------------------------|------------|--------------------------------|
| 1893-1 | 35 Shore A Neoprene | Red | 0.4-0.7 |
| 1893-2 | 45 Shore A Neoprene | Orange | 0.6-1.2 |
| 1893-3 | 55 Shore A Neoprene | White | 0.8-1.6 |
| 1893-4 | 65 Shore A Neoprene | Blue | 1.3-2.6 |
| 1893-5 | 75 Shore A Neoprene | Green | 1.6-3.2 |

Dimensional tolerance ±.015"



Ball Mount Series: 1893

Dimensions and Load Ranges



SECTION B INTENTIONALLY LEFT BLANK

CENTERBOND SERIES



Centerbond Series

Low cost, elastomeric mount to reduce vibration and shock

C



Attributes

- Single bonded design
- Low profile design
- Low cost and easy to install
- Fail-safe when using a snubbing washer
- Axial and radial isolation

Applications

- Engine mounts
- Cab mounts
- Radiator mounts
- Pumps
- Air Compressors

Load Range

- EP2001 = load ratings to 160 lbs. max.
- EP2002 = load ratings to 520 lbs. max.
- EP2003 = load ratings to 720 lbs. max.
- EP2004 = load ratings to 720 lbs. max.
- EP2005 = load ratings to 1100 lbs. max.
- EP2006 = load ratings to 1500 lbs. max.
- EP2007 = load ratings to 2400 lbs. max.
- EP2012 = load ratings to 300 lbs. max.

SNUBBING WASHERS

| PART NUMBER | O.D" | I.D" | THICKNESS " | MATERIAL | FINISH | CENTERBOND PART NUMBER |
|----------------------|-------|-------|-------------|---------------|------------|----------------------------------|
| SW-1120-0400-0125-SZ | 1.12" | .400" | .125" | 1010-1020 CRS | Clear Zinc | EP2001 |
| SW-1500-0520-0125-SZ | 1.50" | .520" | .125" | 1010-1020 CRS | Clear Zinc | EP2002, EP2012-01 thru EP2012-04 |
| SW-1700-0625-0125-SZ | 1.70" | .625" | .125" | 1010-1020 CRS | Clear Zinc | EP2003 |
| SW-1700-0650-0125-SZ | 1.70" | .650" | .125" | 1010-1020 CRS | Clear Zinc | EP2004 |
| SW-2500-0650-0190-SZ | 2.50" | .650" | .190" | 1010-1020 CRS | Clear Zinc | EP2005-EP2006 |
| SW-2700-0800-0190-SZ | 2.70" | .80" | .190" | 1010-1020 CRS | Clear Zinc | EP2007 |
| SW-1500-0375-0125-SZ | 1.50" | .375" | .125" | 1010-1020 CRS | Clear Zinc | EP2012-11 thru EP2012-14 |

Specifications

- Resilient Element—Natural Rubber or Neoprene
- Standard materials— Steel

Elastomeric Data

- Natural Rubber elastomer has an operating temperature range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$).
- Neoprene elastomer is also available

Centerbond Series

Dimensional Drawing and Load Ranges

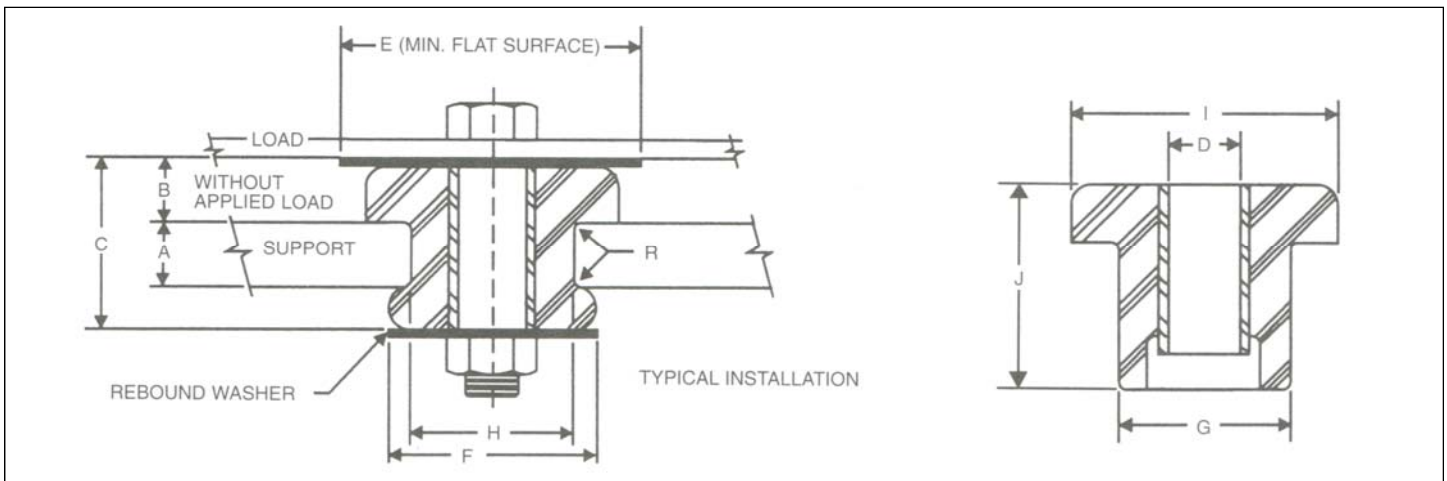
| PART NUMBER | MAX LOAD | AXIAL SPRING RATE (lbs./in.) | A | B | C | D | E (MIN) | F (MIN) | G | H | I | J | R (MIN) |
|-------------|----------|------------------------------|------|------|------|------|---------|---------|------|------|------|------|---------|
| EP2001-01 | 30 | 1,000 | | | | | | | | | | | |
| EP2001-02 | 50 | 2,000 | | | | | | | | | | | |
| EP2001-03 | 80 | 4,200 | 0.31 | 0.22 | 0.69 | 0.40 | 1.25 | 1.10 | 0.81 | 0.75 | 1.09 | 0.80 | 0.06 |
| EP2001-04 | 140 | 9,750 | | | | | | | | | | | |
| EP2001-11 | 45 | 1,800 | | | | | | | | | | | |
| EP2001-12 | 75 | 3,000 | | | | | | | | | | | |
| EP2001-13 | 125 | 5,000 | 0.31 | 0.22 | 0.62 | 0.40 | 1.25 | 1.10 | 0.81 | 0.75 | 1.09 | 1.02 | 0.06 |
| EP2001-14 | 160 | 6,400 | | | | | | | | | | | |
| EP2002-01 | 130 | 2,000 | | | | | | | | | | | |
| EP2002-02 | 190 | 3,875 | | | | | | | | | | | |
| EP2002-03 | 300 | 7,500 | 0.41 | 0.38 | 1.00 | 0.47 | 2.00 | 1.50 | 1.24 | 1.12 | 1.75 | 1.25 | 0.06 |
| EP2002-04 | 520 | 15,500 | | | | | | | | | | | |
| EP2002-11 | 130 | 2,000 | | | | | | | | | | | |
| EP2002-12 | 190 | 3,875 | | | | | | | | | | | |
| EP2002-13 | 300 | 7,500 | 0.41 | 0.38 | 1.00 | 0.52 | 2.00 | 1.50 | 1.24 | 1.12 | 1.75 | 1.25 | 0.06 |
| EP2002-14 | 520 | 15,500 | | | | | | | | | | | |
| EP2003-01 | 230 | 3,400 | | | | | | | | | | | |
| EP2003-02 | 360 | 6,000 | | | | | | | | | | | |
| EP2003-03 | 520 | 10,600 | 0.50 | 0.53 | 1.00 | 0.53 | 2.25 | 1.70 | 1.35 | 1.25 | 2.00 | 1.25 | 0.06 |
| EP2003-04 | 720 | 18,200 | | | | | | | | | | | |
| EP2003-11 | 230 | 3,400 | | | | | | | | | | | |
| EP2003-12 | 360 | 6,000 | | | | | | | | | | | |
| EP2003-13 | 520 | 10,600 | 0.50 | 0.53 | 1.00 | .625 | 2.25 | 1.70 | 1.35 | 1.25 | 2.00 | 1.25 | 0.06 |
| EP2003-14 | 720 | 18,200 | | | | | | | | | | | |
| EP2004-01 | 230 | 3,400 | | | | | | | | | | | |
| EP2004-02 | 360 | 6,000 | | | | | | | | | | | |
| EP2004-03 | 520 | 10,600 | 0.62 | 0.53 | 1.38 | 0.53 | 2.25 | 1.70 | 1.35 | 1.25 | 2.00 | 1.61 | 0.06 |
| EP2004-04 | 720 | 18,200 | | | | | | | | | | | |
| EP2004-11 | 230 | 3,400 | | | | | | | | | | | |
| EP2004-12 | 360 | 6,000 | | | | | | | | | | | |
| EP2004-13 | 520 | 10,600 | 0.62 | 0.53 | 1.38 | 0.64 | 2.25 | 1.70 | 1.35 | 1.25 | 2.00 | 1.61 | 0.06 |
| EP2004-14 | 720 | 18,200 | | | | | | | | | | | |

Centerbond Series

Dimensional Drawing and Load Ranges

C

| PART NUMBER | MAX LOAD | AXIAL SPRING RATE (lbs./in.) | A | B | C | D | E (MIN) | F (MIN) | G | H | I | J | R (MIN) |
|-------------|----------|------------------------------|------|------|------|------|---------|---------|------|------|------|------|---------|
| EP2005-01 | 400 | 4,450 | | | | | | | | | | | |
| EP2005-02 | 540 | 7,500 | | | | | | | | | | | |
| EP2005-03 | 750 | 12,900 | 0.75 | 0.62 | 1.75 | 0.64 | 2.85 | 2.20 | 1.61 | 1.50 | 2.50 | 2.00 | 0.06 |
| EP2005-04 | 1100 | 22,000 | | | | | | | | | | | |
| EP2006-01 | 600 | 5,200 | | | | | | | | | | | |
| EP2006-02 | 800 | 9,400 | | | | | | | | | | | |
| EP2006-03 | 1100 | 15,000 | 0.93 | 0.71 | 2.00 | 0.64 | 3.50 | 2.50 | 1.96 | 1.81 | 2.97 | 2.22 | 0.12 |
| EP2006-04 | 1500 | 23,500 | | | | | | | | | | | |
| EP2007-01 | 950 | 6,500 | | | | | | | | | | | |
| EP2007-02 | 1300 | 10,700 | | | | | | | | | | | |
| EP2007-03 | 1850 | 18,500 | 0.75 | 0.94 | 2.12 | 0.77 | 4.25 | 2.70 | 2.20 | 2.00 | 3.68 | 2.50 | 0.12 |
| EP2007-04 | 2400 | 26,700 | | | | | | | | | | | |
| EP2012-01 | 60 | 660 | | | | | | | | | | | |
| EP2012-02 | 100 | 1,112 | | | | | | | | | | | |
| EP2012-03 | 200 | 2,230 | .38 | .55 | 1.07 | .41 | 1.50 | 1.50 | .95 | .875 | 1.25 | 1.44 | .06 |
| EP2012-04 | 300 | 3,300 | | | | | | | | | | | |
| EP2012-11 | 60 | 660 | | | | | | | | | | | |
| EP2012-12 | 100 | 1,112 | | | | | | | | | | | |
| EP2012-13 | 200 | 2,230 | .38 | .55 | 1.07 | .34 | 1.50 | 1.50 | .95 | .875 | 1.25 | 1.44 | .06 |
| EP2012-14 | 300 | 3,300 | | | | | | | | | | | |



CUPMOUNT SERIES



Size 0 Cupmount Series

A compact, universal mount used in the protection of equipment that is exposed to high shock and vibration environments

D



Attributes

- Fail-safe
- All-attitude design
- Compact, low profile design
- Easy to install
- High damped Silicone, Neoprene or Natural Rubber
- Zinc plated steel construction
- Can be used in tandem for higher deflection capability

Applications

- Shipboard equipment
- Mobile platforms
- Avionics
- Rack mounted systems
- Military radios
- Weapons system

Load Range

- 2100-1 = load ratings to 5 lbs./mount max.
- 2100-2 = load ratings to 10 lbs./mount max.
- 2100-3 = load ratings to 15 lbs./mount max.
- 2100-4 = load ratings to 20 lbs./mount max.

Shock & Vibe

- Attenuates a 10g, 11 millisecond half-sine shock to 2 g's
- Survives a 40g, 11 millisecond half-sine
- Passes MIL-STD-167 vibration

Specifications

- Natural Frequency — 20-45 Hertz
- Transmissibility at resonance — 4 max. (Hi-damp Silicone), 10 max. (Neoprene), 10 max. (Natural Rubber)
- Resilient Element — Hi-damp Silicone, Natural Rubber, Neoprene
- Standard materials — Zinc plated steel & black powder coated steel
- Weight — Size 0 = 2.58 oz.

Elastomeric Data

- High-Damp Silicone has an operating temperature of -67°F to +300°F (-55°C to +150°C) and is resistant to ozone, fungus and most solvents.
- Other elastomeric formulations are available in BUNA-N, Butyl, Polybutadiene and Neoprene.
- Neoprene has an operating range of -40°F to 200°F (-40°C to +93°C) and is used where oil immersion is present.
- Natural Rubber has an operating range of -25°F to +160°F (-37°C to +70°C) and is used in high dynamic amplitude environments.

Size 0 Cupmount: 2100

Dimension and Performance Characteristics

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|-------------|--------------|------------------------------------|
| 2100-1SA | 0 | 5 | 2-4 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-2SA | 0 | 10 | 4-7 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-3SA | 0 | 15 | 7-10 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-4SA | 0 | 20 | 10-14 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-1SB | 0 | 5 | 1-7 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |
| 2100-2SB | 0 | 10 | 3-9 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |
| 2100-3SB | 0 | 15 | 5-11 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |
| 2100-4SB | 0 | 20 | 8-14 | .83 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|-------------|--------------|------------------------------------|
| 2100-1NA | 0 | 5 | 2-4 | .83 | Neoprene | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-2NA | 0 | 10 | 4-7 | .83 | Neoprene | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-3NA | 0 | 15 | 7-10 | .83 | Neoprene | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-4NA | 0 | 20 | 10-14 | .83 | Neoprene | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-1NB | 0 | 5 | 1-7 | .83 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-2NB | 0 | 10 | 3-9 | .83 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-3NB | 0 | 15 | 5-11 | .83 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-4NB | 0 | 20 | 8-14 | .83 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |

Size 0 Cupmount: 2100

Dimension and Performance Characteristics



| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|-----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|-------------|--------------|------------------------------------|
| 2100-1NRA | 0 | 5 | 2-4 | .83 | Natural Rubber | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-2NRA | 0 | 10 | 4-7 | .83 | Natural Rubber | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-3NRA | 0 | 15 | 7-10 | .83 | Natural Rubber | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-4NRA | 0 | 20 | 10-14 | .83 | Natural Rubber | Zinc Plated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-1NRB | 0 | 5 | 1-7 | .83 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-2NRB | 0 | 10 | 3-9 | .83 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-3NRB | 0 | 15 | 5-11 | .83 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-4NRB | 0 | 20 | 8-14 | .83 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|------------|------|---------------------|-----------------------|-------------|--------------------|---------------------------|------------|-------------|--------------|------------------------------------|
| 2100-1SAPC | 0 | 5 | 2-4 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-2SAPC | 0 | 10 | 4-7 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-3SAPC | 0 | 15 | 7-10 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-4SAPC | 0 | 20 | 10-14 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 4:1 |
| 2100-1SBPC | 0 | 5 | 1-7 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |
| 2100-2SBPC | 0 | 10 | 3-9 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |
| 2100-3SBPC | 0 | 15 | 5-11 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |
| 2100-4SBPC | 0 | 20 | 8-14 | .83 | Hi-Damp Silicone | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 4:1 |

Size 0 Cupmount: 2100

Dimension and Performance Characteristics

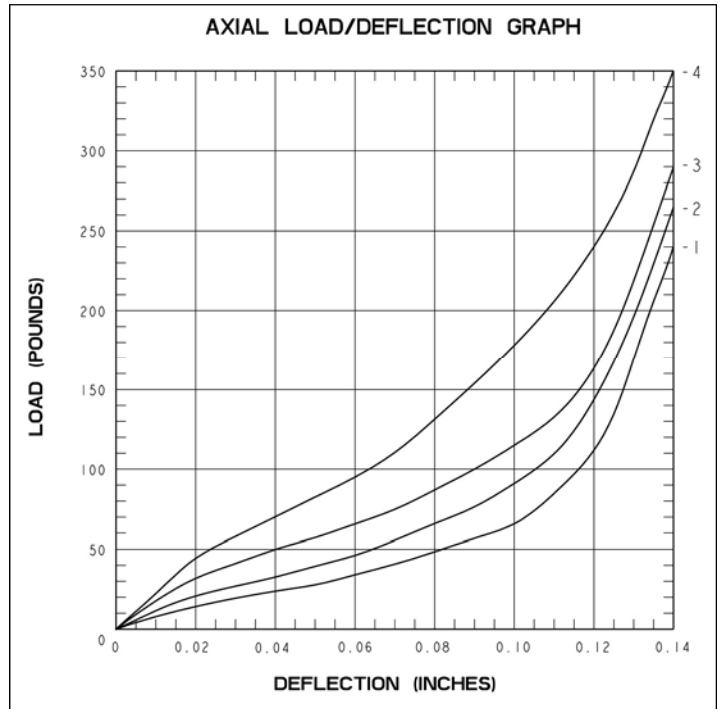
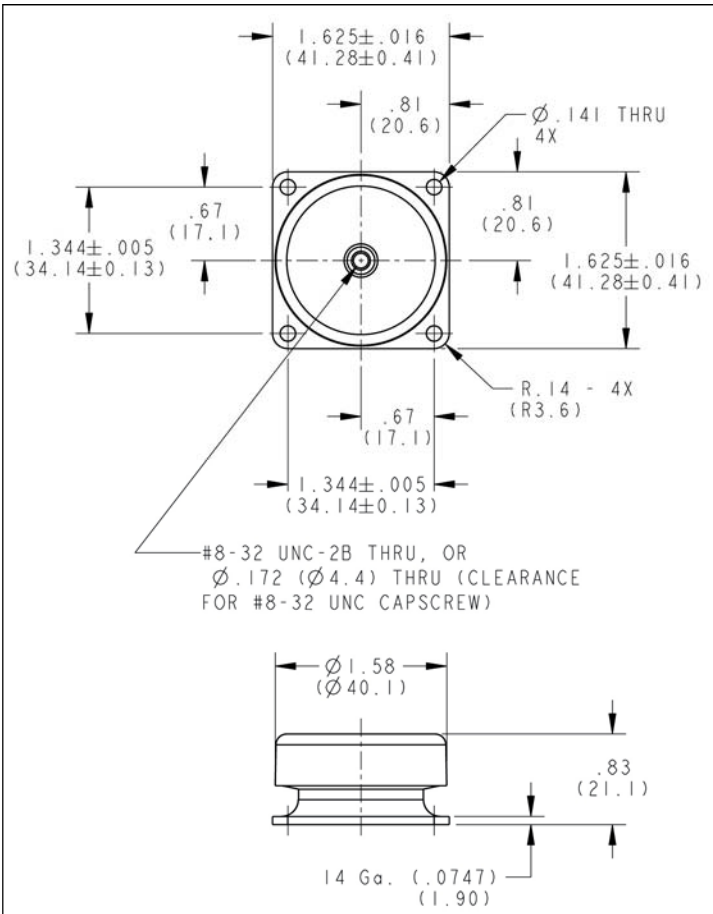
| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|------------|------|---------------------|-----------------------|-------------|--------------------|---------------------------|------------|-------------|--------------|------------------------------------|
| 2100-1NAPC | 0 | 5 | 2-4 | .83 | Neoprene | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-2NAPC | 0 | 10 | 4-7 | .83 | Neoprene | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-3NAPC | 0 | 15 | 7-10 | .83 | Neoprene | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-4NAPC | 0 | 20 | 10-14 | .83 | Neoprene | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-1NBPC | 0 | 5 | 1-7 | .83 | Neoprene | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-2NBPC | 0 | 10 | 3-9 | .83 | Neoprene | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-3NBPC | 0 | 15 | 5-11 | .83 | Neoprene | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-4NBPC | 0 | 20 | 8-14 | .83 | Neoprene | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|-------------|------|---------------------|-----------------------|-------------|--------------------|---------------------------|------------|-------------|--------------|------------------------------------|
| 2100-1NRAPC | 0 | 5 | 2-4 | .83 | Natural Rubber | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-2NRAPC | 0 | 10 | 4-7 | .83 | Natural Rubber | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-3NRAPC | 0 | 15 | 7-10 | .83 | Natural Rubber | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-4NRAPC | 0 | 20 | 10-14 | .83 | Natural Rubber | Black Powder Coated Steel | Threaded | 8-32 UNC-2B | Ø.141 | 10:1 |
| 2100-1NRBPC | 0 | 5 | 1-7 | .83 | Natural Rubber | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-2NRBPC | 0 | 10 | 3-9 | .83 | Natural Rubber | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-3NRBPC | 0 | 15 | 5-11 | .83 | Natural Rubber | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |
| 2100-4NRBPC | 0 | 20 | 8-14 | .83 | Natural Rubber | Black Powder Coated Steel | Thru Hole | Ø.172 | Ø.141 | 10:1 |

Size 0 Cupmount: 2100

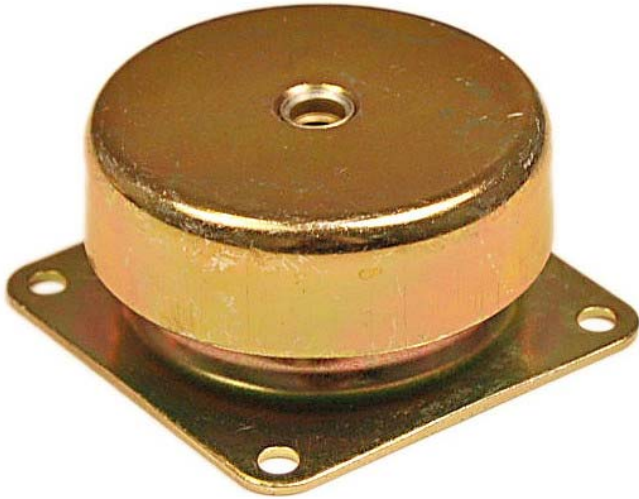
Dimension and Performance Characteristics

D



Size 1 Cupmount Series

A compact, universal mount used in the protection of equipment that is exposed to high shock and vibration environments



Attributes

- Fail-safe
- All-attitude design
- Compact, low profile design
- Easy to install
- High damped Silicone, Neoprene or Natural Rubber
- Zinc plated steel construction
- Can be used in tandem for higher deflection capability

Applications

- Shipboard equipment
- Mobile platforms
- Avionics
- Rack mounted systems
- Military radios
- Weapons system

Load Range

- 1870-1 = load ratings to 20 lbs./mount max.
- 1870-2 = load ratings to 30 lbs./mount max.
- 1870-3 = load ratings to 70 lbs./mount max.
- 1870-4 = load ratings to 100 lbs./mount max.

Shock & Vibe

- Attenuates a 10g, 11 millisecond half-sine shock to 2 g's
- Survives a 30g, 11 millisecond half-sine
- Passes MIL-STD-167 vibration

Specifications

- Natural Frequency—20-45 Hertz
- Transmissibility at resonance—4 max. (Hi-damp Silicone), 10 max. (Neoprene), 10 max. (Natural Rubber)
- Resilient Element—Hi-damp Silicone, Natural Rubber, Neoprene
- Standard materials—Zinc plated steel
- Weight—Size 1 = 6 oz.

Elastomeric Data

- High-Damp Silicone has an operating temperature of -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$) and is resistant to ozone, fungus and most solvents.
- Other elastomeric formulations are available in BUNA-N, Butyl, Polybutadiene and Neoprene.
- Neoprene has an operating range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is used where oil immersion is present.
- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$) and is used in high dynamic amplitude environments.

Size 1 Cupmount: 1870

Dimension and Performance Characteristics

D

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1870-1SA | 1 | 20 | 8-14 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 4:1 |
| 1870-2SA | 1 | 30 | 14-24 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 4:1 |
| 1870-3SA | 1 | 70 | 24-38 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 4:1 |
| 1870-4SA | 1 | 100 | 38-60 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 4:1 |
| 1870-1SB | 1 | 20 | 8-14 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 4:1 |
| 1870-2SB | 1 | 30 | 14-24 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 4:1 |
| 1870-3SB | 1 | 70 | 24-38 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 4:1 |
| 1870-4SB | 1 | 100 | 38-60 | 1.17 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 4:1 |

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1870-1NA | 1 | 20 | 8-14 | 1.17 | Neoprene | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-2NA | 1 | 30 | 14-24 | 1.17 | Neoprene | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-3NA | 1 | 70 | 24-38 | 1.17 | Neoprene | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-4NA | 1 | 100 | 38-60 | 1.17 | Neoprene | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-1NB | 1 | 20 | 8-14 | 1.17 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |
| 1870-2NB | 1 | 30 | 14-24 | 1.17 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |
| 1870-3NB | 1 | 70 | 24-38 | 1.17 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |
| 1870-4NB | 1 | 100 | 38-60 | 1.17 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |

Size 1 Cupmount: 1870

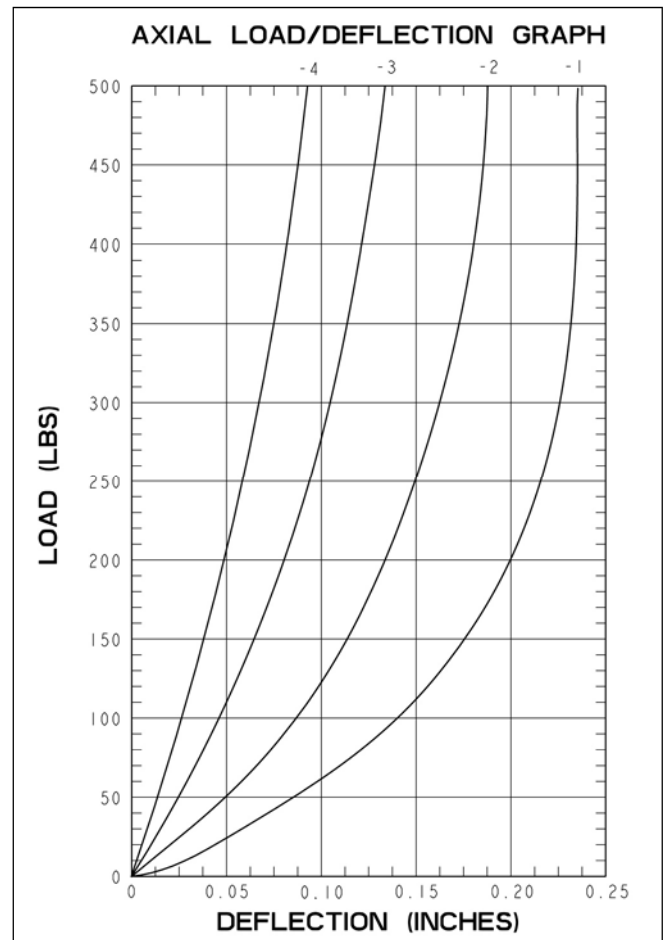
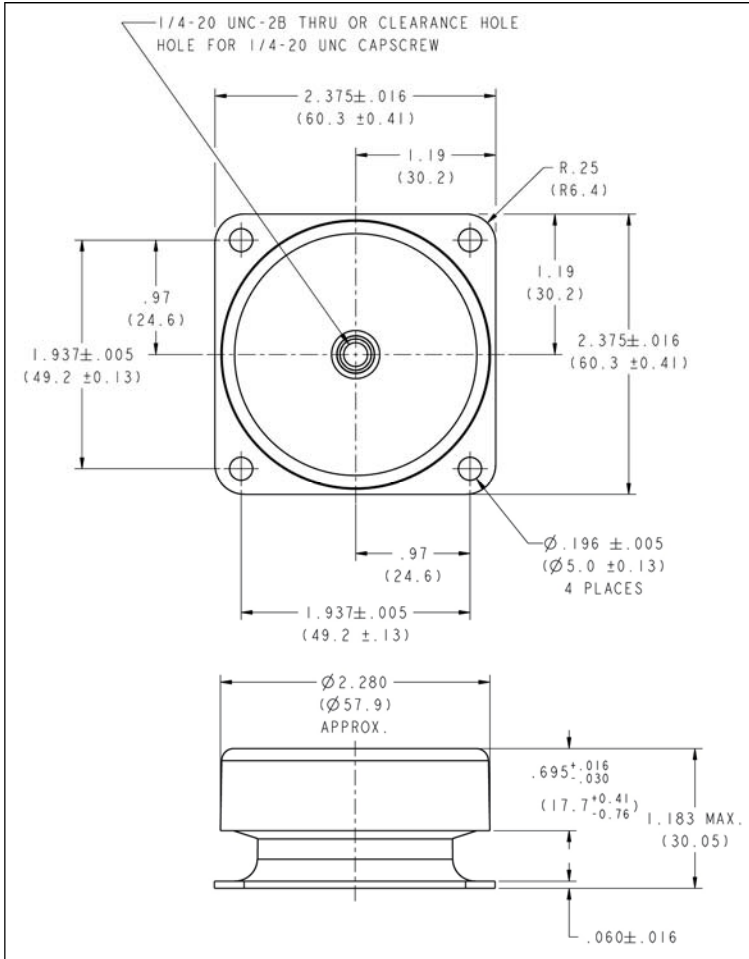
Dimension and Performance Characteristics

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|-----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1870-1NRA | 1 | 20 | 8-14 | 1.17 | Natural Rubber | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-2NRA | 1 | 30 | 14-24 | 1.17 | Natural Rubber | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-3NRA | 1 | 70 | 24-38 | 1.17 | Natural Rubber | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-4NRA | 1 | 100 | 38-60 | 1.17 | Natural Rubber | Zinc Plated Steel | Threaded | 1/4-20 UNC-2B | Ø.196 | 10:1 |
| 1870-1NRB | 1 | 20 | 8-14 | 1.17 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |
| 1870-2NRB | 1 | 30 | 14-24 | 1.17 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |
| 1870-3NRB | 1 | 70 | 24-38 | 1.17 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |
| 1870-4NRB | 1 | 100 | 38-60 | 1.17 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.266 | Ø.196 | 10:1 |

Size 1 Cupmount: 1870

Dimension and Performance Characteristics

D



Size 2 Cupmount Series

A compact, universal mount used in the protection of equipment that is exposed to high shock and vibration environments



Attributes

- Fail-safe
- All-attitude design
- Compact, low profile design
- Easy to install
- High damped Silicone, Neoprene or Natural Rubber
- Zinc plated steel construction
- Can be used in tandem for higher deflection capability

Applications

- Shipboard equipment
- Mobile platforms
- Avionics
- Rack mounted systems
- Military radios
- Weapons system

Load Range

- 1871-1 = load ratings to 50 lbs./mount max.
- 1871-2 = load ratings to 100 lbs./mount max.
- 1871-3 = load ratings to 150 lbs./mount max.
- 1871-4 = load ratings to 250 lbs./mount max.

Shock & Vibe

- Attenuates a 10g, 11 millisecond half-sine shock to 2 g's
- Survives a 30g, 11 millisecond half-sine
- Passes MIL-STD-167 vibration

Specifications

- Natural Frequency—20-45 Hertz
- Transmissibility at resonance—4 max. (Hi-damp Silicone), 10 max. (Neoprene), 10 max. (Natural Rubber)
- Resilient Element—Hi-damp Silicone, Natural Rubber, Neoprene
- Standard materials—Zinc plated steel
- Weight—Size 2 = 1 lb.

Elastomeric Data

- High-Damp Silicone has an operating temperature of -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$) and is resistant to ozone, fungus and most solvents.
- Other elastomeric formulations are available in BUNA-N, Butyl, Polybutadiene and Neoprene.
- Neoprene has an operating range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is used where oil immersion is present.
- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$) and is used in high dynamic amplitude environments.

Size 2 Cupmount: 1871

Dimension and Performance Characteristics



| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1871-1SA | 2 | 50 | 15-30 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 4:1 |
| 1871-2SA | 2 | 100 | 30-50 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 4:1 |
| 1871-3SA | 2 | 150 | 50-80 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 4:1 |
| 1871-4SA | 2 | 250 | 80-105 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 4:1 |
| 1871-1SB | 2 | 50 | 15-30 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 4:1 |
| 1871-2SB | 2 | 100 | 30-50 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 4:1 |
| 1871-3SB | 2 | 150 | 50-80 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 4:1 |
| 1871-4SB | 2 | 250 | 80-105 | 1.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 4:1 |

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1871-1NA | 2 | 50 | 15-30 | 1.56 | Neoprene | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-2NA | 2 | 100 | 30-50 | 1.56 | Neoprene | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-3NA | 2 | 150 | 50-80 | 1.56 | Neoprene | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-4NA | 2 | 250 | 80-105 | 1.56 | Neoprene | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-1NB | 2 | 50 | 15-30 | 1.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |
| 1871-2NB | 2 | 100 | 30-50 | 1.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |
| 1871-3NB | 2 | 150 | 50-80 | 1.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |
| 1871-4NB | 2 | 250 | 80-105 | 1.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |

Size 2 Cupmount: 1871

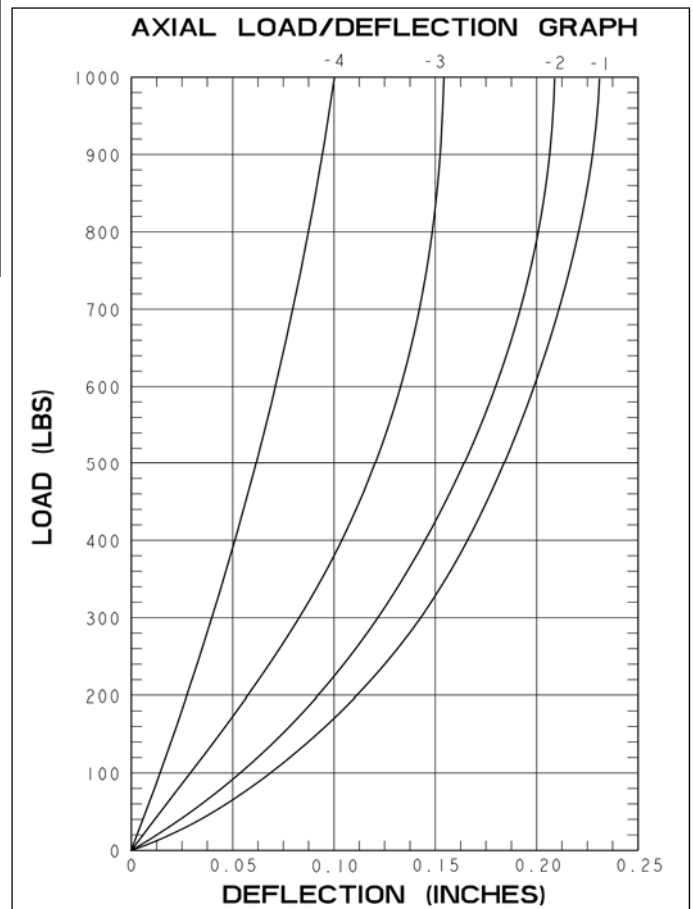
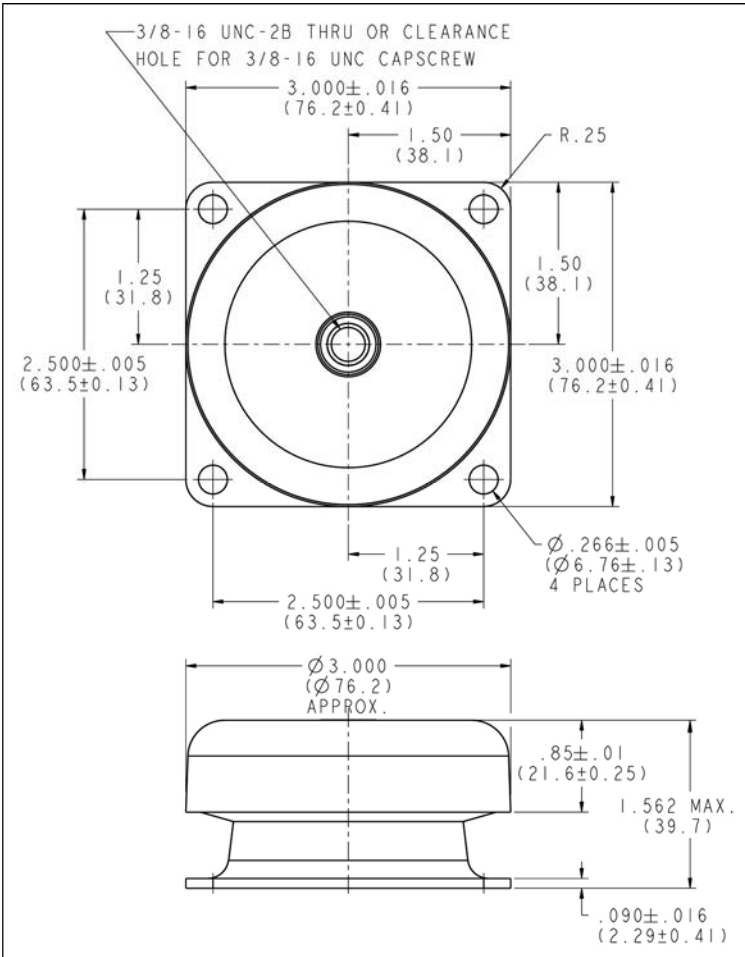
Dimension and Performance Characteristics

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|-----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1871-1NRA | 2 | 50 | 15-30 | 1.56 | Natural Rubber | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-2NRA | 2 | 100 | 30-50 | 1.56 | Natural Rubber | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-3NRA | 2 | 150 | 50-80 | 1.56 | Natural Rubber | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-4NRA | 2 | 250 | 80-105 | 1.56 | Natural Rubber | Zinc Plated Steel | Threaded | 3/8-16 UNC-2B | Ø.266 | 10:1 |
| 1871-1NRB | 2 | 50 | 15-30 | 1.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |
| 1871-2NRB | 2 | 100 | 30-50 | 1.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |
| 1871-3NRB | 2 | 150 | 50-80 | 1.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |
| 1871-4NRB | 2 | 250 | 80-105 | 1.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.391 | Ø.266 | 10:1 |

Size 2 Cupmount: 1871

Dimension and Performance Characteristics

D



Size 3 Cupmount Series

A compact, universal mount used in the protection of equipment that is exposed to high shock and vibration environments



Attributes

- Fail-safe
- All-attitude design
- Compact, low profile design
- Easy to install
- High damped Silicone, Neoprene or Natural Rubber
- Zinc plated steel construction
- Can be used in tandem for higher deflection capability

Applications

- Shipboard equipment
- Mobile platforms
- Avionics
- Rack mounted systems
- Military radios
- Weapons system

Load Range

- 1872-1 = load ratings to 600 lbs./mount max.
- 1872-2 = load ratings to 800 lbs./mount max.
- 1872-3 = load ratings to 1400 lbs./mount max.
- 1872-4 = load ratings to 1800 lbs./mount max.

Shock & Vibe

- Attenuates a 10g, 11 millisecond half-sine shock to 2 g's
- Survives a 30g, 11 millisecond half-sine
- Passes MIL-STD-167 vibration

Specifications

- Natural Frequency—20-45 Hertz
- Transmissibility at resonance—4 max. (Hi-damp Silicone), 10 max. (Neoprene), 10 max. (Natural Rubber)
- Resilient Element—Hi-damp Silicone, Natural Rubber, Neoprene
- Standard materials—Zinc plated steel
- Weight—Size 3 = 10 lbs.

Elastomeric Data

- High-Damp Silicone has an operating temperature of -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$) and is resistant to ozone, fungus and most solvents.
- Other elastomeric formulations are available in BUNA-N, Butyl, Polybutadiene and Neoprene.
- Neoprene has an operating range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is used where oil immersion is present.
- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$) and is used in high dynamic amplitude environments.

Size 3 Cupmount: 1872

Dimension and Performance Characteristics



| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1872-1SA | 3 | 600 | 80-120 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 4:1 |
| 1872-2SA | 3 | 800 | 120-185 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 4:1 |
| 1872-3SA | 3 | 1400 | 185-285 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 4:1 |
| 1872-4SA | 3 | 1800 | 285-530 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 4:1 |
| 1872-1SB | 3 | 600 | 80-120 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 4:1 |
| 1872-2SB | 3 | 800 | 120-185 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 4:1 |
| 1872-3SB | 3 | 1400 | 185-285 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 4:1 |
| 1872-4SB | 3 | 1800 | 285-530 | 3.56 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 4:1 |

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1872-1NA | 3 | 600 | 80-120 | 3.56 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-2NA | 3 | 800 | 120-185 | 3.56 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-3NA | 3 | 1400 | 185-285 | 3.56 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-4NA | 3 | 1800 | 285-530 | 3.56 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-1NB | 3 | 600 | 80-120 | 3.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |
| 1872-2NB | 3 | 800 | 120-185 | 3.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |
| 1872-3NB | 3 | 1400 | 185-285 | 3.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |
| 1872-4NB | 3 | 1800 | 285-530 | 3.56 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |

Size 3 Cupmount: 1872

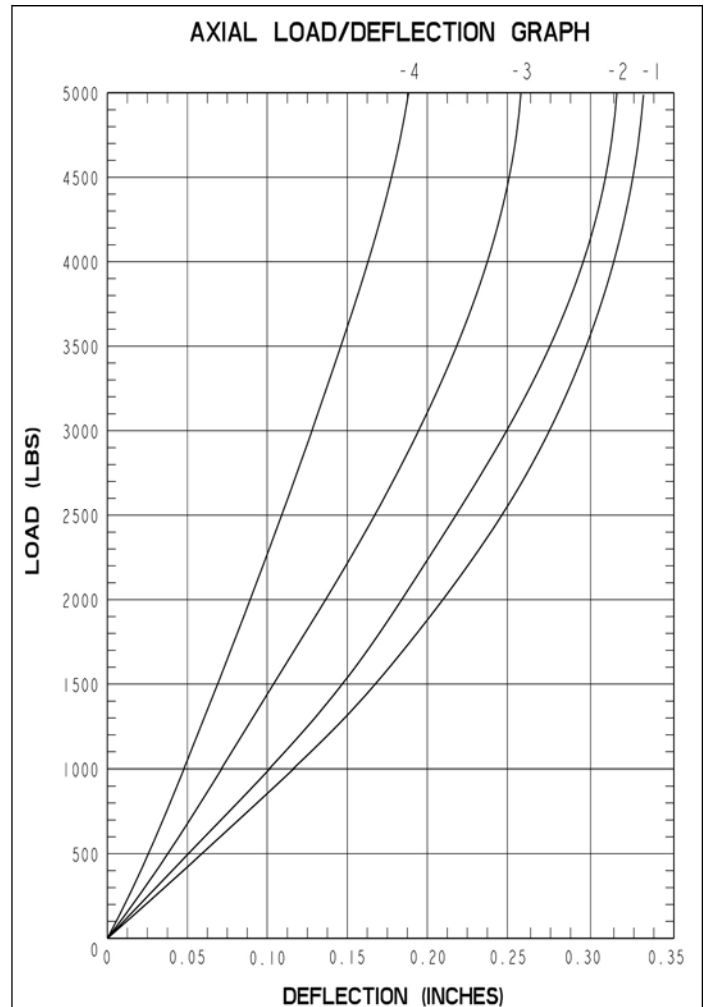
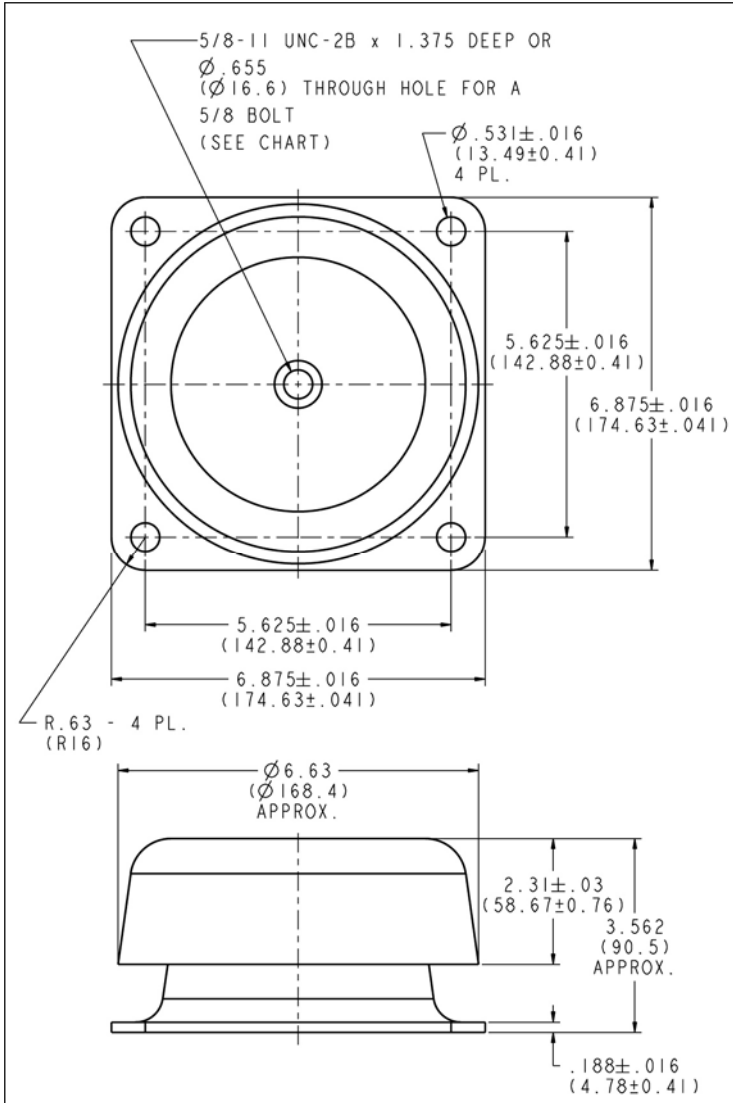
Dimension and Performance Characteristics

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|-----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1872-1NRA | 3 | 600 | 80-120 | 3.56 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-2NRA | 3 | 800 | 120-185 | 3.56 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-3NRA | 3 | 1400 | 185-285 | 3.56 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-4NRA | 3 | 1800 | 285-530 | 3.56 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.531 | 10:1 |
| 1872-1NRB | 3 | 600 | 80-120 | 3.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |
| 1872-2NRB | 3 | 800 | 120-185 | 3.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |
| 1872-3NRB | 3 | 1400 | 185-285 | 3.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |
| 1872-4NRB | 3 | 1800 | 285-530 | 3.56 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.531 | 10:1 |

Size 3 Cupmount: 1872

Dimension and Performance Characteristics

D



Size 4 Cupmount Series

A compact, universal mount used in the protection of equipment that is exposed to high shock and vibration environments



Attributes

- Fail-safe
- All-attitude design
- Compact, low profile design
- Easy to install
- High damped Silicone, Neoprene or Natural Rubber
- Zinc plated steel construction
- Can be used in tandem for higher deflection capability

Applications

- Shipboard equipment
- Mobile platforms
- Avionics
- Rack mounted systems
- Military radios
- Weapons system

Load Range

- 1873-1 = load ratings to 250 lbs./mount max.
- 1873-2 = load ratings to 400 lbs./mount max.
- 1873-3 = load ratings to 650 lbs./mount max.
- 1873-4 = load ratings to 900 lbs./mount max.

Shock & Vibe

- Attenuates a 10g, 11 millisecond half-sine shock to 2 g's
- Survives a 30g, 11 millisecond half-sine
- Passes MIL-STD-167 vibration

Specifications

- Natural Frequency—20-45 Hertz
- Transmissibility at resonance—4 max. (Hi-damp Silicone), 10 max. (Neoprene), 10 max. (Natural Rubber)
- Resilient Element—Hi-damp Silicone, Natural Rubber, Neoprene
- Standard materials—Zinc plated steel
- Weight—Size 4 = 4 lbs.

Elastomeric Data

- High-Damp Silicone has an operating temperature of -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$) and is resistant to ozone, fungus and most solvents.
- Other elastomeric formulations are available in BUNA-N, Butyl, Polybutadiene and Neoprene.
- Neoprene has an operating range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is used where oil immersion is present.
- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$) and is used in high dynamic amplitude environments.

Size 4 Cupmount: 1873

Dimension and Performance Characteristics



| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1873-1SA | 4 | 250 | 65-100 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 4:1 |
| 1873-2SA | 4 | 400 | 100-155 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 4:1 |
| 1873-3SA | 4 | 650 | 155-200 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 4:1 |
| 1873-4SA | 4 | 900 | 200-285 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 4:1 |
| 1873-1SB | 4 | 250 | 65-100 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 4:1 |
| 1873-2SB | 4 | 400 | 100-155 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 4:1 |
| 1873-3SB | 4 | 650 | 155-200 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 4:1 |
| 1873-4SB | 4 | 900 | 200-285 | 2.63 | Hi-Damp Silicone | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 4:1 |

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1873-1NA | 4 | 250 | 65-100 | 2.63 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-2NA | 4 | 400 | 100-155 | 2.63 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-3NA | 4 | 650 | 155-200 | 2.63 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-4NA | 4 | 900 | 200-285 | 2.63 | Neoprene | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-1NB | 4 | 250 | 65-100 | 2.63 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |
| 1873-2NB | 4 | 400 | 100-155 | 2.63 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |
| 1873-3NB | 4 | 650 | 155-200 | 2.63 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |
| 1873-4NB | 4 | 900 | 200-285 | 2.63 | Neoprene | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |

Size 4 Cupmount: 1873

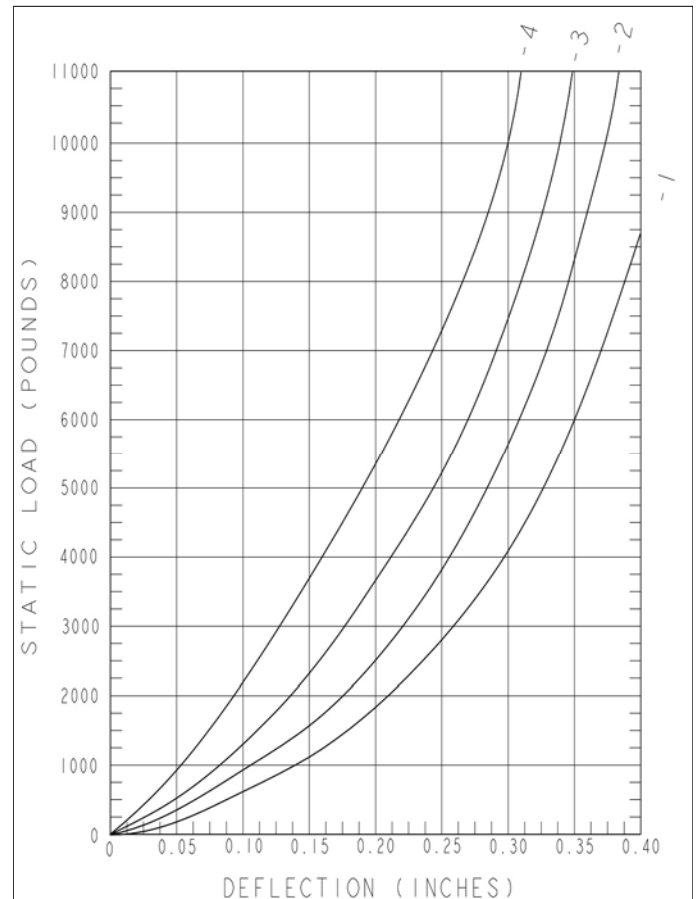
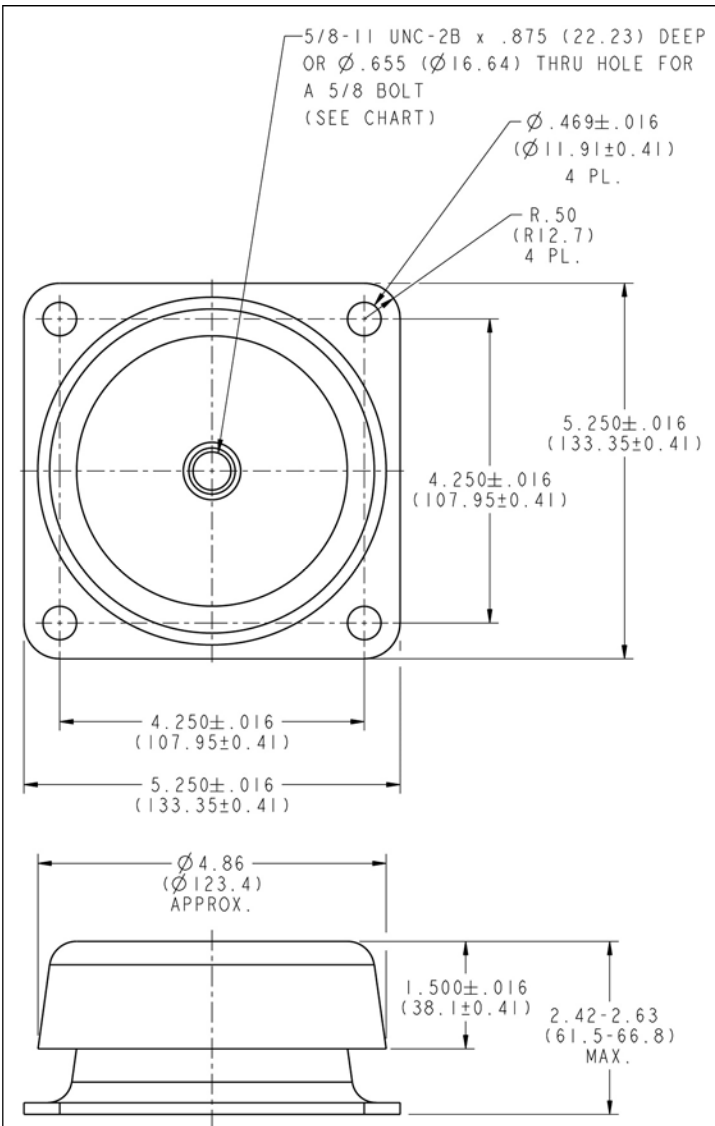
Dimension and Performance Characteristics

| Part # | Size | Maximum Load (lbs.) | Load Range Shock lbs. | Free Height | Resilient Material | Structural Material | Core Style | Center Hole | Flange Holes | Transmissibility at Resonance Max. |
|-----------|------|---------------------|-----------------------|-------------|--------------------|---------------------|------------|---------------|--------------|------------------------------------|
| 1873-1NRA | 4 | 250 | 65-100 | 2.63 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-2NRA | 4 | 400 | 100-155 | 2.63 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-3NRA | 4 | 650 | 155-200 | 2.63 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-4NRA | 4 | 900 | 200-285 | 2.63 | Natural Rubber | Zinc Plated Steel | Threaded | 5/8-11 UNC-2B | Ø.469 | 10:1 |
| 1873-1NRB | 4 | 250 | 65-100 | 2.63 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |
| 1873-2NRB | 4 | 400 | 100-155 | 2.63 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |
| 1873-3NRB | 4 | 650 | 155-200 | 2.63 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |
| 1873-4NRB | 4 | 900 | 200-285 | 2.63 | Natural Rubber | Zinc Plated Steel | Thru Hole | Ø.655 | Ø.469 | 10:1 |

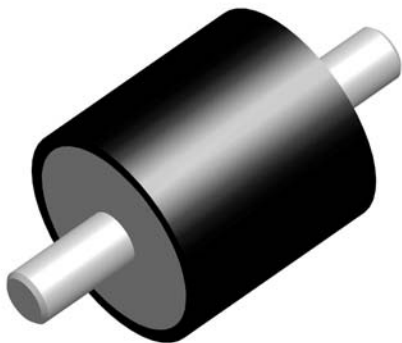
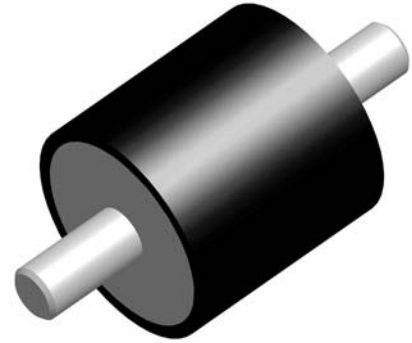
Size 4 Cupmount: 1873

Dimension and Performance Characteristics

D

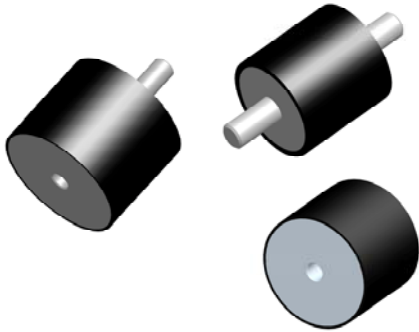


CYLINDRICAL MOUNT SERIES



Cylindrical Mount Series

Industry standard easy to install, low-cost stud type mounts for vibration, shock and motion accommodation



Applications

- Small industrial equipment
- HVAC equipment
- Business equipment
- Air compressors (no mobile)

E

Attributes

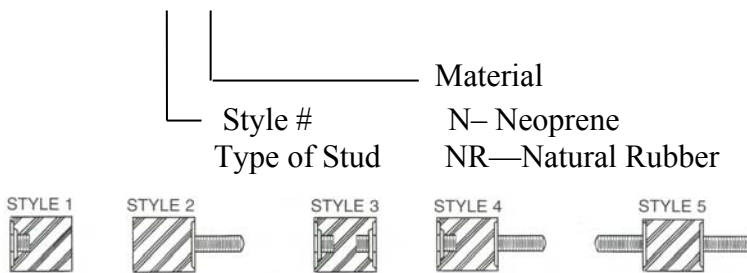
- Easy to install
- Low-cost
- Numerous configuration
- Compact

Benefits

- Simple design and sturdy construction permit their use in a wide variety of industrial applications

How to order cylindrical mounts

EP1000-101-2-N



Load Range Axial Compression

- EP1000 = load ratings from 3.0—27.2 lbs.
- EP1100 = load ratings from 2.5—45 lbs.
- EP1105 = load ratings from 5.0—18 lbs.
- EP1200 = load ratings from 6.0—92 lbs.
- EP1300 = load ratings from 9.2—380 lbs.
- EP1400 = load ratings from 20—220 lbs.
- EP1500 = load ratings from 37—560 lbs.
- EP1600 = load ratings from 44—180 lbs.
- EP1700 = load ratings from 110—230 lbs.
- EP1830 = load ratings from 80—400 lbs.
- EP1810 = load ratings from 60—780 lbs.

Specifications

- Natural Frequency—10-30 Hertz
- Transmissibility at resonance—10:1
- Resilient Element—Neoprene and Natural Rubber
- Materials—Low carbon steel, zinc plate

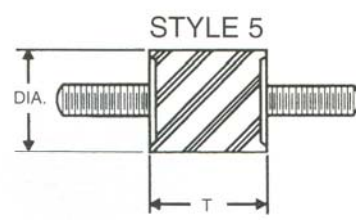
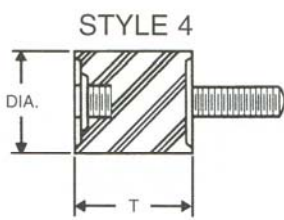
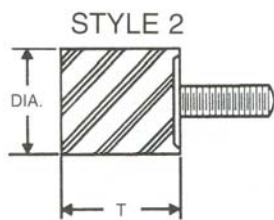
Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to oils, most solvents and ozone
- Natural Rubber has an operating temperature range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$)
- Other materials are available on special order to meet specific operating characteristics

Cylindrical Mount Series: 6-32 Threads

*Ordering example: EP1000-101-(5)-(N) = 3/8 dia x 5/16 long, 3 lbs. load, Style 5, Neoprene

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1000-101-(-)(-) | 2,4,5 | 3/8 | 5/16 | 3/8 | .5 | 3.0 |
| EP1000-102-(-)(-) | | | | | .7 | 4.0 |
| EP1000-103-(-)(-) | | | | | 1.0 | 5.0 |
| EP1000-104-(-)(-) | | | | | 1.2 | 6.0 |
| EP1000-105-(-)(-) | | | | | 1.5 | 7.0 |
| EP1000-121-(-)(-) | 2,4,5 | 7/16 | 7/16 | 3/8 | 2.0 | 4.2 |
| EP1000-122-(-)(-) | | | | | 2.9 | 5.7 |
| EP1000-123-(-)(-) | | | | | 4.2 | 8.5 |
| EP1000-124-(-)(-) | | | | | 5.8 | 10.4 |
| EP1000-125-(-)(-) | | | | | 6.9 | 11.9 |
| EP1000-131-(-)(-) | 2,4,5 | 7/16 | 1/2 | 3/8 | 2.7 | 4.9 |
| EP1000-132-(-)(-) | | | | | 3.6 | 6.4 |
| EP1000-133-(-)(-) | | | | | 5.6 | 10.4 |
| EP1000-134-(-)(-) | | | | | 6.4 | 13.3 |
| EP1000-135-(-)(-) | | | | | 7.4 | 15.8 |
| EP1000-141-(-)(-) | 2,4,5 | 1/2 | 1/2 | 3/8 | 3.6 | 6.5 |
| EP1000-142-(-)(-) | | | | | 4.5 | 9.2 |
| EP1000-143-(-)(-) | | | | | 7.3 | 13.2 |
| EP1000-144-(-)(-) | | | | | 9.2 | 19.3 |
| EP1000-145-(-)(-) | | | | | 11.2 | 27.2 |



AVAILABLE IN NATURAL AND NEOPRENE

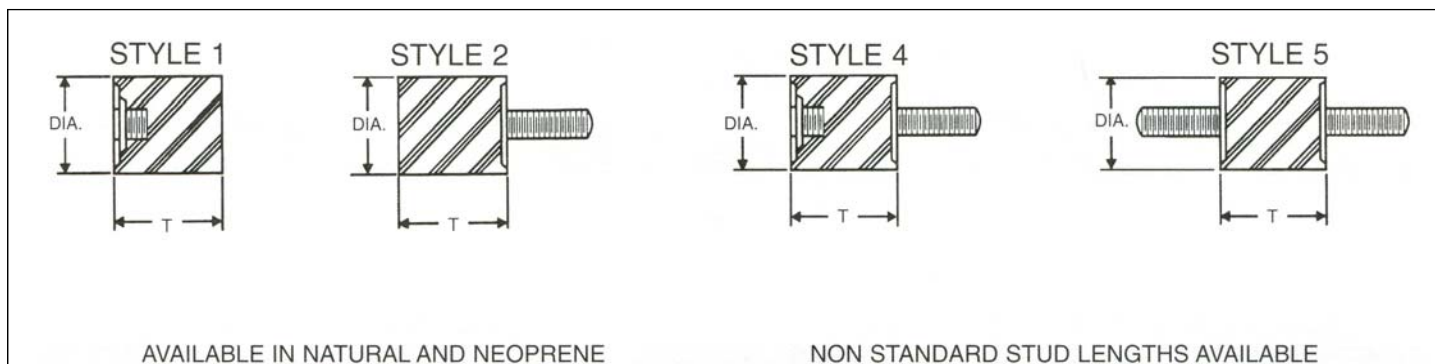
NON STANDARD STUD LENGTHS AVAILABLE

Cylindrical Mount Series: 8-32 Threads

*Ordering example: EP1100-101-(5)-(NR) = 3/8 dia x 1/4 long, 3 lbs. load, Style 5, Natural Rubber

E

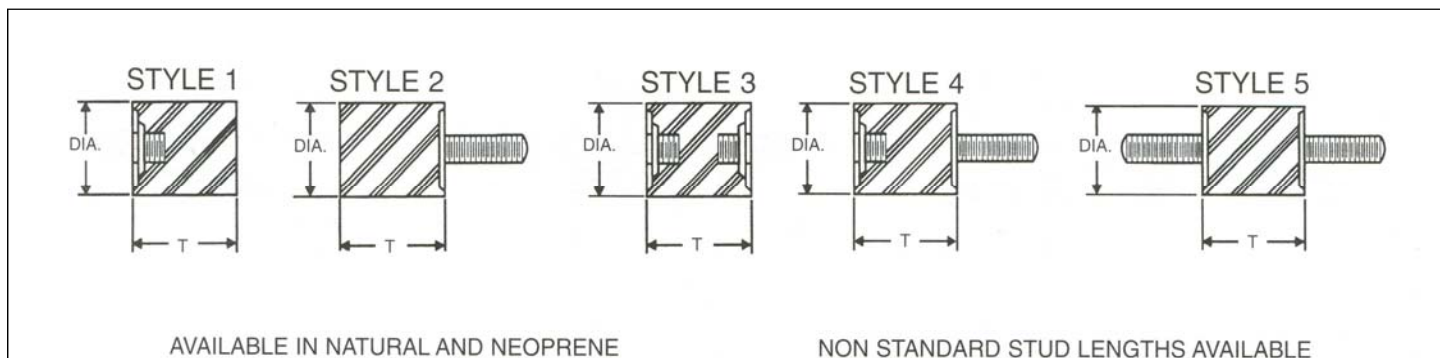
| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|--------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1100-101-(-)-(-) | 1, 2, 4, 5 | 3/8 | 1/4 | 3/8 | .5 | 3.0 |
| EP1100-102-(-)-(-) | | | | | .7 | 4.0 |
| EP1100-103-(-)-(-) | | | | | 1.0 | 5.0 |
| EP1100-104-(-)-(-) | | | | | 1.2 | 6.0 |
| EP1100-105-(-)-(-) | | | | | 1.5 | 7.0 |
| EP1100-106-(-)-(-) | 2, 5 | 3/8 | 5/32 | 3/8 | .3 | 2.5 |
| EP1100-107-(-)-(-) | | | | | .5 | 3.5 |
| EP1100-108-(-)-(-) | | | | | .8 | 4.5 |
| EP1100-109-(-)-(-) | | | | | 1.0 | 5.5 |
| EP1100-110-(-)-(-) | | | | | 1.2 | 6.5 |
| EP1100-111-(-)-(-) | 1, 2, 4, 5 | 3/8 | 1/2 | 3/8 | .8 | 4.5 |
| EP1100-112-(-)-(-) | | | | | 1.2 | 6.2 |
| EP1100-113-(-)-(-) | | | | | 1.7 | 8.0 |
| EP1100-114-(-)-(-) | | | | | 1.9 | 9.5 |
| EP1100-115-(-)-(-) | | | | | 2.3 | 10.9 |
| EP1100-116-(-)-(-) | 2, 5 | 3/8 | 5/16 | 3/8 | .5 | 3.0 |
| EP1100-117-(-)-(-) | | | | | .7 | 4.0 |
| EP1100-118-(-)-(-) | | | | | 1.0 | 5.0 |
| EP1100-119-(-)-(-) | | | | | 1.2 | 6.0 |
| EP1100-120-(-)-(-) | | | | | 1.5 | 7.0 |



Cylindrical Mount Series: 8-32 Threads

*Ordering example: EP1100-121-(5)-(N) = 7/16 dia x 1/2 long, 4.9 lbs. load, Style 5, Neoprene

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1100-121-(-)(-) | 1, 2, 3, 4, 5 | 7/16 | 1/2 | 3/8 | 2.7 | 4.9 |
| EP1100-122-(-)(-) | | | | | 3.6 | 6.4 |
| EP1100-123-(-)(-) | | | | | 5.6 | 10.4 |
| EP1100-124-(-)(-) | | | | | 6.4 | 13.3 |
| EP1100-125-(-)(-) | | | | | 7.4 | 15.8 |
| EP1100-126-(-)(-) | 1, 2, 3, 4, 5 | 1/2 | 3/4 | 3/8 | 8.5 | 22.0 |
| EP1100-127-(-)(-) | | | | | 12.0 | 29.0 |
| EP1100-128-(-)(-) | | | | | 16.0 | 35.0 |
| EP1100-129-(-)(-) | | | | | 20.0 | 40.0 |
| EP1100-130-(-)(-) | | | | | 25.0 | 45.0 |
| EP1100-131-(-)(-) | 1, 2, 3, 4, 5 | 9/16 | 1/2 | 3/8 | 4.4 | 8.0 |
| EP1100-132-(-)(-) | | | | | 6.7 | 12.0 |
| EP1100-133-(-)(-) | | | | | 9.0 | 16.0 |
| EP1100-134-(-)(-) | | | | | 12.0 | 25.0 |
| EP1100-135-(-)(-) | | | | | 15.0 | 33.0 |
| EP1100-136-(-)(-) | 1, 2, 3, 4, 5 | 9/16 | .66 | 3/8 | 4.2 | 7.8 |
| EP1100-137-(-)(-) | | | | | 6.3 | 11.5 |
| EP1100-138-(-)(-) | | | | | 8.5 | 15.3 |
| EP1100-139-(-)(-) | | | | | 11.4 | 22.2 |
| EP1100-140-(-)(-) | | | | | 14.1 | 45.0 |

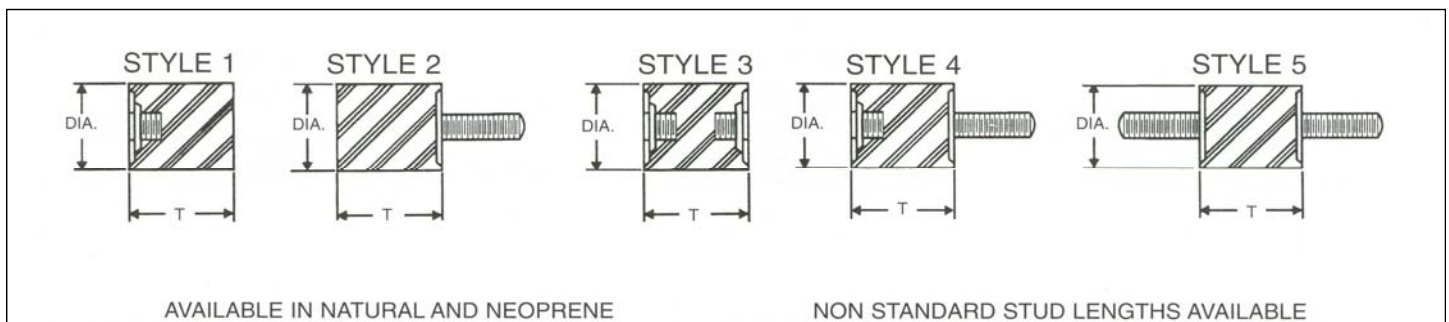


Cylindrical Mount Series: 8-32 Threads

*Ordering example: EP1100-141-(5)-(N) = 9/16 dia x 3/4 long, 22 lbs. load, Style 5, Neoprene

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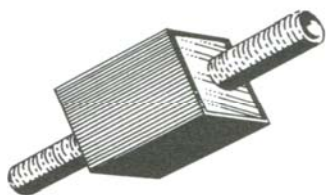
| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1100-141-(-)(-) | 1, 2, 3, 4, 5 | 9/16 | 3/4 | 3/8 | 8.5 | 22.0 |
| EP1100-142-(-)(-) | | | | | 12.0 | 29.0 |
| EP1100-143-(-)(-) | | | | | 16.0 | 35.0 |
| EP1100-144-(-)(-) | | | | | 20.0 | 40.0 |
| EP1100-145-(-)(-) | | | | | 25.0 | 45.0 |
| EP1100-146-(-)(-) | 1, 2, 3, 4, 5 | 7/16 | 7/16 | 3/8 | 2.0 | 4.2 |
| EP1100-147-(-)(-) | | | | | 2.9 | 5.7 |
| EP1100-148-(-)(-) | | | | | 4.2 | 8.5 |
| EP1100-149-(-)(-) | | | | | 5.8 | 10.4 |
| EP1100-150-(-)(-) | | | | | 6.9 | 11.9 |
| EP1100-151-(-)(-) | 1, 2, 3, 4, 5 | 5/8 | 1/2 | 3/8 | 4.6 | 9.0 |
| EP1100-152-(-)(-) | | | | | 6.8 | 13.0 |
| EP1100-153-(-)(-) | | | | | 9.5 | 17.0 |
| EP1100-154-(-)(-) | | | | | 13.0 | 26.0 |
| EP1100-155-(-)(-) | | | | | 15.0 | 31.0 |
| EP1100-161-(-)(-) | 1, 2, 3, 4, 5 | 3/4 | 1/2 | 3/8 | 8.0 | 22.0 |
| EP1100-162-(-)(-) | | | | | 11.0 | 29.0 |
| EP1100-163-(-)(-) | | | | | 15.0 | 35.0 |
| EP1100-164-(-)(-) | | | | | 18.0 | 18.0 |
| EP1100-165-(-)(-) | | | | | 21.0 | 21.0 |



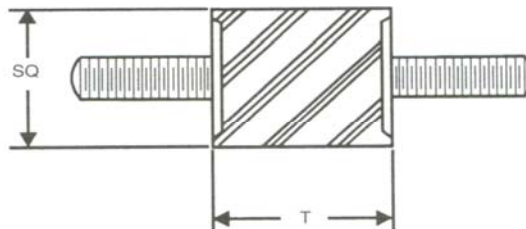
Rectangular Mount Series: 8-32 Threads

*Ordering example: EP1105-801-(N) = 5/16 long, 6.5 lbs. load, Neoprene

| PART NUMBER | SQ (square) (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|----------------|-------------------------|------------|----------------------------------|----------------------------|-------------|
| | | | | Shear | Compression |
| EP1105-801-(-) | 3/8 | 5/16 | 7/32 | 4.5 | 6.5 |
| EP1105-802-(-) | 3/8 | 5/16 | 7/32 | 5.5 | 9.0 |
| EP1105-803-(-) | 3/8 | 5/16 | 7/32 | 8.0 | 12.0 |
| EP1105-804-(-) | 3/8 | 5/16 | 7/32 | 10.0 | 15.5 |
| EP1105-805-(-) | 3/8 | 5/16 | 7/32 | 12.5 | 18.0 |
| EP1105-811-(-) | 3/8 | 1/2 | 3/8 | 2.5 | 5.0 |
| EP1105-812-(-) | 3/8 | 1/2 | 3/8 | 3.5 | 6.5 |
| EP1105-813-(-) | 3/8 | 1/2 | 3/8 | 5.5 | 11.0 |
| EP1105-814-(-) | 3/8 | 1/2 | 3/8 | 7.0 | 14.0 |
| EP1105-815-(-) | 3/8 | 1/2 | 3/8 | 8.5 | 17.0 |



AVAILABLE IN NATURAL AND NEOPRENE



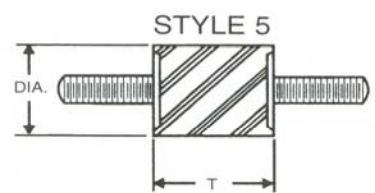
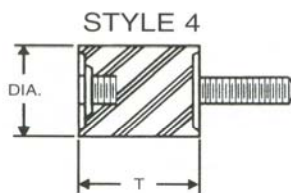
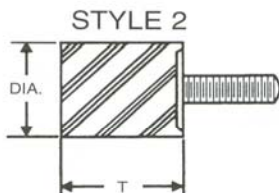
NON STANDARD STUD LENGTHS AVAILABLE

Cylindrical Mount Series: 10-32 Threads

*Ordering example: EP1200-101-(5)-(N) = 9/16 dia x 1/2 long, 8 lbs. load, Style 5, Neoprene

E

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|--------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1200-101-(-)-(-) | 2, 4, 5 | 9/16 | 1/2 | 3/8 | 4.4 | 8.0 |
| EP1200-102-(-)-(-) | | | | | 6.7 | 12.0 |
| EP1200-103-(-)-(-) | | | | | 9.4 | 16.0 |
| EP1200-104-(-)-(-) | | | | | 12.0 | 25.0 |
| EP1200-105-(-)-(-) | | | | | 15.0 | 33.0 |
| EP1200-106-(-)-(-) | 2, 5 | 9/16 | 5/16 | 3/8 | 3.0 | 6.0 |
| EP1200-107-(-)-(-) | | | | | 5.2 | 8.0 |
| EP1200-108-(-)-(-) | | | | | 7.0 | 12.0 |
| EP1200-109-(-)-(-) | | | | | 9.0 | 19.0 |
| EP1200-110-(-)-(-) | | | | | 11.0 | 27.0 |
| EP1200-121-(-)-(-) | 2, 4, 5 | 3/4 | 5/8 | 3/8 | 9.0 | 23.0 |
| EP1200-122-(-)-(-) | | | | | 12.0 | 30.0 |
| EP1200-123-(-)-(-) | | | | | 16.0 | 37.0 |
| EP1200-124-(-)-(-) | | | | | 18.5 | 41.0 |
| EP1200-125-(-)-(-) | | | | | 21.0 | 45.5 |
| EP1200-131-(-)-(-) | 2, 5 | 1 | 3/8 | 3/8 | 8.5 | 21.0 |
| EP1200-132-(-)-(-) | | | | | 1.2 | 31.0 |
| EP1200-133-(-)-(-) | | | | | 17.5 | 36.5 |
| EP1200-134-(-)-(-) | | | | | 18.0 | 40.0 |
| EP1200-135-(-)-(-) | | | | | 22.0 | 46.0 |
| EP1200-141-(-)-(-) | 2, 4, 5 | 1 | 3/4 | 3/8 | 18.0 | 35.0 |
| EP1200-142-(-)-(-) | | | | | 25.0 | 45.0 |
| EP1200-143-(-)-(-) | | | | | 34.0 | 60.0 |
| EP1200-144-(-)-(-) | | | | | 40.0 | 80.0 |
| EP1200-145-(-)-(-) | | | | | 48.0 | 92.0 |



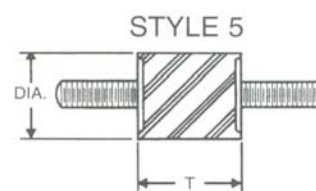
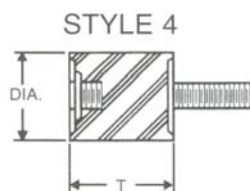
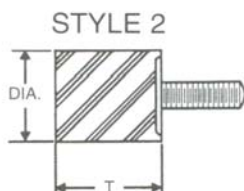
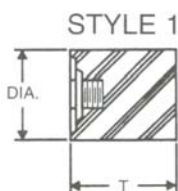
AVAILABLE IN NATURAL AND NEOPRENE

NON STANDARD STUD LENGTHS AVAILABLE

Cylindrical Mount Series: 1/4-20 Threads

*Ordering example: EP1300-101-(5)-(N) = 5/8 dia x 5/8 long, 9.2 lbs. load, Style 5, Neoprene

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1300-101-(-)(-) | 1, 2, 4, 5 | 5/8 | 5/8 | 1/2 | 5.2 | 9.2 |
| EP1300-102-(-)(-) | | | | | 7.3 | 13.1 |
| EP1300-103-(-)(-) | | | | | 10.1 | 17.0 |
| EP1300-104-(-)(-) | | | | | 13.2 | 24.0 |
| EP1300-105-(-)(-) | | | | | 14.0 | 28.0 |
| EP1300-111-(-)(-) | 2, 4, 5 | 3/4 | 3/8 | 1/2 | 8.5 | 22.0 |
| EP1300-112-(-)(-) | | | | | 12.0 | 29.0 |
| EP1300-113-(-)(-) | | | | | 16.0 | 35.0 |
| EP1300-114-(-)(-) | | | | | 20.0 | 40.0 |
| EP1300-115-(-)(-) | | | | | 25.0 | 45.0 |
| EP1300-116-(-)(-) | 2, 4, 5 | 1 | 1/4 | 1/2 | 10.0 | 22.0 |
| EP1300-117-(-)(-) | | | | | 12.5 | 32.0 |
| EP1300-118-(-)(-) | | | | | 17.0 | 36.5 |
| EP1300-119-(-)(-) | | | | | 19.5 | 43.0 |
| EP1300-120-(-)(-) | | | | | 21.0 | 46.5 |
| EP1300-121-(-)(-) | 1, 2, 4, 5 | 3/4 | 1/2 | 1/2 | 8.5 | 22.0 |
| EP1300-122-(-)(-) | | | | | 13.0 | 30.0 |
| EP1300-123-(-)(-) | | | | | 16.5 | 36.0 |
| EP1300-124-(-)(-) | | | | | 19.2 | 42.5 |
| EP1300-125-(-)(-) | | | | | 26.5 | 47.0 |
| EP1300-126-(-)(-) | 2, 5 | 1 | 3/8 | 1/2 | 9.0 | 20.0 |
| EP1300-127-(-)(-) | | | | | 11.5 | 30.0 |
| EP1300-128-(-)(-) | | | | | 15.5 | 35.0 |
| EP1300-129-(-)(-) | | | | | 18.0 | 41.0 |
| EP1300-130-(-)(-) | | | | | 20.5 | 45.0 |



AVAILABLE IN NATURAL AND NEOPRENE

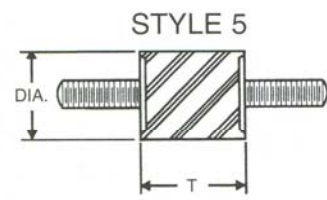
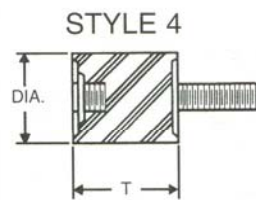
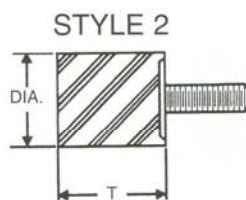
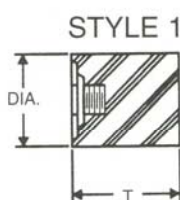
NON STANDARD STUD LENGTHS AVAILABLE

Cylindrical Mount Series: 1/4-20 Threads

*Ordering example: EP1300-131-(5)-(N) = 3/4 dia x 5/8 long, 23 lbs. load, Style 5, Neoprene

E

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1300-131-(-)(-) | 1, 2, 4, 5 | 3/4 | 5/8 | 1/2 | 9.0 | 23.0 |
| EP1300-132-(-)(-) | | | | | 12.0 | 30.0 |
| EP1300-133-(-)(-) | | | | | 16.0 | 37.0 |
| EP1300-134-(-)(-) | | | | | 18.5 | 41.0 |
| EP1300-135-(-)(-) | | | | | 21.0 | 45.5 |
| EP1300-136-(-)(-) | 1, 2, 4, 5 | 3/4 | 3/4 | 1/2 | 9.5 | 24.0 |
| EP1300-137-(-)(-) | | | | | 14.0 | 32.0 |
| EP1300-138-(-)(-) | | | | | 18.0 | 38.0 |
| EP1300-139-(-)(-) | | | | | 21.0 | 45.0 |
| EP1300-140-(-)(-) | | | | | 28.5 | 50.0 |
| EP1300-141-(-)(-) | 1, 2, 4, 5 | 3/4 | 1 | 1/2 | 8.0 | 22.5 |
| EP1300-142-(-)(-) | | | | | 12.5 | 30.5 |
| EP1300-143-(-)(-) | | | | | 17.0 | 36.5 |
| EP1300-144-(-)(-) | | | | | 20.0 | 43.0 |
| EP1300-145-(-)(-) | | | | | 27.0 | 48.5 |
| EP1300-146-(-)(-) | 1, 2, 4, 5 | 1 | 17/32 | 1/2 | 19.0 | 40.0 |
| EP1300-147-(-)(-) | | | | | 21.0 | 43.0 |
| EP1300-148-(-)(-) | | | | | 37.0 | 74.0 |
| EP1300-149-(-)(-) | | | | | 42.0 | 175.0 |
| EP1300-150-(-)(-) | | | | | 49.0 | 380.0 |
| EP1300-151-(-)(-) | 1, 2, 4, 5 | 1 | 3/4 | 1/2 | 18.0 | 35.0 |
| EP1300-152-(-)(-) | | | | | 25.0 | 45.0 |
| EP1300-153-(-)(-) | | | | | 34.0 | 60.0 |
| EP1300-154-(-)(-) | | | | | 40.0 | 80.0 |
| EP1300-155-(-)(-) | | | | | 45.0 | 88.0 |



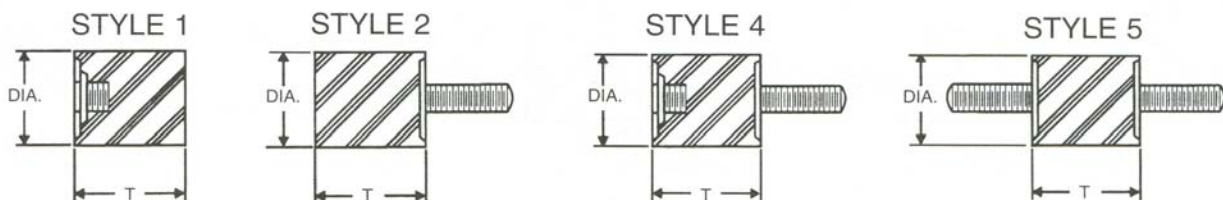
AVAILABLE IN NATURAL AND NEOPRENE

NON STANDARD STUD LENGTHS AVAILABLE

Cylindrical Mount Series: 1/4-20 Threads

*Ordering example: EP1300-156-(5)-(N) = 1" dia x 5/8 long, 37.5 lbs. load, Style 5, Neoprene

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1300-156-(-)(-) | 1, 2, 4, 5 | 1 | 5/8 | 1/2 | 18.5 | 37.5 |
| EP1300-157-(-)(-) | | | | | 23.0 | 44.0 |
| EP1300-158-(-)(-) | | | | | 35.0 | 57.0 |
| EP1300-159-(-)(-) | | | | | 41.0 | 77.0 |
| EP1300-160-(-)(-) | | | | | 47.0 | 84.0 |
| EP1300-161-(-)(-) | 1, 2, 4, 5 | 1 | 1 | 1/2 | 15.0 | 37.0 |
| EP1300-162-(-)(-) | | | | | 23.0 | 50.0 |
| EP1300-163-(-)(-) | | | | | 35.0 | 62.0 |
| EP1300-164-(-)(-) | | | | | 43.0 | 85.0 |
| EP1300-165-(-)(-) | | | | | 48.0 | 91.0 |
| EP1300-166-(-)(-) | 1, 2, 4, 5 | 1 | 1 1/4 | 1/2 | 13.0 | 34.5 |
| EP1300-167-(-)(-) | | | | | 21.5 | 48.0 |
| EP1300-168-(-)(-) | | | | | 33.0 | 60.0 |
| EP1300-169-(-)(-) | | | | | 41.0 | 83.5 |
| EP1300-170-(-)(-) | | | | | 46.5 | 89.0 |
| EP1300-171-(-)(-) | 1, 2, 4, 5 | 1 1/4 | 3/4 | 1/2 | 30.0 | 55.0 |
| EP1300-172-(-)(-) | | | | | 40.0 | 75.0 |
| EP1300-173-(-)(-) | | | | | 50.0 | 100 |
| EP1300-174-(-)(-) | | | | | 60.0 | 140 |
| EP1300-175-(-)(-) | | | | | 70.0 | 160 |
| EP1300-176-(-)(-) | 1, 2, 4, 5 | 1 1/4 | 1 | 1/2 | 32.0 | 56.0 |
| EP1300-177-(-)(-) | | | | | 37.0 | 82.0 |
| EP1300-178-(-)(-) | | | | | 48.0 | 115 |
| EP1300-179-(-)(-) | | | | | 63.0 | 123 |
| EP1300-180-(-)(-) | | | | | 72.0 | 130 |



AVAILABLE IN NATURAL AND NEOPRENE

NON STANDARD STUD LENGTHS AVAILABLE

Cylindrical Mount Series: 5/16-18 Threads

*Ordering example: EP1400-091-(5)-(N) = 3/4 dia x 1" long, 25 lbs. load, Style 5, Neoprene

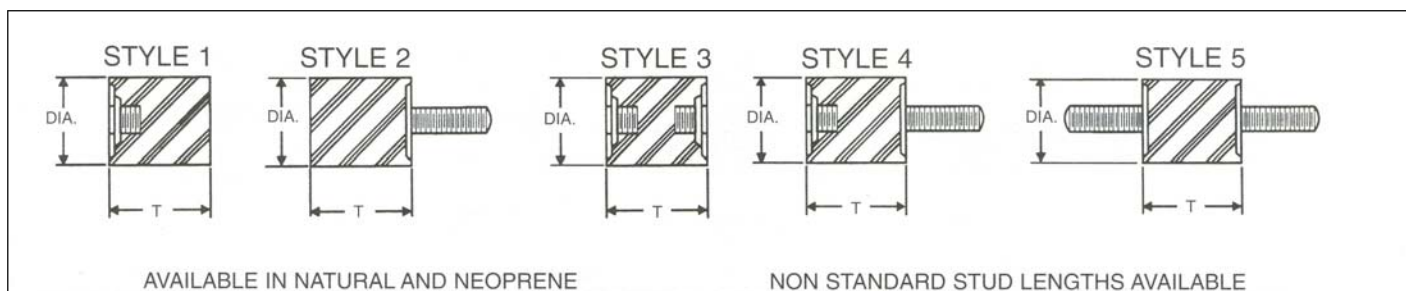
E

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1400-091-(-)(-) | 1, 2, 4, 5 | 3/4 | 1 | 1/2 | 10.0 | 25.0 |
| EP1400-092-(-)(-) | | | | | 13.0 | 30.0 |
| EP1400-093-(-)(-) | | | | | 15.8 | 39.0 |
| EP1400-094-(-)(-) | | | | | 22.0 | 47.0 |
| EP1400-095-(-)(-) | | | | | 31.0 | 59.0 |
| EP1400-096-(-)(-) | 1, 2, 4, 5 | 3/4 | 5/8 | 1/2 | 9.0 | 23.0 |
| EP1400-097-(-)(-) | | | | | 12.0 | 30.0 |
| EP1400-098-(-)(-) | | | | | 16.0 | 37.0 |
| EP1400-099-(-)(-) | | | | | 18.5 | 41.0 |
| EP1400-100-(-)(-) | | | | | 21.0 | 45.5 |
| EP1400-101-(-)(-) | 1, 2, 5 | 1 | 5/8 | 1/2 | 19.0 | 37.0 |
| EP1400-102-(-)(-) | | | | | 23.5 | 44.5 |
| EP1400-103-(-)(-) | | | | | 35.5 | 56.0 |
| EP1400-104-(-)(-) | | | | | 41.0 | 77.0 |
| EP1400-105-(-)(-) | | | | | 47.5 | 84.0 |
| EP1400-106-(-)(-) | 1, 2, 4, 5 | 1 | 17/32 | 1/2 | 20.0 | 39.0 |
| EP1400-107-(-)(-) | | | | | 22.0 | 44.0 |
| EP1400-108-(-)(-) | | | | | 37.0 | 54.0 |
| EP1400-109-(-)(-) | | | | | 42.0 | 74.0 |
| EP1400-110-(-)(-) | | | | | 50.0 | 80.0 |
| EP1400-111-(-)(-) | 1, 2, 4, 5 | 1 | 3/4 | 1/2 | 18.0 | 35.0 |
| EP1400-112-(-)(-) | | | | | 25.0 | 45.0 |
| EP1400-113-(-)(-) | | | | | 34.0 | 60.0 |
| EP1400-114-(-)(-) | | | | | 40.0 | 80.0 |
| EP1400-115-(-)(-) | | | | | 45.0 | 88.0 |
| EP1400-116-(-)(-) | 2, 5 | 1 | 3/8 | 1/2 | 9.0 | 20.0 |
| EP1400-117-(-)(-) | | | | | 11.5 | 30.0 |
| EP1400-118-(-)(-) | | | | | 15.5 | 35.0 |
| EP1400-119-(-)(-) | | | | | 18.0 | 41.0 |
| EP1400-120-(-)(-) | | | | | 20.5 | 45.0 |

Cylindrical Mount Series: 5/16-18 Threads

*Ordering example: EP1400-121-(2)-(NR) = 1" dia x 1" long, 37 lbs. load, Style 2, Natural Rubber

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1400-121-(-)(-) | 1, 2, 3, 4, 5 | 1 | 1 | 1/2 | 15.0 | 37.0 |
| EP1400-122-(-)(-) | | | | | 23.0 | 50.0 |
| EP1400-123-(-)(-) | | | | | 35.0 | 62.0 |
| EP1400-124-(-)(-) | | | | | 43.0 | 85.0 |
| EP1400-125-(-)(-) | | | | | 48.0 | 91.0 |
| EP1400-126-(-)(-) | 1, 2, 4, 5 | 3/4 | 3/4 | 1/2 | 9.5 | 24.0 |
| EP1400-127-(-)(-) | | | | | 14.0 | 32.0 |
| EP1400-128-(-)(-) | | | | | 18.0 | 38.0 |
| EP1400-129-(-)(-) | | | | | 22.0 | 45.0 |
| EP1400-130-(-)(-) | | | | | 28.5 | 50.0 |
| EP1400-131-(-)(-) | 1, 2, 4, 5 | 1 | 1 1/4 | 5/8 | 16.5 | 40.0 |
| EP1400-132-(-)(-) | | | | | 25.0 | 52.0 |
| EP1400-133-(-)(-) | | | | | 37.0 | 63.0 |
| EP1400-134-(-)(-) | | | | | 45.0 | 87.0 |
| EP1400-135-(-)(-) | | | | | 50.0 | 98.0 |
| EP1400-146-(-)(-) | 2 | 3/4 | 3/8 | 1/2 | N/A | 22.0 |
| EP1400-147-(-)(-) | | | | | N/A | 28.5 |
| EP1400-148-(-)(-) | | | | | N/A | 35.0 |
| EP1400-149-(-)(-) | | | | | N/A | 41.0 |
| EP1400-150-(-)(-) | | | | | N/A | 48.5 |

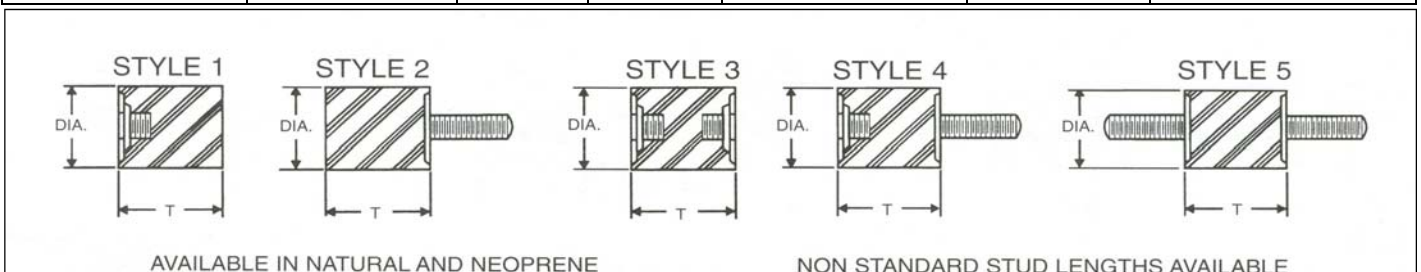


Cylindrical Mount Series: 5/16-18 Threads

*Ordering example: EP1400-156-(2)-(N) = 1 1/4 dia x 3/4 long, 55 lbs. load, Style 2, Neoprene

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1400-156-(-)(-) | 1, 2, 4, 5 | 1 1/4 | 3/4 | 9/16 | 30.0 | 55.0 |
| EP1400-157-(-)(-) | | | | | 40.0 | 75.0 |
| EP1400-158-(-)(-) | | | | | 50.0 | 100 |
| EP1400-159-(-)(-) | | | | | 60.0 | 140 |
| EP1400-160-(-)(-) | | | | | 70.0 | 155 |
| EP1400-161-(-)(-) | 1, 2, 3, 4, 5 | 1 1/4 | 1 | 9/16 | 30.0 | 55.0 |
| EP1400-162-(-)(-) | | | | | 40.0 | 80.0 |
| EP1400-163-(-)(-) | | | | | 49.0 | 112 |
| EP1400-164-(-)(-) | | | | | 60.0 | 126 |
| EP1400-165-(-)(-) | | | | | 69.0 | 140 |
| EP1400-166-(-)(-) | 1, 2, 3, 4, 5 | 1 1/4 | 7/8 | 9/16 | 32.0 | 56.0 |
| EP1400-167-(-)(-) | | | | | 37.0 | 82.0 |
| EP1400-168-(-)(-) | | | | | 48.0 | 115 |
| EP1400-169-(-)(-) | | | | | 63.0 | 123 |
| EP1400-170-(-)(-) | | | | | 75.0 | 135 |
| EP1400-171-(-)(-) | 1, 2, 3, 4, 5 | 1 1/4 | 1 1/4 | 9/16 | 21.0 | 41.0 |
| EP1400-172-(-)(-) | | | | | 31.0 | 64.0 |
| EP1400-173-(-)(-) | | | | | 48.0 | 90.0 |
| EP1400-174-(-)(-) | | | | | 63.0 | 120 |
| EP1400-175-(-)(-) | | | | | 72.0 | 140 |
| EP1400-176-(-)(-) | 2 | 1 1/4 | 1/4 | 9/16 | N/A | 75.0 |
| EP1400-177-(-)(-) | | | | | N/A | 100 |
| EP1400-178-(-)(-) | | | | | N/A | 132 |
| EP1400-179-(-)(-) | | | | | N/A | 146 |
| EP1400-180-(-)(-) | | | | | N/A | 160 |
| EP1400-181-(-)(-) | 2, 4, 5 | 1 3/8 | 5/8 | 9/16 | 36.0 | 93.0 |
| EP1400-182-(-)(-) | | | | | 46.0 | 118 |
| EP1400-183-(-)(-) | | | | | 57.0 | 158 |
| EP1400-184-(-)(-) | | | | | 67.0 | 185 |
| EP1400-185-(-)(-) | | | | | 77.0 | 220 |

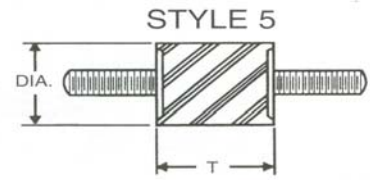
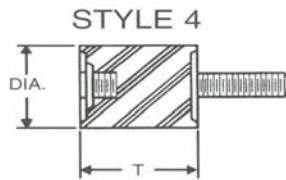
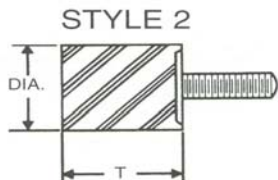
E



Cylindrical Mount Series: 5/16-18 Threads

*Ordering example: EP1400-191-(5)-(N) = 1 3/8 dia x 1" long, 55 lbs. load, Style 5, Neoprene

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1400-191-(-)(-) | 1, 2, 4, 5 | 1 3/8 | 1 | 9/16 | 30.0 | 55.0 |
| EP1400-192-(-)(-) | | | | | 40.0 | 81.0 |
| EP1400-193-(-)(-) | | | | | 50.0 | 110 |
| EP1400-194-(-)(-) | | | | | 61.0 | 125 |
| EP1400-195-(-)(-) | | | | | 70.0 | 142 |
| EP1400-201-(-)(-) | 2, 4, 5 | 1 3/8 | 1 1/2 | 9/16 | 30.0 | 90.0 |
| EP1400-202-(-)(-) | | | | | 42.0 | 110 |
| EP1400-203-(-)(-) | | | | | 53.0 | 148 |
| EP1400-204-(-)(-) | | | | | 62.0 | 179 |
| EP1400-205-(-)(-) | | | | | 70.0 | 195 |
| EP1400-206-(-)(-) | 2, 4, 5 | 1 1/2 | 3/4 | 9/16 | 23.5 | 44.5 |
| EP1400-207-(-)(-) | | | | | 35.0 | 67.0 |
| EP1400-208-(-)(-) | | | | | 49.5 | 102 |
| EP1400-209-(-)(-) | | | | | 63.5 | 115 |
| EP1400-210-(-)(-) | | | | | 72.0 | 125 |
| EP1400-211-(-)(-) | 2, 4, 5 | 1 1/2 | 1 | 9/16 | 22.0 | 43.0 |
| EP1400-212-(-)(-) | | | | | 33.0 | 65.0 |
| EP1400-213-(-)(-) | | | | | 48.0 | 100 |
| EP1400-214-(-)(-) | | | | | 62.0 | 110 |
| EP1400-215-(-)(-) | | | | | 70.0 | 119 |
| EP1400-216-(-)(-) | 2, 4, 5 | 1 1/2 | 1.2 | 9/16 | 20.0 | 41.0 |
| EP1400-217-(-)(-) | | | | | 31.5 | 63.0 |
| EP1400-218-(-)(-) | | | | | 46.0 | 97.5 |
| EP1400-219-(-)(-) | | | | | 60.0 | 107 |
| EP1400-220-(-)(-) | | | | | 67.5 | 115 |
| EP1400-246-(-)(-) | 2, 4, 5 | 1 1/2 | 1 1/2 | 9/16 | 18.0 | 39.5 |
| EP1400-247-(-)(-) | | | | | 24.5 | 61.0 |
| EP1400-248-(-)(-) | | | | | 44.5 | 96.0 |
| EP1400-249-(-)(-) | | | | | 57.5 | 105 |
| EP1400-250-(-)(-) | | | | | 65.0 | 112 |



AVAILABLE IN NATURAL AND NEOPRENE

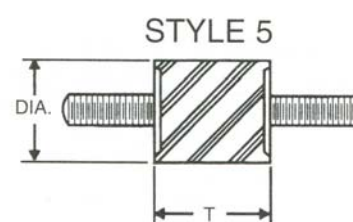
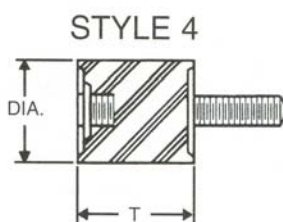
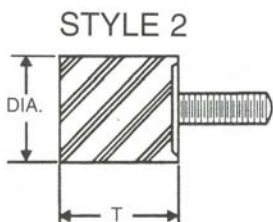
NON STANDARD STUD LENGTHS AVAILABLE

Cylindrical Mount Series: 3/8-16 Threads

*Ordering example: EP1500-106-(5)-(NR) = 1" dia x 1" long, 37 lbs. load, Style 5, Natural Rubber

E

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1500-106-(-)(-) | 2, 4, 5 | 1 | 1 | 3/8 | 18.0 | 37.0 |
| EP1500-107-(-)(-) | | | | | 25.0 | 50.0 |
| EP1500-108-(-)(-) | | | | | 35.0 | 62.0 |
| EP1500-109-(-)(-) | | | | | 43.0 | 85.0 |
| EP1500-110-(-)(-) | | | | | 48.0 | 91.0 |
| EP1500-111-(-)(-) | 2, 4, 5 | 1 1/2 | 1 | 3/4 | 22.0 | 95 |
| EP1500-112-(-)(-) | | | | | 33.0 | 135 |
| EP1500-113-(-)(-) | | | | | 48.0 | 185 |
| EP1500-114-(-)(-) | | | | | 62.0 | 210 |
| EP1500-115-(-)(-) | | | | | 70.0 | 210 |
| EP1500-126-(-)(-) | 2, 4, 5 | 2 | 3/4 | 3/4 | 45 | 250 |
| EP1500-127-(-)(-) | | | | | 70 | 310 |
| EP1500-128-(-)(-) | | | | | 90 | 370 |
| EP1500-129-(-)(-) | | | | | 110 | 450 |
| EP1500-130-(-)(-) | | | | | 140 | 560 |

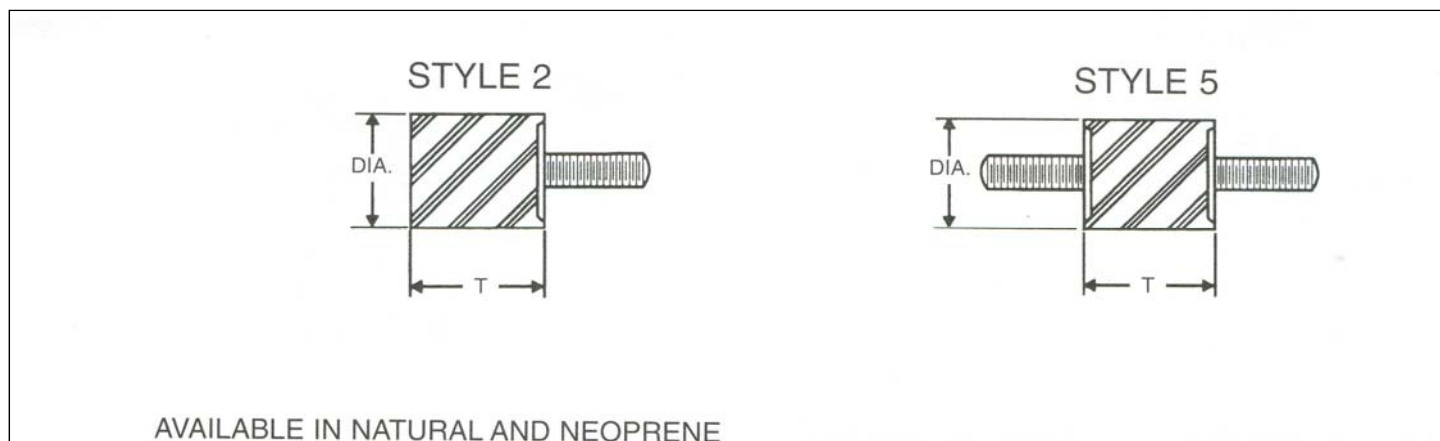


AVAILABLE IN NATURAL AND NEOPRENE

Cylindrical Mount Series: 3/8-16 Threads

*Ordering example: EP1500-131-(5)-(N) = 2" dia x 1 1/2 long, 80 lbs. load, Style 5, Neoprene

| PART NUMBER | STYLES AVAILABLE | DIA (in.) | T (in.) | STANDARD STUD LENGTH (in.) | MAXIMUM STATIC LOAD (lbs.) | |
|-------------------|------------------|-----------|---------|----------------------------|----------------------------|-------------|
| | | | | | Shear | Compression |
| EP1500-131-(-)(-) | 2, 5 | 2 | 1 1/2 | 3/4 | 35.0 | 80.0 |
| EP1500-132-(-)(-) | | | | | 40.0 | 100 |
| EP1500-133-(-)(-) | | | | | 55.0 | 165 |
| EP1500-134-(-)(-) | | | | | 65.0 | 240 |
| EP1500-135-(-)(-) | | | | | 80.0 | 350 |
| EP1500-141-(-)(-) | 2, 5 | 2 | 1 3/4 | 3/4 | 24.0 | 80.0 |
| EP1500-142-(-)(-) | | | | | 29.0 | 135 |
| EP1500-143-(-)(-) | | | | | 58.0 | 280 |
| EP1500-144-(-)(-) | | | | | 79.0 | 360 |
| EP1500-145-(-)(-) | | | | | 29.0 | 8.5 |
| EP1500-151-(-)(-) | 2, 5 | 2 | 2 1/8 | 3/4 | 32.0 | 140 |
| EP1500-152-(-)(-) | | | | | 44.0 | 250 |
| EP1500-153-(-)(-) | | | | | 50.0 | 110 |
| EP1500-154-(-)(-) | | | | | 58.0 | 285 |
| EP1500-155-(-)(-) | | | | | 92.0 | 380 |



Conical Mount Series: 5/16-18 Threads

*Ordering example: EP1600-101-(NR) = 1 1/4 long, 90 lbs. load, Natural Rubber

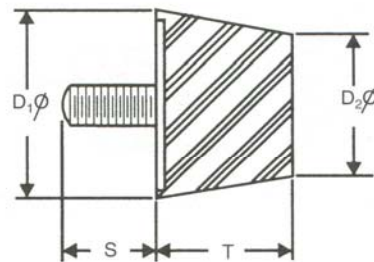
E

| PART NUMBER | D ₁ (in.) | D ₂ (in.) | T (in.) | S (in.) | STATIC LOAD (lbs.) | DYNAMIC LOAD (lbs.) |
|---------------|-------------------------|-------------------------|------------|------------|-----------------------|------------------------|
| EP1600-101(-) | 1 1/2 | 1 | 1 1/4 | 9/16 | 44 | 90 |
| EP1600-102(-) | | | | | 49 | 100 |
| EP1600-103(-) | | | | | 56 | 125 |
| EP1600-104(-) | | | | | 62 | 150 |
| EP1600-105(-) | | | | | 68 | 160 |
| EP1600-106(-) | 1 1/2 | 1 | 1 1/4 | 5/8 | 44 | 90 |
| EP1600-107(-) | | | | | 49 | 100 |
| EP1600-108(-) | | | | | 56 | 125 |
| EP1600-109(-) | | | | | 62 | 150 |
| EP1600-110(-) | | | | | 68 | 160 |
| EP1600-111(-) | 1 1/2 | 1 | 1 1/4 | 3/4 | 44 | 90 |
| EP1600-112(-) | | | | | 49 | 100 |
| EP1600-113(-) | | | | | 56 | 125 |
| EP1600-114(-) | | | | | 62 | 150 |
| EP1600-115(-) | | | | | 68 | 160 |
| EP1600-121(-) | 1 1/2 | 1 | 1 1/4 | 1 1/8 | 44 | 90 |
| EP1600-122(-) | | | | | 49 | 100 |
| EP1600-123(-) | | | | | 56 | 125 |
| EP1600-124(-) | | | | | 62 | 150 |
| EP1600-125(-) | | | | | 68 | 160 |
| EP1600-126(-) | 1 1/2 | 1 | 1 1/4 | 1 | 44 | 90 |
| EP1600-127(-) | | | | | 49 | 100 |
| EP1600-128(-) | | | | | 56 | 125 |
| EP1600-129(-) | | | | | 62 | 150 |
| EP1600-130(-) | | | | | 68 | 160 |
| EP1600-131(-) | 1 1/2 | 1 | 1 1/4 | 1 1/2 | 44 | 90 |
| EP1600-132(-) | | | | | 49 | 100 |
| EP1600-133(-) | | | | | 56 | 125 |
| EP1600-134(-) | | | | | 62 | 150 |
| EP1600-135(-) | | | | | 68 | 160 |

Conical Mount Series: 5/16-18 Threads

*Ordering example: EP1600-141-(N) = 1 1/4 long, 90 lbs. load, Neoprene

| PART NUMBER | D ₁ (in.) | D ₂ (in.) | T (in.) | S (in.) | STATIC LOAD (lbs.) | DYNAMIC LOAD (lbs.) |
|---------------|-------------------------|-------------------------|------------|------------|-----------------------|------------------------|
| EP1600-141(-) | 1 1/2 | 1 | 1 1/4 | 1/2 | 44 | 90 |
| EP1600-142(-) | | | | | 49 | 100 |
| EP1600-143(-) | | | | | 56 | 125 |
| EP1600-144(-) | | | | | 62 | 150 |
| EP1600-145(-) | | | | | 68 | 160 |
| EP1600-301(-) | 1 5/8 | 1 3/8 | 1 | 5/8 | 40 | 85 |
| EP1600-302(-) | | | | | 55 | 115 |
| EP1600-303(-) | | | | | 80 | 175 |
| EP1600-304(-) | | | | | 100 | 205 |
| EP1600-305(-) | | | | | 180 | 350 |



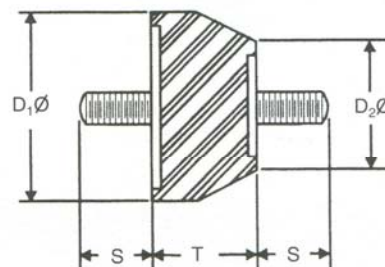
AVAILABLE IN NATURAL AND NEOPRENE

Cylindrical Mount Series

*Ordering example: EP1700-101-(N) = 1 1/32 long, 260 lbs. load, Neoprene

E

| PART NUMBER | D ₁ (in.) | D ₂ (in.) | T (in.) | THREAD | S (in.) | STATIC LOAD (lbs.) | DYNAMIC LOAD (lbs.) |
|---------------|-------------------------|-------------------------|------------|--------|------------|-----------------------|------------------------|
| EP1700-101(-) | 2 3/4 | 2 | 1 1/32 | 1/2-13 | 1 1/4 | 110 | 260 |
| EP1700-102(-) | | | | | | 140 | 330 |
| EP1700-103(-) | | | | | | 165 | 380 |
| EP1700-104(-) | | | | | | 190 | 430 |
| EP1700-105(-) | | | | | | 230 | 500 |
| EP1700-111(-) | 2 3/4 | 2 | 1 1/32 | 1/2-20 | 29/32 | 110 | 260 |
| EP1700-112(-) | | | | | | 140 | 330 |
| EP1700-113(-) | | | | | | 165 | 380 |
| EP1700-114(-) | | | | | | 190 | 430 |
| EP1700-115(-) | | | | | | 230 | 500 |

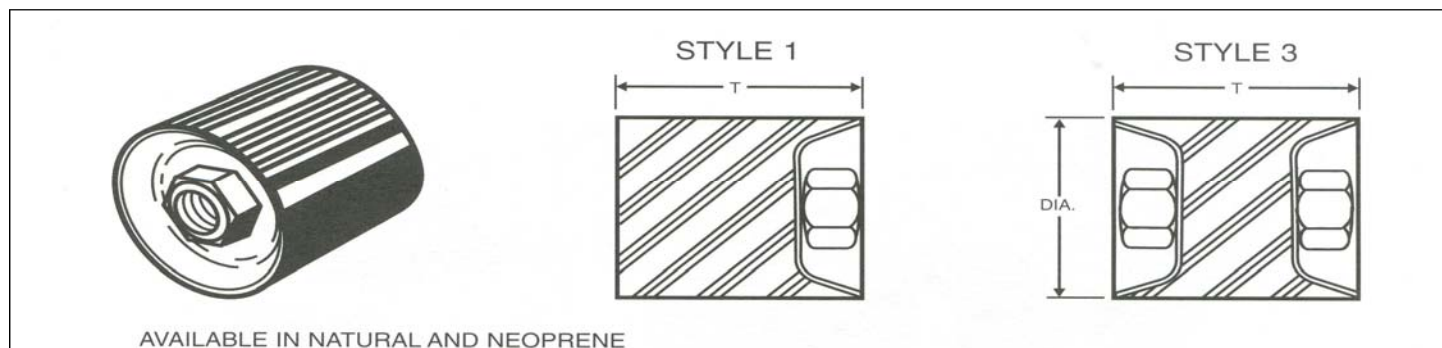


AVAILABLE IN NATURAL AND NEOPRENE

Cylindrical Mount Series

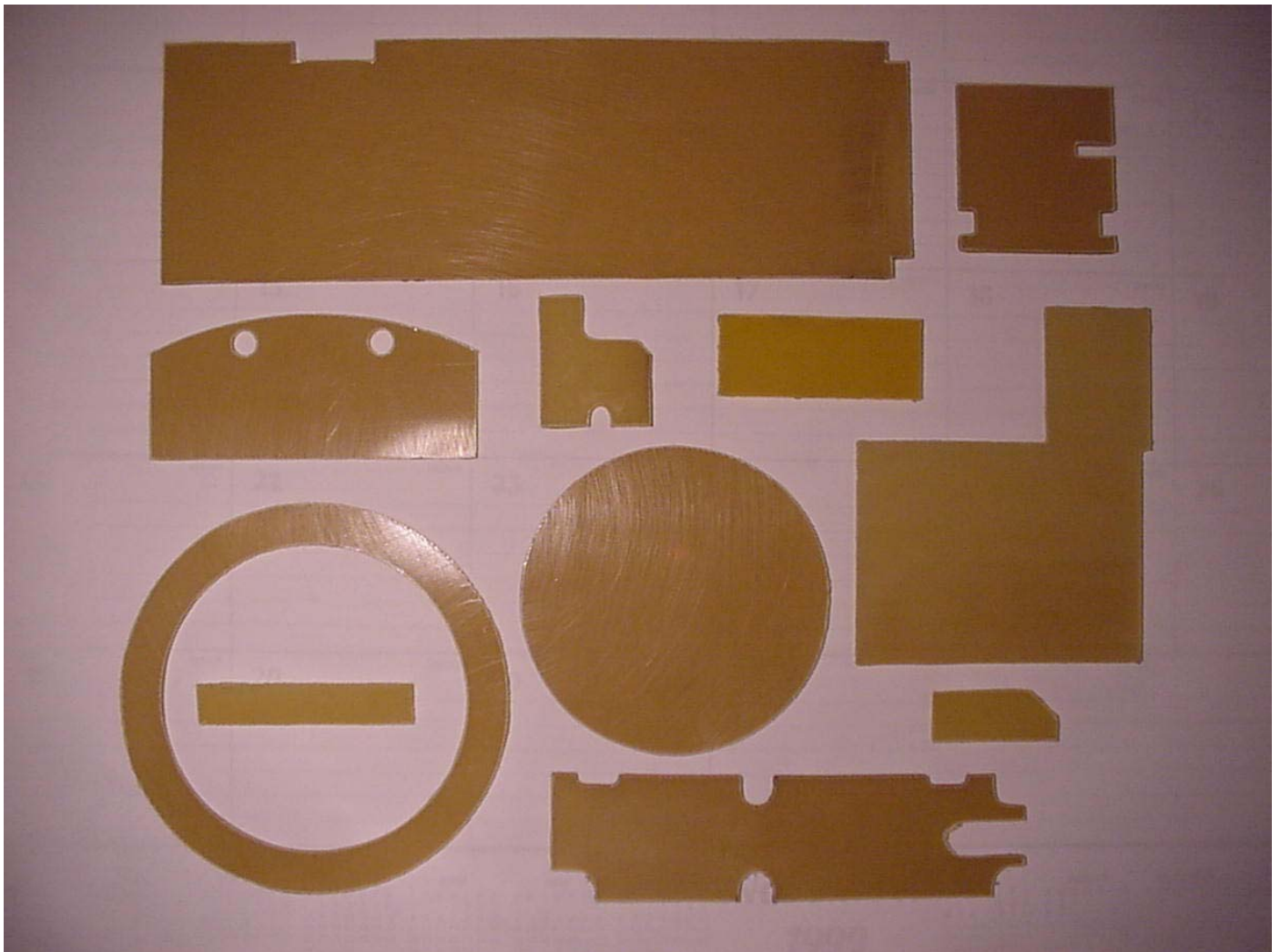
*Ordering example: EP1830-301-(3)-(N) = 2" dia x 1 3/4 long, 40 lbs. load, Style 3, Neoprene

| PART NUMBER | STYLE | DIA. (in.) | T (in.) | THREAD | COMPRESSION (lbs.) | SHEAR (lbs.) |
|--------------------|-------|---------------|------------|--------|-----------------------|-----------------|
| EP1830-301-(-)-(-) | 3 | 2 | 1 3/4 | 1/2-13 | 90 | 40 |
| EP1830-302-(-)-(-) | | | | | 120 | 60 |
| EP1830-303-(-)-(-) | | | | | 160 | 80 |
| EP1830-304-(-)-(-) | | | | | 225 | 100 |
| EP1830-305-(-)-(-) | | | | | 480 | 200 |
| EP1830-311-(-)-(-) | 3 | 2 | 2 1/8 | 1/2-13 | 80 | 30 |
| EP1830-312-(-)-(-) | | | | | 100 | 40 |
| EP1830-313-(-)-(-) | | | | | 135 | 55 |
| EP1830-314-(-)-(-) | | | | | 180 | 70 |
| EP1830-315-(-)-(-) | | | | | 400 | 140 |
| EP1810-331-(-)-(-) | 1 | 2 | 1 3/4 | 1/2-13 | 90 | N/A |
| EP1810-332-(-)-(-) | | | | | 150 | N/A |
| EP1810-333-(-)-(-) | | | | | 275 | N/A |
| EP1810-334-(-)-(-) | | | | | 625 | N/A |
| EP1810-335-(-)-(-) | | | | | 780 | N/A |
| EP1810-341-(-)-(-) | 1 | 2 | 1 | 1/2-13 | 95 | N/A |
| EP1810-342-(-)-(-) | | | | | 160 | N/A |
| EP1810-343-(-)-(-) | | | | | 300 | N/A |
| EP1810-344-(-)-(-) | | | | | 650 | N/A |
| EP1810-345-(-)-(-) | | | | | 725 | N/A |
| EP1810-361-(-)-(-) | 3 | 2 | 2 5/8 | 1/2-13 | 60 | 15 |
| EP1810-362-(-)-(-) | | | | | 90 | 30 |
| EP1810-363-(-)-(-) | | | | | 125 | 45 |
| EP1810-364-(-)-(-) | | | | | 160 | 50 |
| EP1810-365-(-)-(-) | | | | | 385 | 100 |



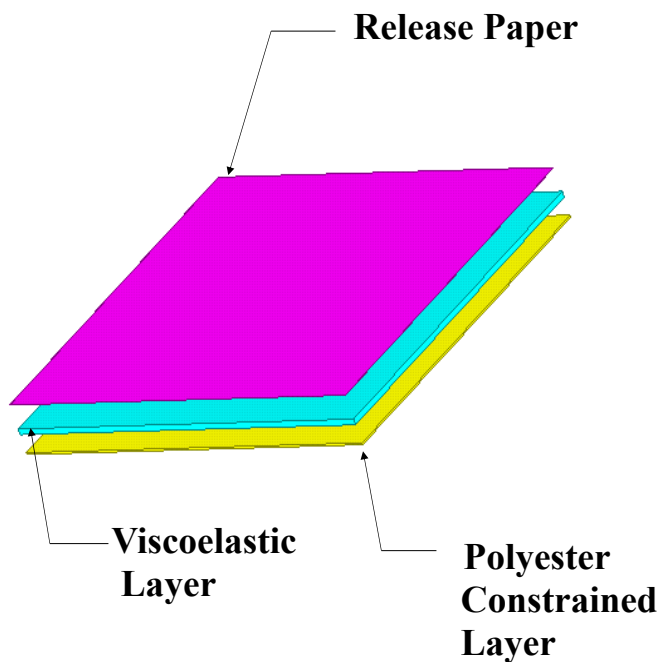
DAMPING MATERIALS

Available in sheets, die-cut or water-jet shapes.



Constrained Layer Damping Material

Reduction of vibration in circuit boards and panel-type structures using a highly damped, constrained viscoelastic material



Attributes

The CLDM material effectively and efficiently reduces the amount of vibration transmitted to a structure resulting in longer fatigue life of the structure or circuit board components. Typically, undamped structures have resonant transmissibility's of 30:1 to 50:1 compared to the input. Damped systems have transmissibility's of 3:1 to 10:1. This significant decrease in transmissibility directly correlates to a reduction in sound power transmission from the structure at resonance. Circuit boards can be ruggedized efficiently and cost effectively without changes to the components of the circuit board.

Applications

The CLDM damping material has three layers: a viscoelastic damping material, a polyester constraining layer, and a protective release paper. The CLDM material is designed to offer the maximum amount of structural damping to circuit boards and panel structures by shearing the highly damped viscoelastic layer.

Material Properties

Temperature range----- -60F to 200F
Thermal Conductivity----- 1.712 BTU-IN/HR/FT²/F
Tensile Strength----- 52 PSI
Adhesive Peel Strength---- 122 OZ/IN after 5 MIN
156 OZ/IN after 24 HR
Breakdown Voltage----- 45 KVAC
Specific Gravity ----- 1.234 Grams/CM³
Dielectric Strength----- 490 Volts/MM
Shear Strength----- 45PSI
Fungus Resistance----- No Growth
Shelf Life----One Year from Date of Manufacture

Installation Data

To install the CLDM material, simply remove the protective release paper and place the damping material on the undamped structure. In circuit board application, the CLDM material must cover at least 60% of the back of the circuit board. Hand pressure is all that is required to adhere the CLDM damper. No additional pressure or curing is needed. The CLDM material is flexible enough to adhere to slightly imperfect surfaces.

Dimensions

The CLDM material is available in sheets of different sizes and shapes as well as different constraining layer materials polyester, stainless steel, aluminum, galvanized steel as well other unique materials. The thickness of the constraining and viscoelastic layers can be varied depending on the application's requirements. The data below is based on a .020 inch thick polyester layer and a .060 inch thick viscoelastic layer. We have found that this configuration provides optimal damping of circuit boards and undamped structures.

Input

A Sine sweep of 2G's at 30 to 500 HZ

Constrained Layer Damping Material

VIBRATION CHARACTERISTICS

| | | |
|------------------------|------------------------------------|-----|
| RANDOM INPUT _____ | INCREASED STIFFNESS _____ | 27% |
| | DECREASE IN TRANSMISSIBILITY _____ | 59% |
| SINUSOIDAL INPUT _____ | INCREASED STIFFNESS _____ | 11% |
| | DECREASE IN TRANSMISSIBILITY _____ | 60% |

OUTGASSING CHARACTERISTICS

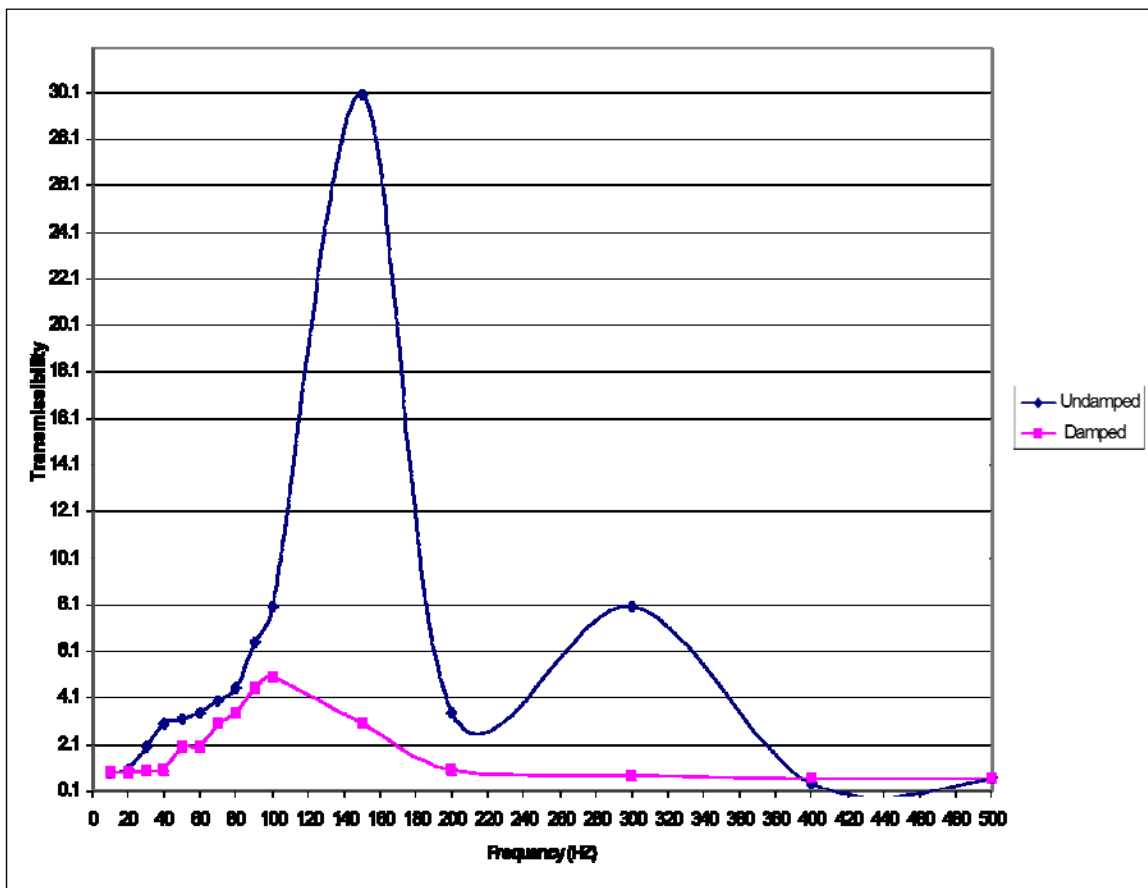
| | | |
|---------------------------|-----------------------|-------|
| MATERIAL OUTGASSING _____ | TOTAL MASS LOSS _____ | 3.23% |
| | CVCM _____ | .52% |

FLAMMABILITY CHARACTERISTICS

FLAMMABILITY RESISTANCE _____ FAR 25.853 B-2, B-3

F

TYPICAL CLDM TRANSMISSIBILITY DATA



Damping Material 7361D

Reduction of vibration in panel-type structures using a highly damped, constrained viscoelastic material



Attributes

The 7361D material effectively and efficiently reduces the amount of vibration transmitted to a structure resulting in longer fatigue life of the structure or components. Typically, un-damped structures have resonant transmissibility's of 30:1 to 50:1 compared to the input. Damped systems have transmissibility's of 3:1 to 10:1. This significant decrease in transmissibility directly correlates to a reduction in sound power transmission from the structure at resonance. 7361D has an aggressive surface tack and high tensile strength that provides an immediate bond while remaining flexible.

Applications

The 7361D damping material is produced as constrained layer or non constrained layer depending on the application. The constrained version is a viscoelastic damping material, a constraining layer, and a protective release paper. The 7361D material is designed to offer the maximum amount of structural damping to panel structures by shearing the highly damped viscoelastic layer between the two constrained layers.

Material Properties

| | |
|---------------------------------|--|
| Hardness (Shore 00) | 60-80 |
| Color | Black |
| Temperature range | 25F to 180F |
| Thermal Conductivity | 1.972 BTU-IN/HR/FT ² /F |
| Breakdown Voltage | 60 KVAC |
| Specific Gravity (ASTM D792) | 1.40 Grams/CM ³ |
| Dielectric Strength | 490 Volts/MM |
| Tensile Strength (ASTM C907) | 10-18 PSI |
| Elongation at Break (ASTM C908) | 300% |
| Lap Shear Strength (ASTM C961) | 6 PLI Min |
| Adhesive Peel Strength | 49 OZ/IN after 5 73 OZ/IN after 24 HR |
| Fungus Resistance | No Growth |

Installation Data

To install the 7361D material, simply remove the protective release paper and place the damping material on the un-damped structure. The 7361D material must cover at least 80% of the back of the structure. Hand pressure is all that is required to adhere the 7361D damper. No additional pressure or curing is needed. The 7361D material is flexible enough to adhere to imperfect surfaces no primer is required.

Dimensions

The 7361D material is available in sheets of different sizes and shapes as well as different constraining layer materials polyester, stainless steel, aluminum, galvanized steel as well other unique materials. The thickness of the constraining and viscoelastic layers can be varied depending on the application's requirements. The data below is based on a .005 inch thick aluminum layer and a .039 inch thick viscoelastic layer. We have found that this configuration provides optimal damping of un-damped structures.

Damping Material 7361D

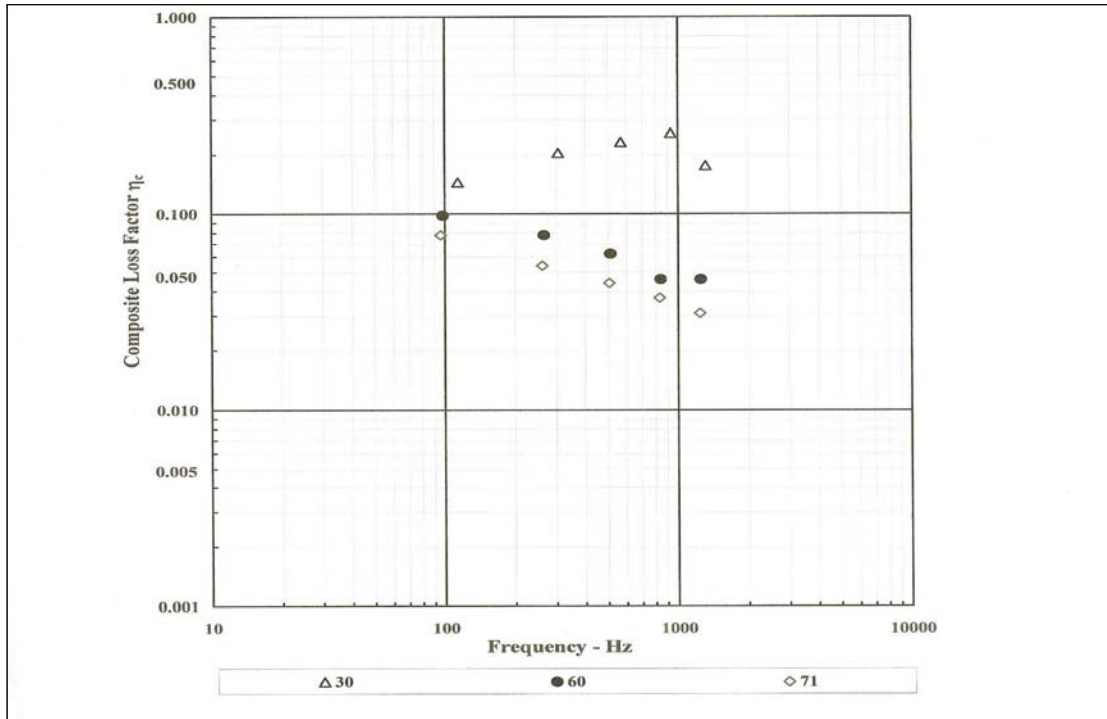
Composite Loss Factor of 7361D at 30, 60 and 71 C from Oberst Bar Damping Tests

Sample Description: .005 aluminum with 1 MM 7361D

Measured Sample Thickness 1.3 MM

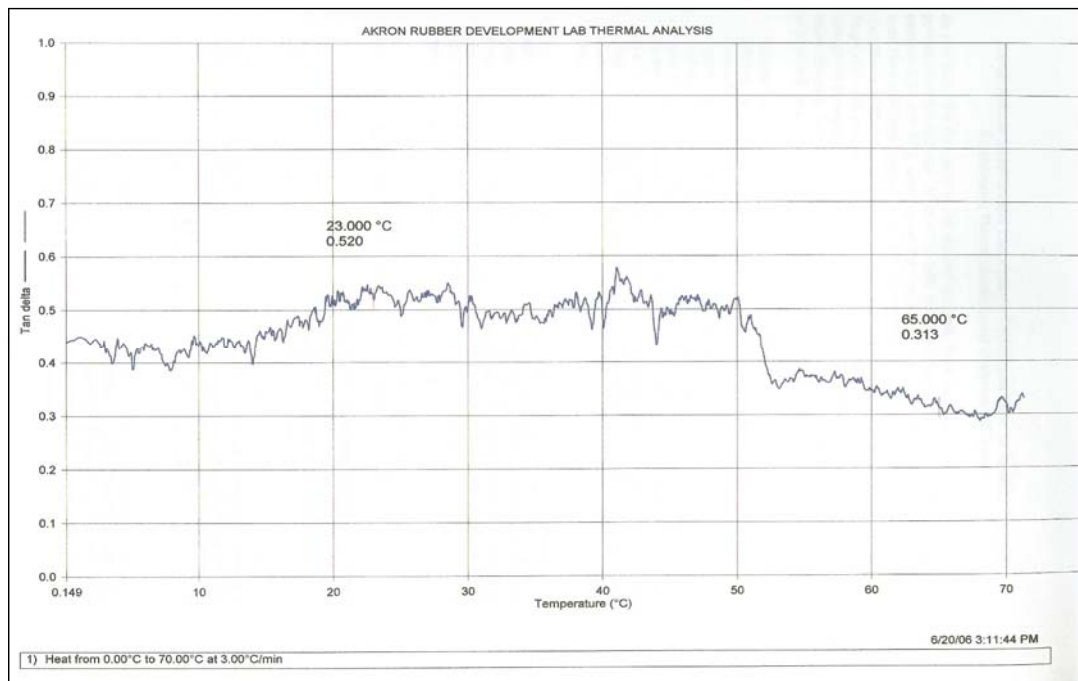
Measured Sample Surface Weight 1.7 kg/m²

Steel Bar- Free length 200 mm, Thickness 0.8 mm, Width 12.7 mm



F

Dynamic Mechanical Thermal Analysis Test



DOMES MOUNT SERIES



Dome Mount Series

Low profile, fail-safe, easy to install for vibration and shock accommodation



Applications

- Industrial machinery
- Military/defense
- Power generation
- HVAC
- Large motors/pumps/ compressors
- Diesel engine applications

G

Attributes

- Fail-safe design
- Wide load range covered by four sizes
- Low height for tight locations
- One piece mount
- Threaded core
- Top-down assembly

Load Range

- 1961-1 = load ratings to 325 lbs.
- 1961-2 = load ratings to 800 lbs.
- 1961-3 = load ratings to 925 lbs.
- 1961-4 = load ratings to 1425 lbs.

Specifications

- Natural frequency—8-15 Hertz
- Transmissibility at resonance - 10:1
- Resilient Element—Neoprene and Natural Rubber
- Standard materials—Zinc phosphate, low carbon steel

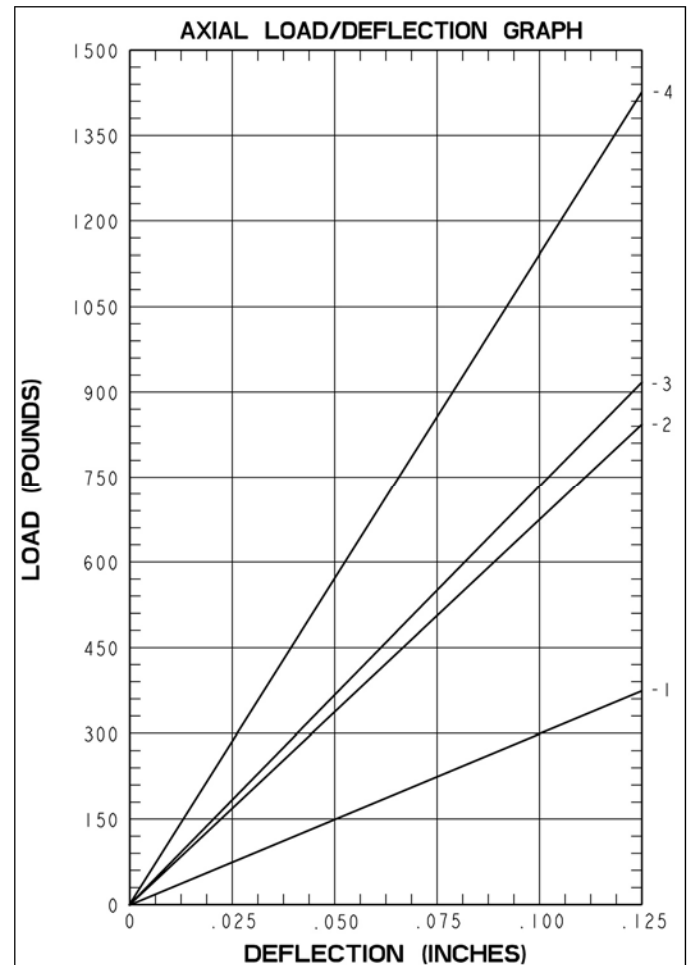
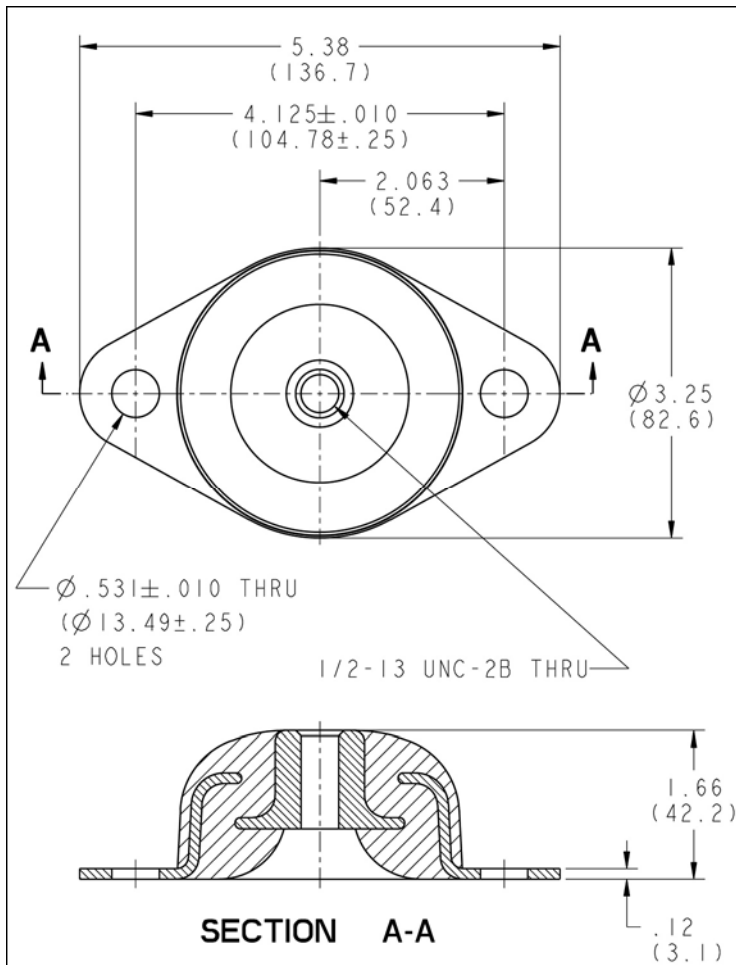
Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to oils, most solvents and ozone
- Natural Rubber has an operating temperature range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$)
- Other materials are available on special order to meet specific operating characteristics

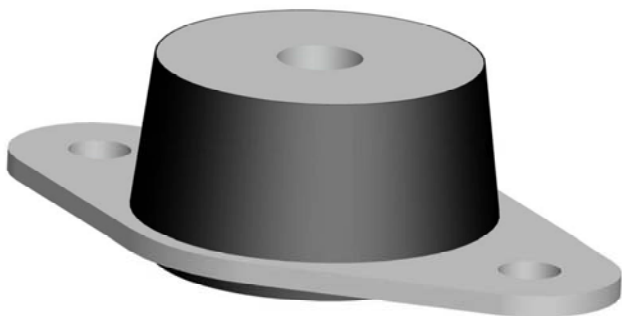
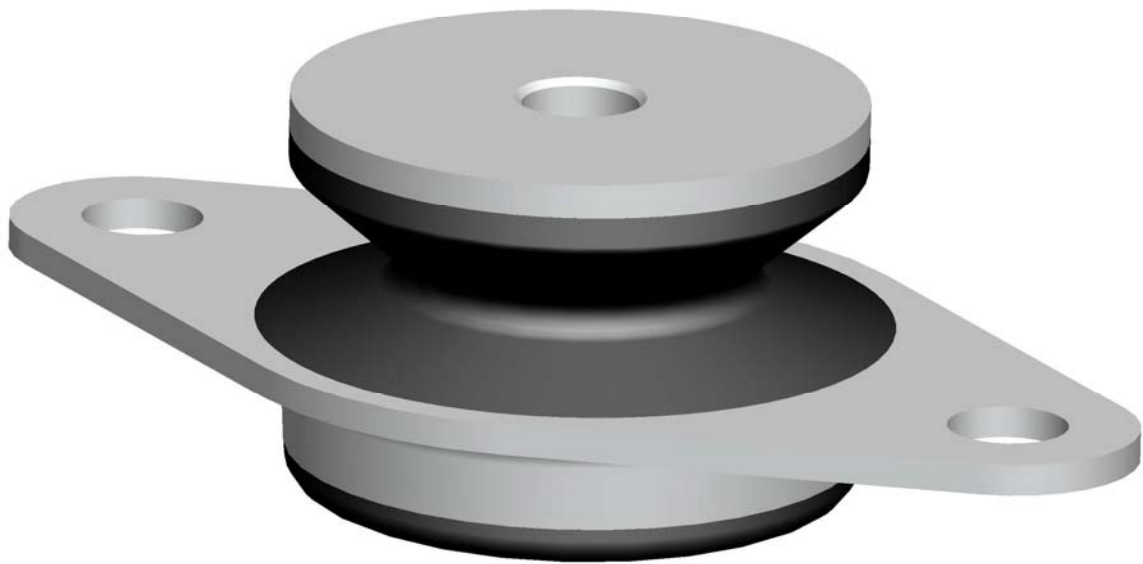
Dome Mount Series

Dimensions and Load Deflection Curves

| PART NUMBER | MAX LOAD (lbs.) | SPRING RATE (lbs./in.) | Color Code |
|-------------|-----------------|------------------------|------------|
| 1961-1 | 375 | 3,000 | Red |
| 1961-2 | 800 | 6,400 | Orange |
| 1961-3 | 925 | 7,400 | Yellow |
| 1961-4 | 1,425 | 11,500 | Green |



FAIL-SAFE COMPRESSION MOUNT SERIES



Fail-Safe Compression Mount Series

1751—1757

Compact, high load capacity mounts for vibration and shock protection



Applications

- Lab equipment
- Business machines
- Vehicle application
- Marine engines
- Power generation
- Cab mounts

Benefits

- Easy to install
- Low cost construction
- Can be mounted in both axial and radial direction

Attributes

- All attitude
- Fail-safe design
- Rugged construction
- High fatigue resistance

Load Range

- 1751 = 3 load ratings to 60 lbs.
- 1752 = 3 load ratings to 100 lbs.
- 1753 = 5 load ratings to 220 lbs.
- 1754 = 5 load ratings to 380 lbs.
- 1755 = 5 load ratings to 680 lbs.
- 1756 = 5 load ratings to 1000 lbs.
- 1757 = 5 load ratings to 1780 lbs.

Specifications

- Natural Frequency - 8-18 Hertz
- Transmissibility at resonance - 10:1
- Resilient Element - Neoprene
- Standard materials - Cold-rolled steel
- Standard Finish - Zinc Phosphate, Black Enamel Paint (BP), Electroless Nickel (EN)
- Weight - See dimensional drawings

Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to most solvents, oils and ozone
- Special elastomer and finishes are available for applications in severe environments. Please note that Silicone elastomer is not compatible with nickel plating.

Fail-Safe Compression Mount Series: 1751

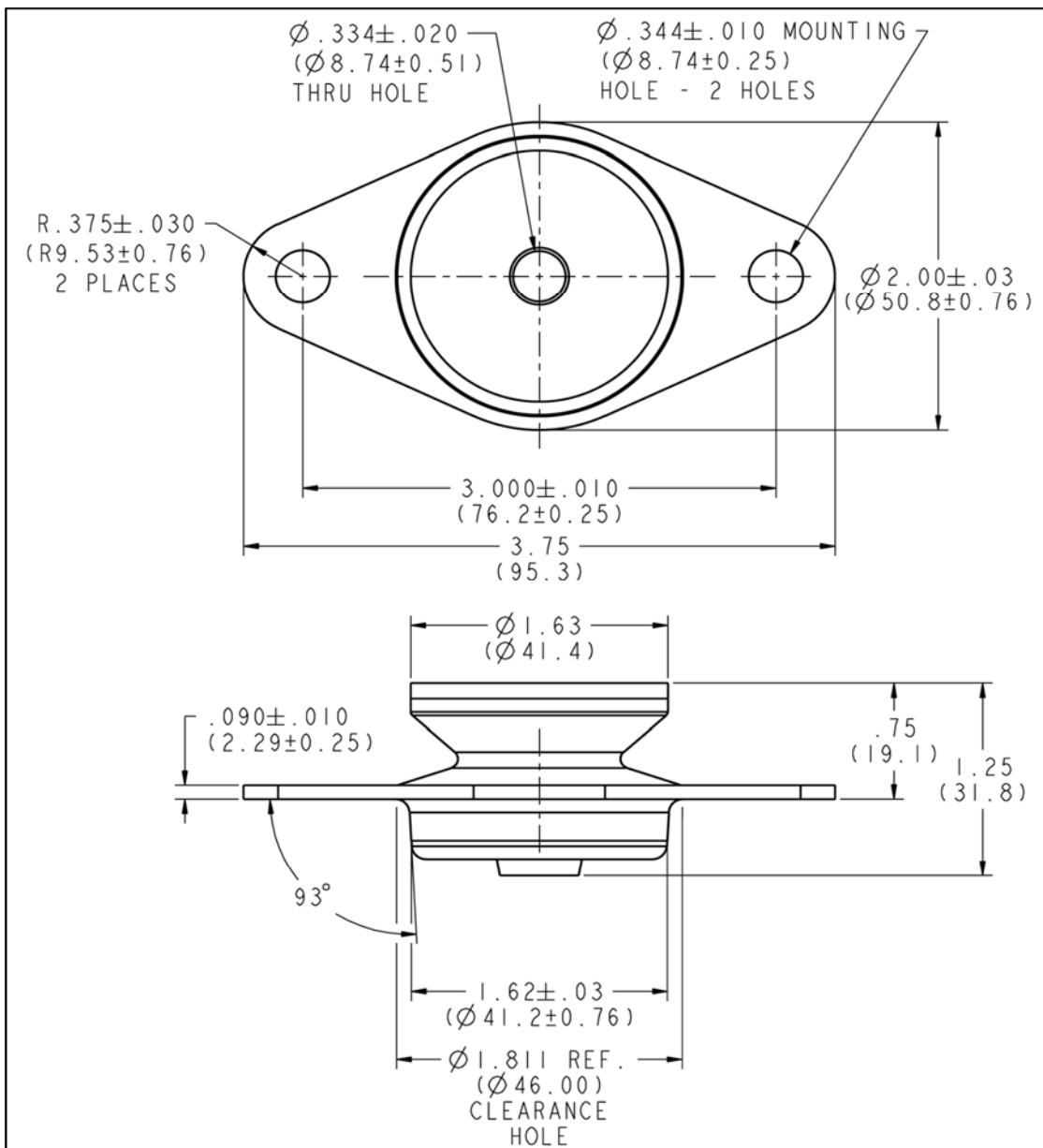
Dimension and Performance Characteristics

| Part # | Nominal Axial Load (lbs.) | Max. Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Finish | Core Style | Center Hole | Flange Hole | Color Code |
|-----------|---------------------------|------------------------|---|------------------|------------------------|---------------------|----------------------|--------------------|------------|-------------|-------------|------------|
| 1751-30 | 25 | 38 | 250 | 10:1 | 1.25 | Neoprene | Steel | Zinc | Thru Hole | .334 | .344 | Red |
| 1751-40 | 40 | 60 | 400 | 10:1 | 1.25 | Neoprene | Steel | Zinc | Thru Hole | .334 | .344 | Orange |
| 1751-50 | 60 | 90 | 600 | 10:1 | 1.25 | Neoprene | Steel | Zinc | Thru Hole | .334 | .344 | Yellow |
| 1751-30BP | 25 | 38 | 250 | 10:1 | 1.25 | Neoprene | Steel | Black Paint | Thru Hole | .334 | .344 | Red |
| 1751-40BP | 40 | 60 | 400 | 10:1 | 1.25 | Neoprene | Steel | Black Paint | Thru Hole | .334 | .344 | Orange |
| 1751-50BP | 60 | 90 | 600 | 10:1 | 1.25 | Neoprene | Steel | Black Paint | Thru Hole | .334 | .344 | Yellow |
| 1751-30EN | 25 | 38 | 250 | 10:1 | 1.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .334 | .344 | Red |
| 1751-40EN | 40 | 60 | 400 | 10:1 | 1.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .334 | .344 | Orange |
| 1751-50EN | 60 | 90 | 600 | 10:1 | 1.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .334 | .344 | Yellow |

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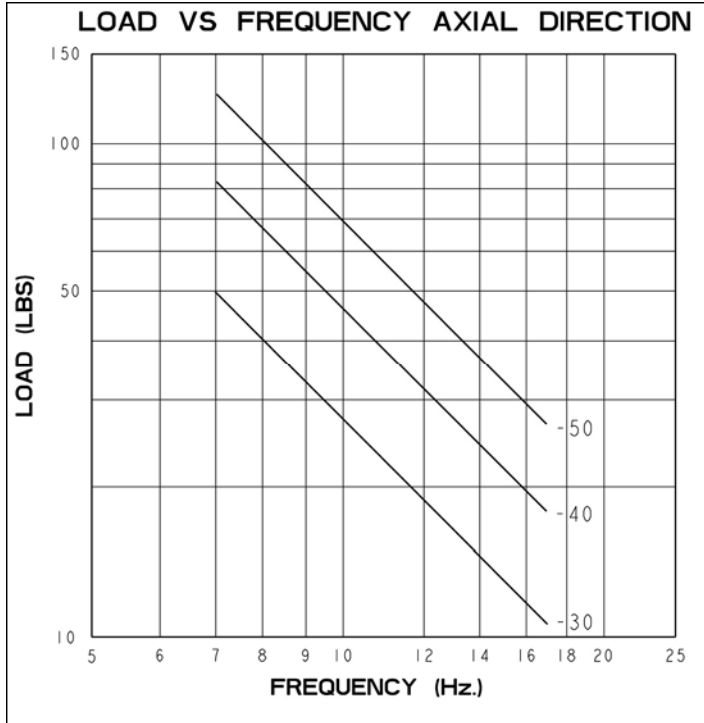
Fail-Safe Compression Mount Series: 1751

Dimension and Performance Characteristics



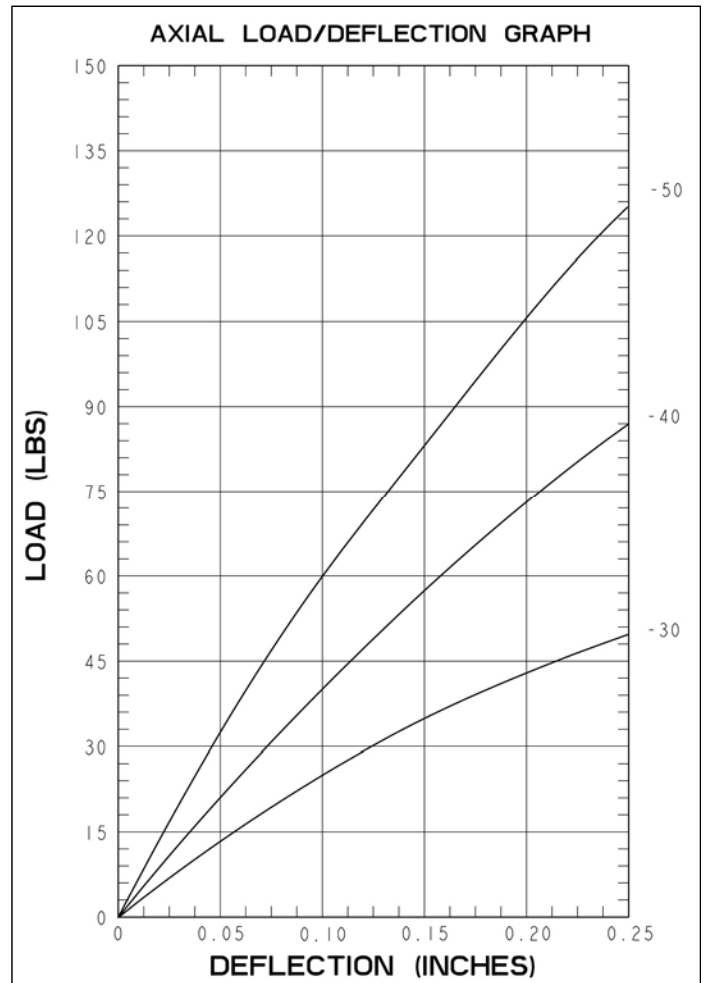
Fail-Safe Compression Mount Series: 1751

Dimension and Performance Characteristics



| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-1625-0322-0093-SZ |
| O.D. = Ø 1.630" |
| I.D. = Ø .322" |
| THICKNESS = .093" |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |

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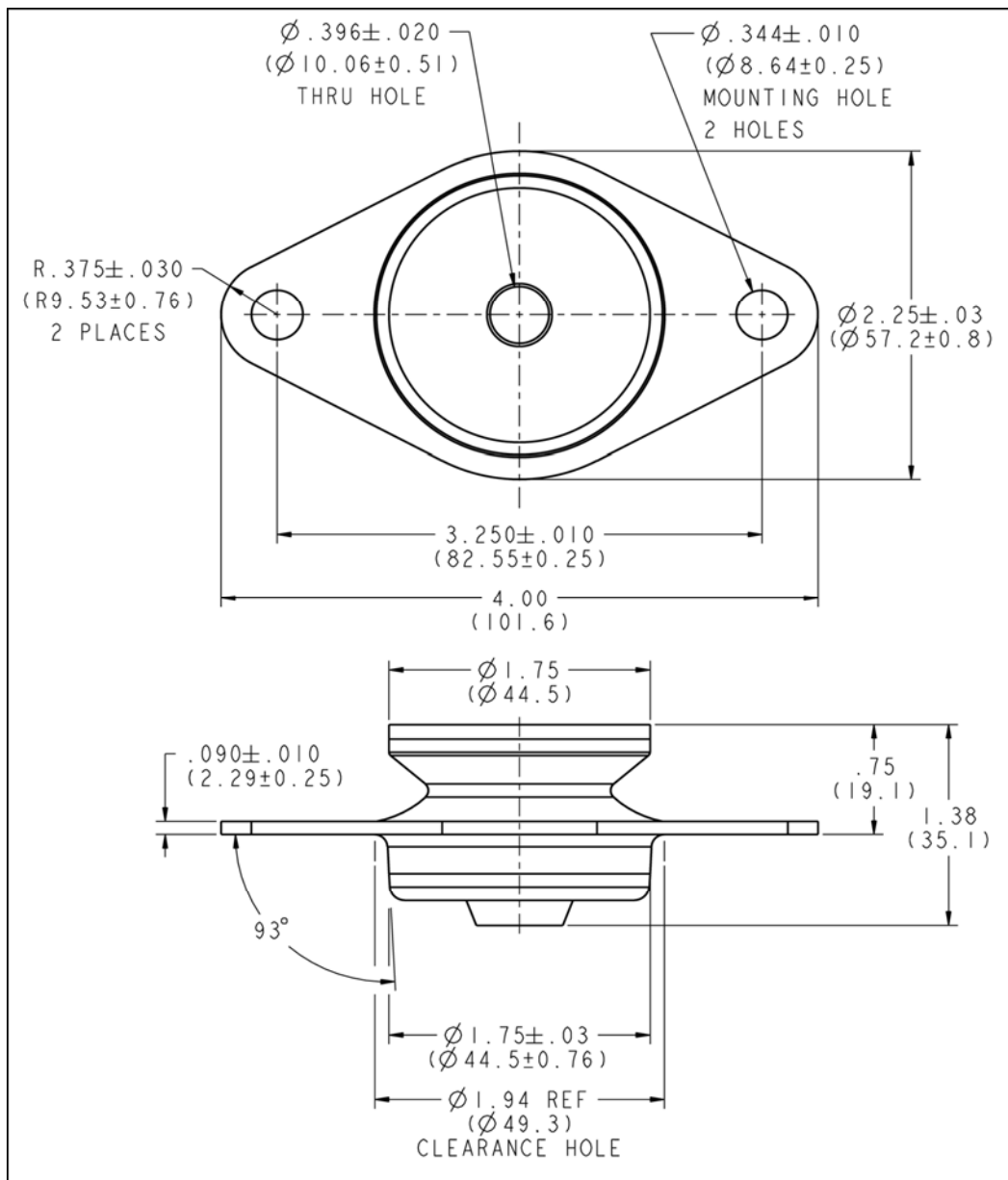
Fail-Safe Compression Mount Series: 1752

Dimension and Performance Characteristics

| Part # | Nominal Axial Load (lbs.) | Max. Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Finish | Core Style | Center Hole | Flange Hole | Color Code |
|-----------|---------------------------|------------------------|---|------------------|------------------------|---------------------|----------------------|--------------------|------------|-------------|-------------|------------|
| 1752-30 | 50 | 75 | 500 | 10:1 | 1.38 | Neoprene | Steel | Zinc | Thru Hole | .396 | .344 | Red |
| 1752-40 | 70 | 105 | 700 | 10:1 | 1.38 | Neoprene | Steel | Zinc | Thru Hole | .396 | .344 | Orange |
| 1752-50 | 100 | 150 | 1000 | 10:1 | 1.38 | Neoprene | Steel | Zinc | Thru Hole | .396 | .344 | Yellow |
| 1752-30BP | 50 | 75 | 500 | 10:1 | 1.38 | Neoprene | Steel | Black Paint | Thru Hole | .396 | .344 | Red |
| 1752-40BP | 70 | 105 | 700 | 10:1 | 1.38 | Neoprene | Steel | Black Paint | Thru Hole | .396 | .344 | Orange |
| 1752-50BP | 100 | 150 | 1000 | 10:1 | 1.38 | Neoprene | Steel | Black Paint | Thru Hole | .396 | .344 | Yellow |
| 1752-30EN | 50 | 75 | 500 | 10:1 | 1.38 | Neoprene | Steel | Electroless Nickel | Thru Hole | .396 | .344 | Red |
| 1752-40EN | 70 | 105 | 700 | 10:1 | 1.38 | Neoprene | Steel | Electroless Nickel | Thru Hole | .396 | .344 | Orange |
| 1752-50EN | 100 | 150 | 1000 | 10:1 | 1.38 | Neoprene | Steel | Electroless Nickel | Thru Hole | .396 | .344 | Yellow |

Fail-Safe Compression Mount Series: 1752

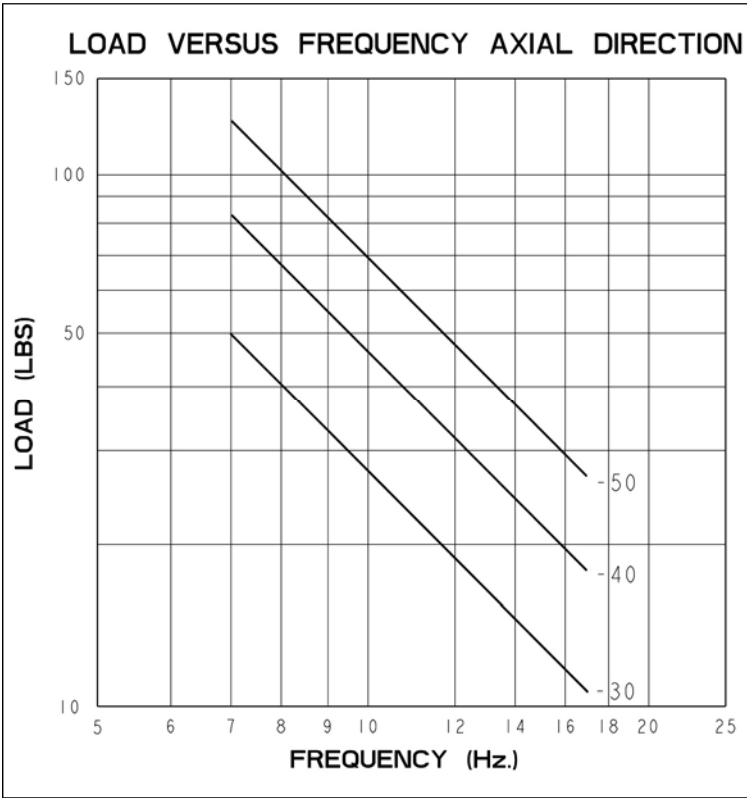
Dimension and Performance Characteristics



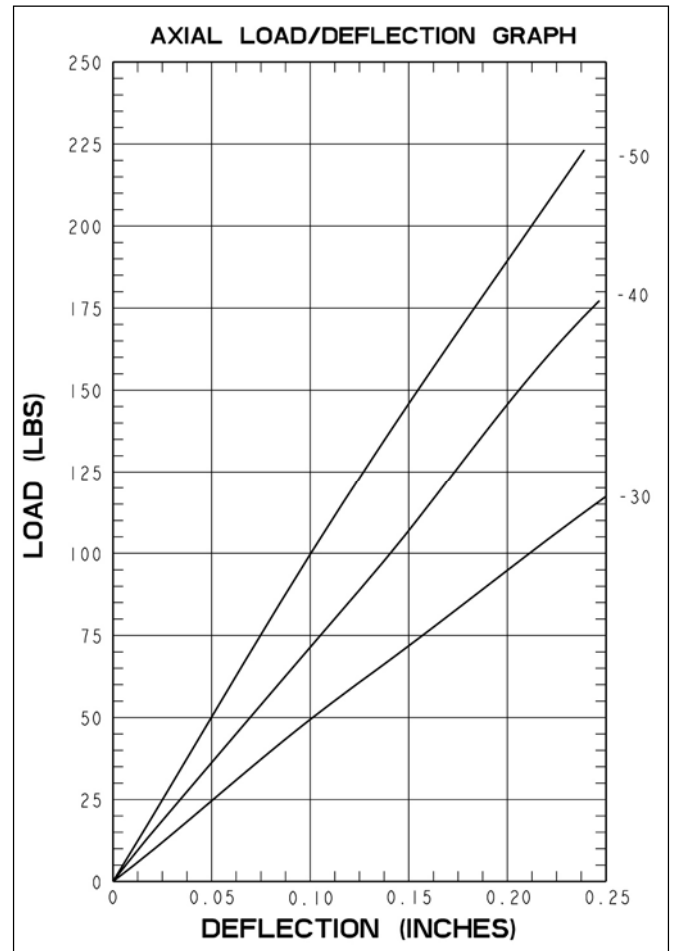
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Fail-Safe Compression Mount Series: 1752

Dimension and Performance Characteristics



| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-1750-0385-0093-SZ |
| O.D. = Ø 1.750" |
| I.D. = Ø .385" |
| THICKNESS = .093" |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |



Fail-Safe Compression Mount Series: 1753

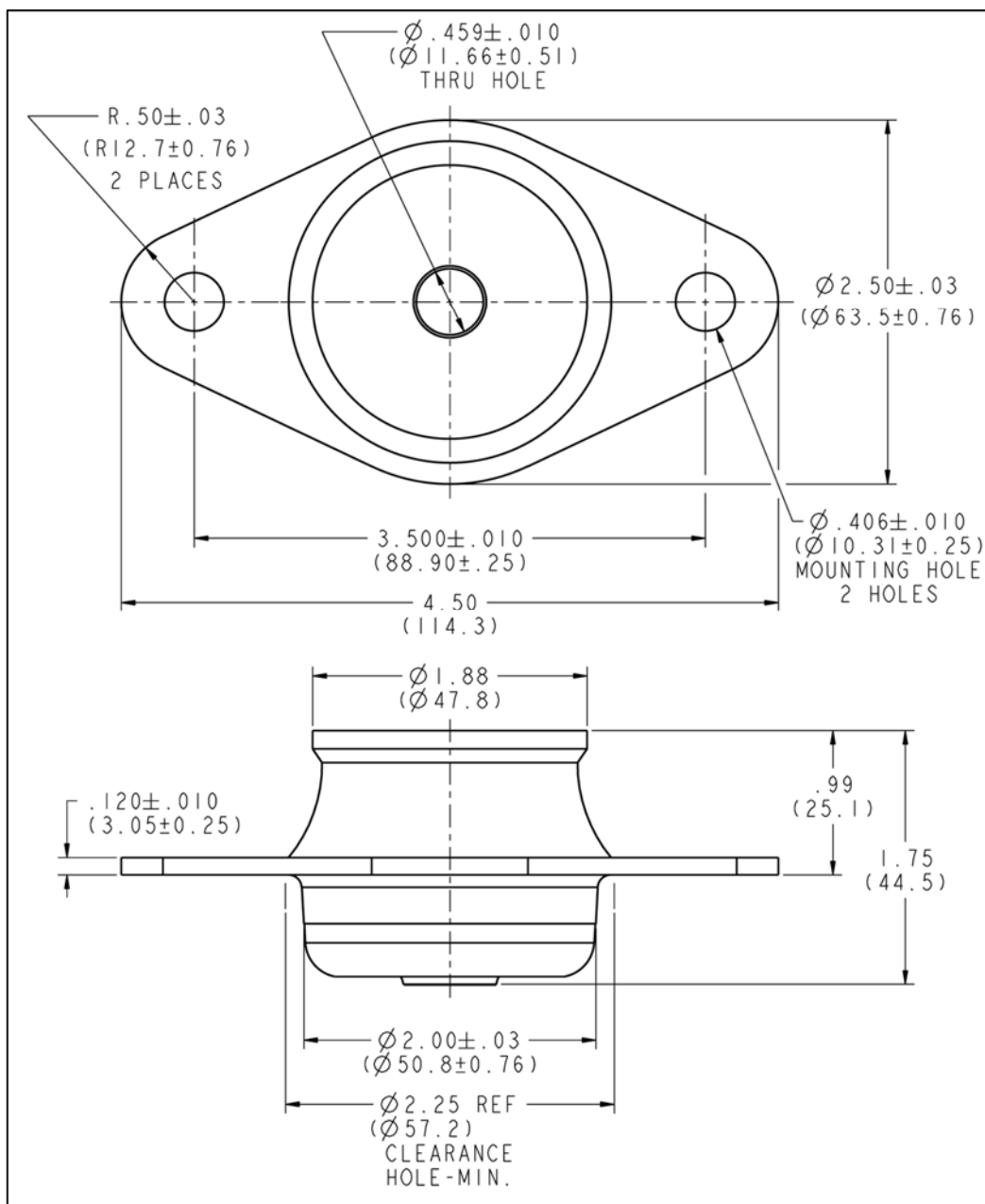
Dimension and Performance Characteristics



| Part # | Nominal Axial Load (lbs.) | Max. Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Radial Static Load Nominal | Radial Static Load Max. | Radial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Finish | Core Style | Center Hole | Flange Hole | Color Code |
|-----------|---------------------------|------------------------|---|----------------------------|-------------------------|--|------------------|------------------------|---------------------|----------------------|--------------------|------------|-------------|-------------|------------|
| 1753-30 | 100 | 150 | 1000 | 50 | 100 | 500 | 10:1 | 1.75 | Neoprene | Steel | Zinc | Thru Hole | .459 | .406 | Red |
| 1753-40 | 120 | 180 | 1200 | 60 | 120 | 600 | 10:1 | 1.75 | Neoprene | Steel | Zinc | Thru Hole | .459 | .406 | Orange |
| 1753-50 | 150 | 225 | 1500 | 75 | 150 | 750 | 10:1 | 1.75 | Neoprene | Steel | Zinc | Thru Hole | .459 | .406 | Yellow |
| 1753-60 | 180 | 270 | 1800 | 90 | 180 | 900 | 10:1 | 1.75 | Neoprene | Steel | Zinc | Thru Hole | .459 | .406 | Green |
| 1753-70 | 220 | 330 | 2200 | 110 | 220 | 1100 | 10:1 | 1.75 | Neoprene | Steel | Zinc | Thru Hole | .459 | .406 | Blue |
| 1753-30BP | 100 | 150 | 1000 | 50 | 100 | 500 | 10:1 | 1.75 | Neoprene | Steel | Black Paint | Thru Hole | .459 | .406 | Red |
| 1753-40BP | 120 | 180 | 1200 | 60 | 120 | 600 | 10:1 | 1.75 | Neoprene | Steel | Black Paint | Thru Hole | .459 | .406 | Orange |
| 1753-50BP | 150 | 225 | 1500 | 75 | 150 | 750 | 10:1 | 1.75 | Neoprene | Steel | Black Paint | Thru Hole | .459 | .406 | Yellow |
| 1753-60BP | 180 | 270 | 1800 | 90 | 180 | 900 | 10:1 | 1.75 | Neoprene | Steel | Black Paint | Thru Hole | .459 | .406 | Green |
| 1753-70BP | 220 | 330 | 2200 | 110 | 220 | 1100 | 10:1 | 1.75 | Neoprene | Steel | Black Paint | Thru Hole | .459 | .406 | Blue |
| 1753-30EN | 100 | 150 | 1000 | 50 | 100 | 500 | 10:1 | 1.75 | Neoprene | Steel | Electroless Nickel | Thru Hole | .459 | .406 | Red |
| 1753-40EN | 120 | 180 | 1200 | 60 | 120 | 600 | 10:1 | 1.75 | Neoprene | Steel | Electroless Nickel | Thru Hole | .459 | .406 | Orange |
| 1753-50EN | 150 | 225 | 1500 | 75 | 150 | 750 | 10:1 | 1.75 | Neoprene | Steel | Electroless Nickel | Thru Hole | .459 | .406 | Yellow |
| 1753-60EN | 180 | 270 | 1800 | 90 | 180 | 900 | 10:1 | 1.75 | Neoprene | Steel | Electroless Nickel | Thru Hole | .459 | .406 | Green |
| 1753-70EN | 220 | 330 | 2200 | 110 | 220 | 1100 | 10:1 | 1.75 | Neoprene | Steel | Electroless Nickel | Thru Hole | .459 | .406 | Blue |

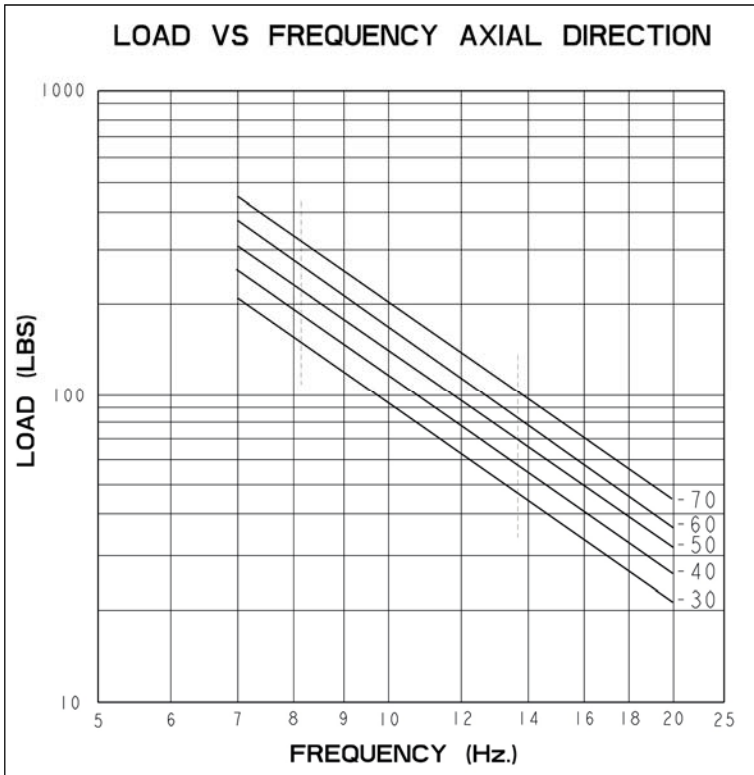
Fail-Safe Compression Mount Series: 1753

Dimension and Performance Characteristics



Fail-Safe Compression Mount Series: 1753

Dimension and Performance Characteristics



SNUBBING WASHER

P/N SW-2000-0450-0125-SZ

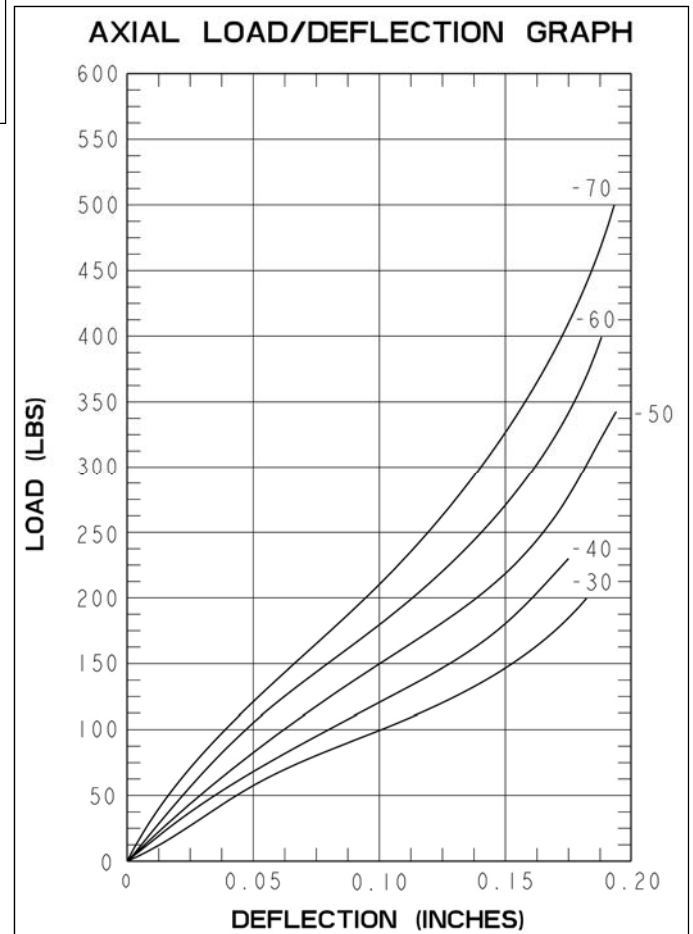
O.D. = Ø 2.00"

I.D. = Ø .450"

THICKNESS = .125"

MATERIAL—1010-1020 CRS

FINISH—CLEAR ZINC



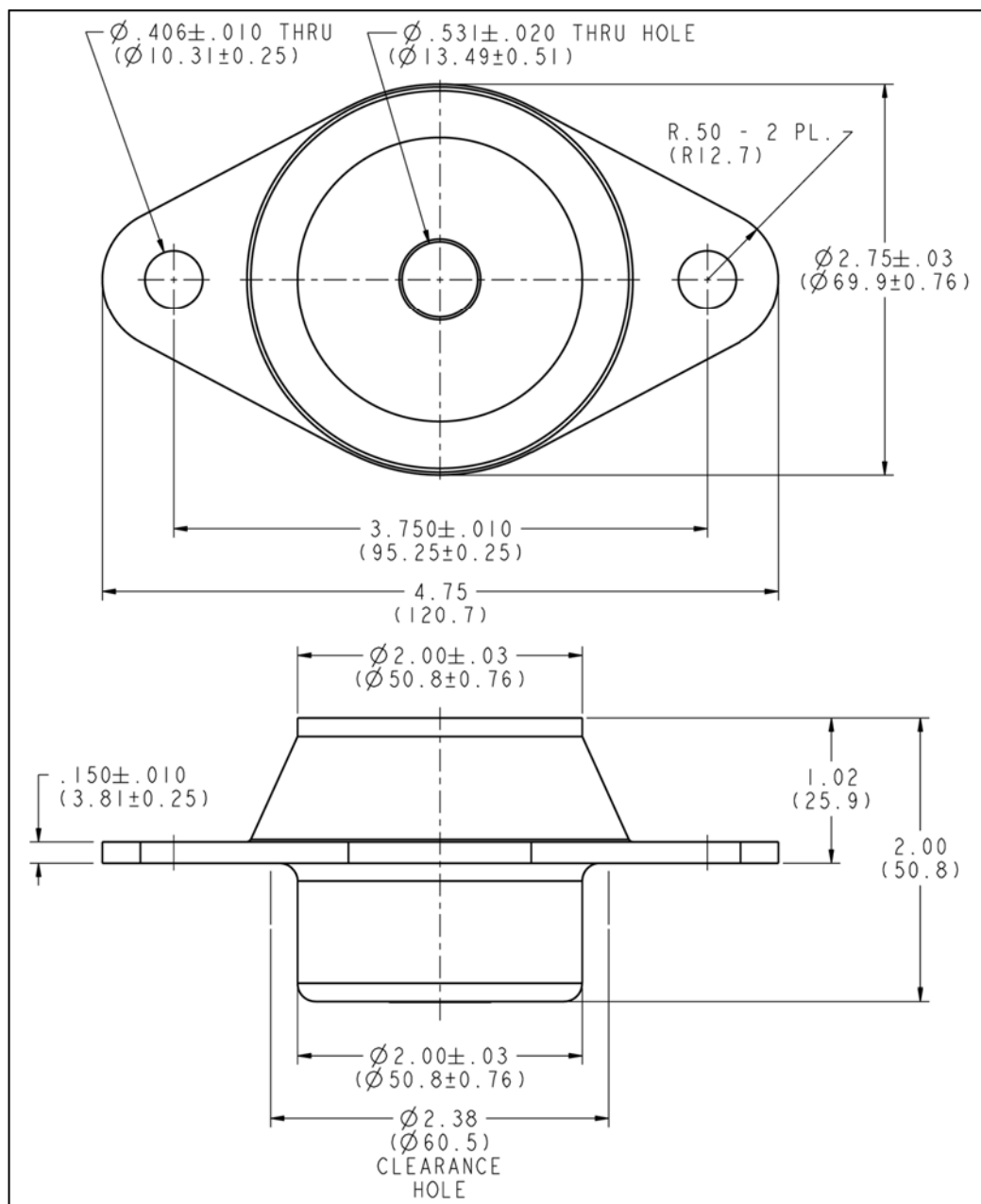
Fail-Safe Compression Mount Series: 1754

Dimension and Performance Characteristics

| Part # | Nominal Axial Load (lbs.) | Max. Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Radial Static Load Nominal | Radial Static Load Max. | Radial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Finish | Core Style | Center Hole | Flange Hole | Color Code |
|-----------|---------------------------|------------------------|---|----------------------------|-------------------------|--|------------------|------------------------|---------------------|----------------------|--------------------|------------|-------------|-------------|------------|
| 1754-30 | 180 | 270 | 1800 | 90 | 180 | 900 | 10:1 | 2.00 | Neoprene | Steel | Zinc | Thru Hole | .531 | .406 | Red |
| 1754-40 | 220 | 330 | 2200 | 110 | 220 | 1100 | 10:1 | 2.00 | Neoprene | Steel | Zinc | Thru Hole | .531 | .406 | Orange |
| 1754-50 | 260 | 390 | 2600 | 130 | 260 | 1300 | 10:1 | 2.00 | Neoprene | Steel | Zinc | Thru Hole | .531 | .406 | Yellow |
| 1754-60 | 320 | 480 | 3200 | 160 | 320 | 1600 | 10:1 | 2.00 | Neoprene | Steel | Zinc | Thru Hole | .531 | .406 | Green |
| 1754-70 | 380 | 570 | 3800 | 190 | 380 | 1900 | 10:1 | 2.00 | Neoprene | Steel | Zinc | Thru Hole | .531 | .406 | Blue |
| 1754-30BP | 180 | 270 | 1800 | 90 | 180 | 900 | 10:1 | 2.00 | Neoprene | Steel | Black Paint | Thru Hole | .531 | .406 | Red |
| 1754-40BP | 220 | 330 | 2200 | 110 | 220 | 1100 | 10:1 | 2.00 | Neoprene | Steel | Black Paint | Thru Hole | .531 | .406 | Orange |
| 1754-50BP | 260 | 390 | 2600 | 130 | 260 | 1300 | 10:1 | 2.00 | Neoprene | Steel | Black Paint | Thru Hole | .531 | .406 | Yellow |
| 1754-60BP | 320 | 480 | 3200 | 160 | 320 | 1600 | 10:1 | 2.00 | Neoprene | Steel | Black Paint | Thru Hole | .531 | .406 | Green |
| 1754-70BP | 380 | 570 | 3800 | 190 | 380 | 1900 | 10:1 | 2.00 | Neoprene | Steel | Black Paint | Thru Hole | .531 | .406 | Blue |
| 1754-30EN | 180 | 270 | 1800 | 90 | 180 | 900 | 10:1 | 2.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .531 | .406 | Red |
| 1754-40EN | 220 | 330 | 2200 | 110 | 220 | 1100 | 10:1 | 2.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .531 | .406 | Orange |
| 1754-50EN | 260 | 390 | 2600 | 130 | 260 | 1300 | 10:1 | 2.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .531 | .406 | Yellow |
| 1754-60EN | 320 | 480 | 3200 | 160 | 320 | 1600 | 10:1 | 2.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .531 | .406 | Green |
| 1754-70EN | 380 | 570 | 3800 | 190 | 380 | 1900 | 10:1 | 2.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .531 | .406 | Blue |

Fail-Safe Compression Mount Series: 1754

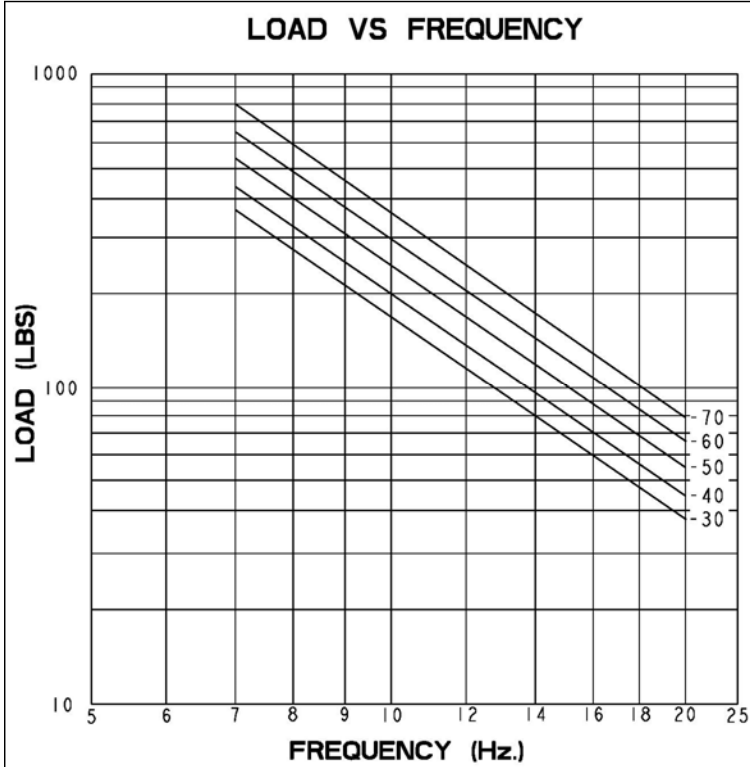
Dimension and Performance Characteristics



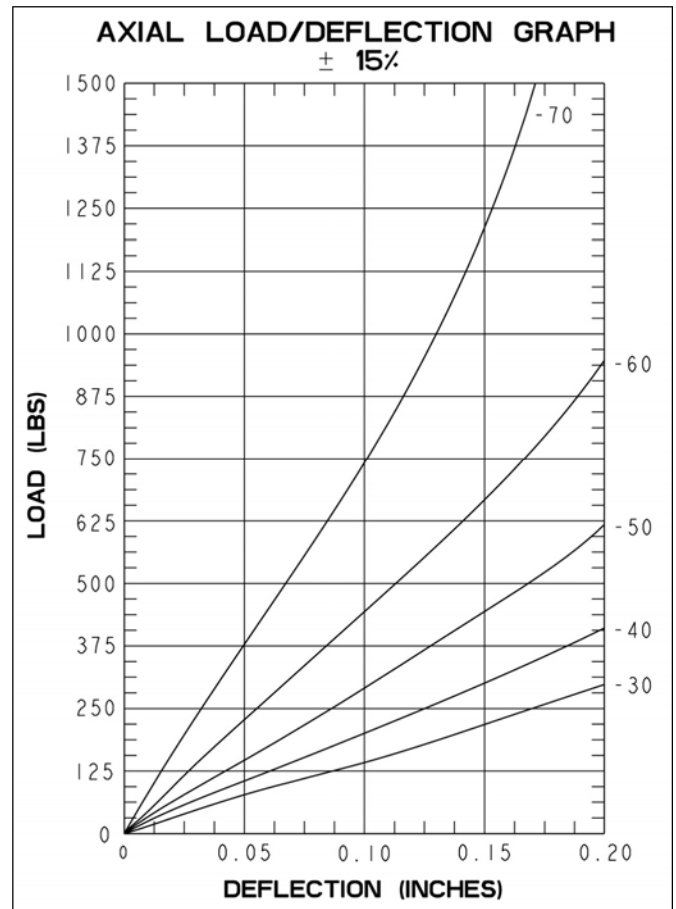
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Fail-Safe Compression Mount Series: 1754

Dimension and Performance Characteristics



| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-2000-0510-0125-SZ |
| O.D. = Ø 2.00" |
| I.D. = Ø .510" |
| THICKNESS = .125" |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |



Fail-Safe Compression Mount Series: 1755

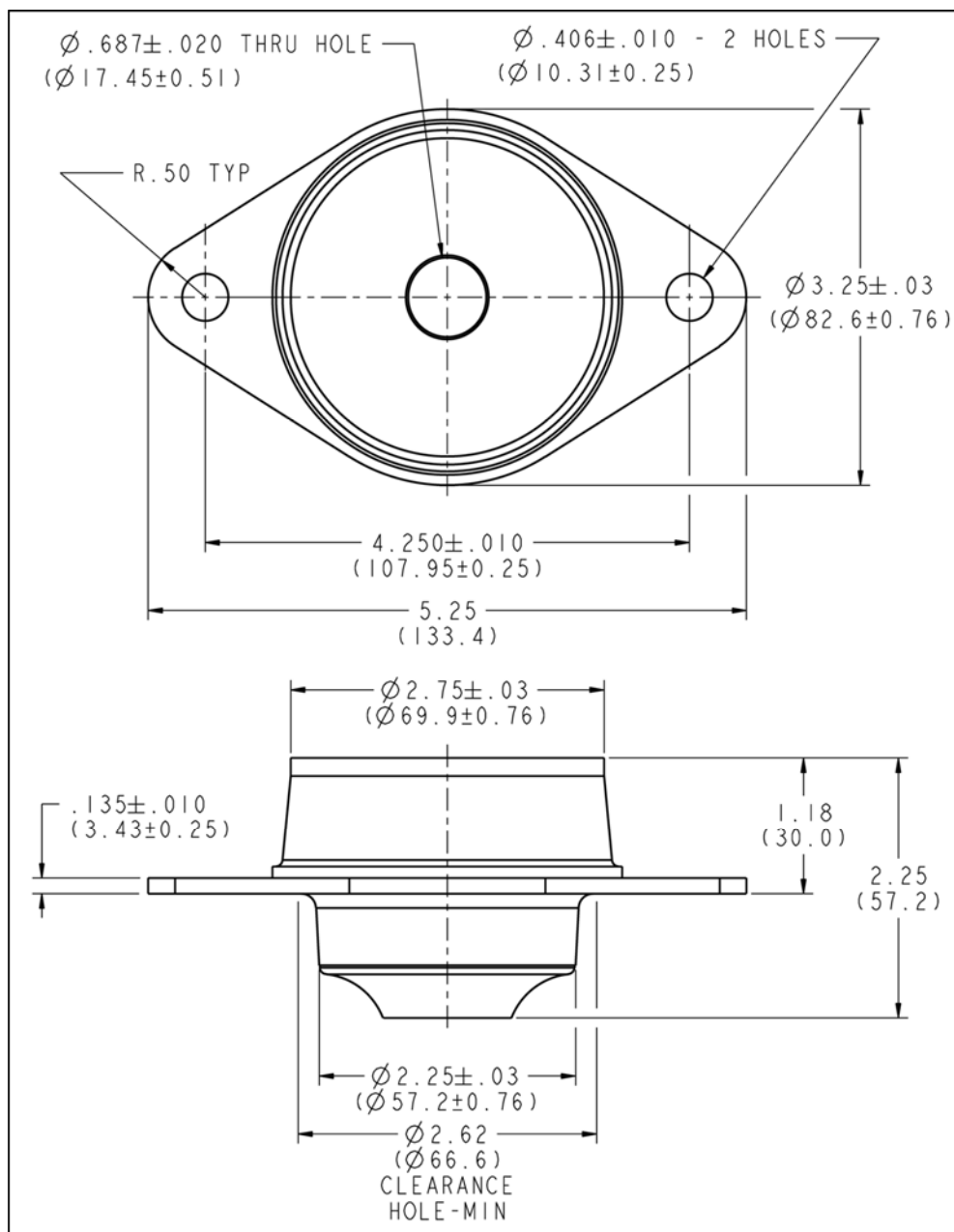
Dimension and Performance Characteristics



| Part # | Nominal Axial Load (lbs.) | Max. Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Radial Static Load Nominal | Radial Static Load Max. | Radial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Finish | Core Style | Center Hole | Flange Hole | Color Code |
|-----------|---------------------------|------------------------|---|----------------------------|-------------------------|--|------------------|------------------------|---------------------|----------------------|--------------------|------------|-------------|-------------|------------|
| 1755-30 | 320 | 480 | 3200 | 150 | 320 | 1500 | 10:1 | 2.25 | Neoprene | Steel | Zinc | Thru Hole | .687 | .406 | Red |
| 1755-40 | 380 | 570 | 3800 | 190 | 380 | 1900 | 10:1 | 2.25 | Neoprene | Steel | Zinc | Thru Hole | .687 | .406 | Orange |
| 1755-50 | 460 | 690 | 4600 | 230 | 460 | 2300 | 10:1 | 2.25 | Neoprene | Steel | Zinc | Thru Hole | .687 | .406 | Yellow |
| 1755-60 | 560 | 840 | 5600 | 280 | 560 | 2800 | 10:1 | 2.25 | Neoprene | Steel | Zinc | Thru Hole | .687 | .406 | Green |
| 1755-70 | 680 | 1020 | 6800 | 340 | 680 | 3400 | 10:1 | 2.25 | Neoprene | Steel | Zinc | Thru Hole | .687 | .406 | Blue |
| 1755-30BP | 320 | 480 | 3200 | 150 | 320 | 1500 | 10:1 | 2.25 | Neoprene | Steel | Black Paint | Thru Hole | .687 | .406 | Red |
| 1755-40BP | 380 | 570 | 3800 | 190 | 380 | 1900 | 10:1 | 2.25 | Neoprene | Steel | Black Paint | Thru Hole | .687 | .406 | Orange |
| 1755-50BP | 460 | 690 | 4600 | 230 | 460 | 2300 | 10:1 | 2.25 | Neoprene | Steel | Black Paint | Thru Hole | .687 | .406 | Yellow |
| 1755-60BP | 560 | 840 | 5600 | 280 | 560 | 2800 | 10:1 | 2.25 | Neoprene | Steel | Black Paint | Thru Hole | .687 | .406 | Green |
| 1755-70BP | 680 | 1020 | 6800 | 340 | 680 | 3400 | 10:1 | 2.25 | Neoprene | Steel | Black Paint | Thru Hole | .687 | .406 | Blue |
| 1755-30EN | 320 | 480 | 3200 | 150 | 320 | 1500 | 10:1 | 2.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .687 | .406 | Red |
| 1755-40EN | 380 | 570 | 3800 | 190 | 380 | 1900 | 10:1 | 2.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .687 | .406 | Orange |
| 1755-50EN | 460 | 690 | 4600 | 230 | 460 | 2300 | 10:1 | 2.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .687 | .406 | Yellow |
| 1755-60EN | 560 | 840 | 5600 | 280 | 560 | 2800 | 10:1 | 2.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .687 | .406 | Green |
| 1755-70EN | 680 | 1020 | 6800 | 340 | 680 | 3400 | 10:1 | 2.25 | Neoprene | Steel | Electroless Nickel | Thru Hole | .687 | .406 | Blue |

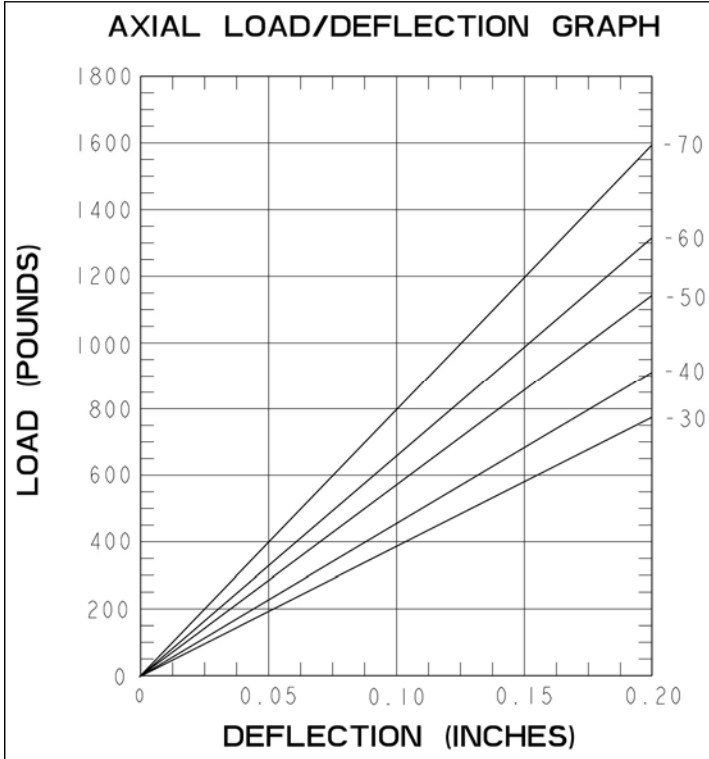
Fail-Safe Compression Mount Series: 1755

Dimension and Performance Characteristics

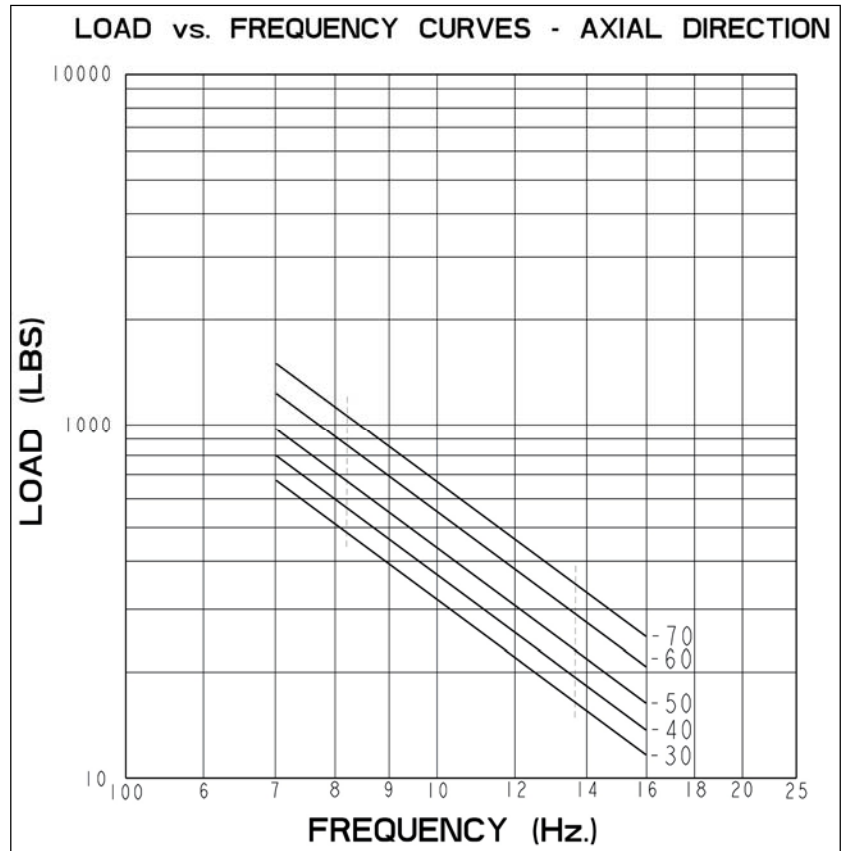


Fail-Safe Compression Mount Series: 1755

Dimension and Performance Characteristics



| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-2250-0635-0150-SZ |
| O.D. = Ø 2.25" |
| I.D. = Ø .635" |
| THICKNESS = .150" |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |



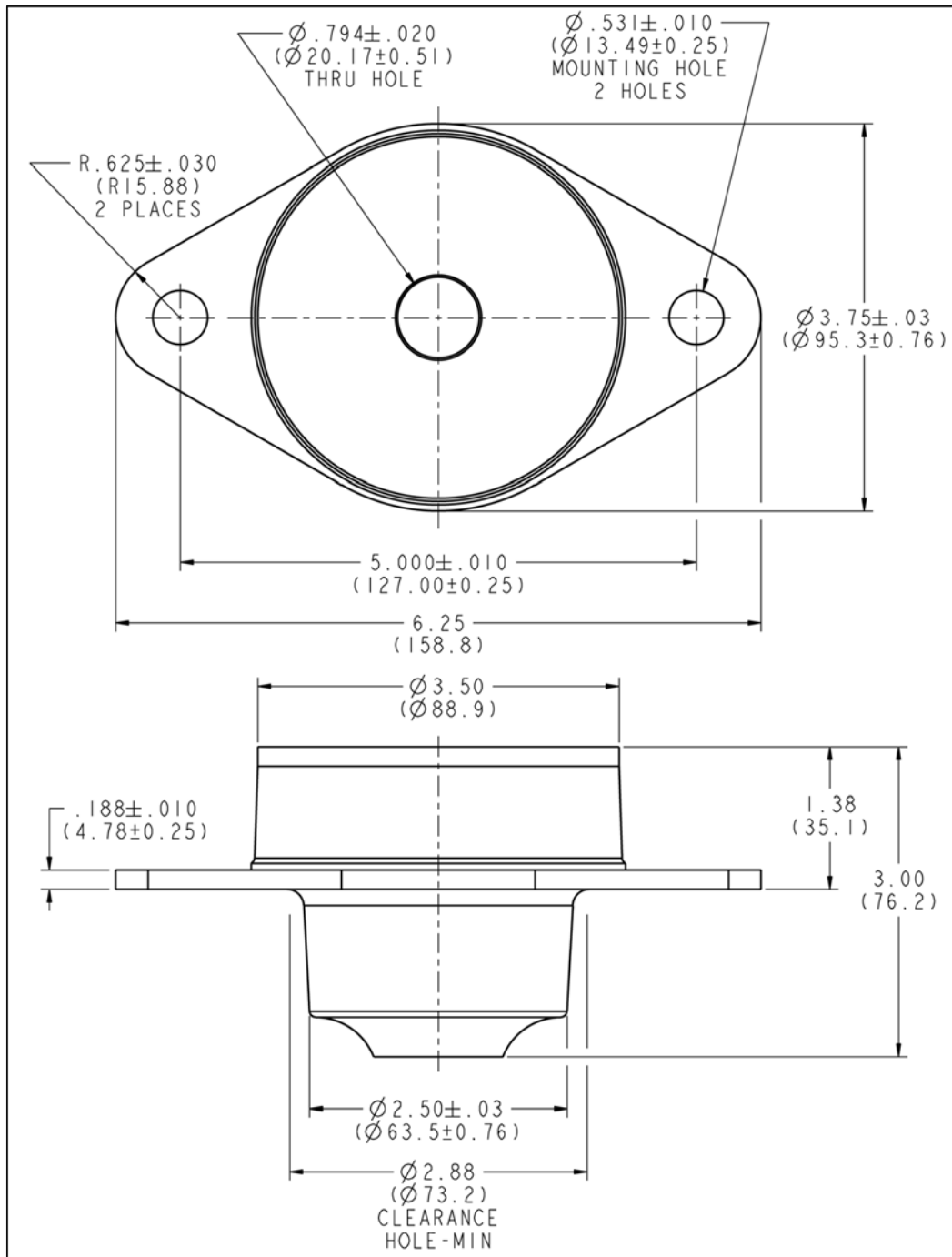
Fail-Safe Compression Mount Series: 1756

Dimension and Performance Characteristics

| Part # | Nominal Axial Load (lbs.) | Max. Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Radial Static Load Nominal | Radial Static Load Max. | Radial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Finish | Core Style | Center Hole | Flange Hole | Color Code |
|-----------|---------------------------|------------------------|---|----------------------------|-------------------------|--|------------------|------------------------|---------------------|----------------------|--------------------|------------|-------------|-------------|------------|
| 1756-30 | 460 | 690 | 4600 | 230 | 450 | 2300 | 10:1 | 3.00 | Neoprene | Steel | Zinc | Thru Hole | .794 | .531 | Red |
| 1756-40 | 560 | 840 | 5600 | 280 | 560 | 2800 | 10:1 | 3.00 | Neoprene | Steel | Zinc | Thru Hole | .794 | .531 | Orange |
| 1756-50 | 680 | 1020 | 6800 | 340 | 680 | 3400 | 10:1 | 3.00 | Neoprene | Steel | Zinc | Thru Hole | .794 | .531 | Yellow |
| 1756-60 | 830 | 1245 | 8300 | 415 | 830 | 4150 | 10:1 | 3.00 | Neoprene | Steel | Zinc | Thru Hole | .794 | .531 | Green |
| 1756-70 | 1000 | 1500 | 10000 | 500 | 1000 | 5000 | 10:1 | 3.00 | Neoprene | Steel | Zinc | Thru Hole | .794 | .531 | Blue |
| 1756-30BP | 460 | 690 | 4600 | 230 | 450 | 2300 | 10:1 | 3.00 | Neoprene | Steel | Black Paint | Thru Hole | .794 | .531 | Red |
| 1756-40BP | 560 | 840 | 5600 | 280 | 560 | 2800 | 10:1 | 3.00 | Neoprene | Steel | Black Paint | Thru Hole | .794 | .531 | Orange |
| 1756-50BP | 680 | 1020 | 6800 | 340 | 680 | 3400 | 10:1 | 3.00 | Neoprene | Steel | Black Paint | Thru Hole | .794 | .531 | Yellow |
| 1756-60BP | 830 | 1245 | 8300 | 415 | 830 | 4150 | 10:1 | 3.00 | Neoprene | Steel | Black Paint | Thru Hole | .794 | .531 | Green |
| 1756-70BP | 1000 | 1500 | 10000 | 500 | 1000 | 5000 | 10:1 | 3.00 | Neoprene | Steel | Black Paint | Thru Hole | .794 | .531 | Blue |
| 1756-30EN | 460 | 690 | 4600 | 230 | 450 | 2300 | 10:1 | 3.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .794 | .531 | Red |
| 1756-40EN | 560 | 840 | 5600 | 280 | 560 | 2800 | 10:1 | 3.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .794 | .531 | Orange |
| 1756-50EN | 680 | 1020 | 6800 | 340 | 680 | 3400 | 10:1 | 3.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .794 | .531 | Yellow |
| 1756-60EN | 830 | 1245 | 8300 | 415 | 830 | 4150 | 10:1 | 3.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .794 | .531 | Green |
| 1756-70EN | 1000 | 1500 | 10000 | 500 | 1000 | 5000 | 10:1 | 3.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | .794 | .531 | Blue |

Fail-Safe Compression Mount Series: 1756

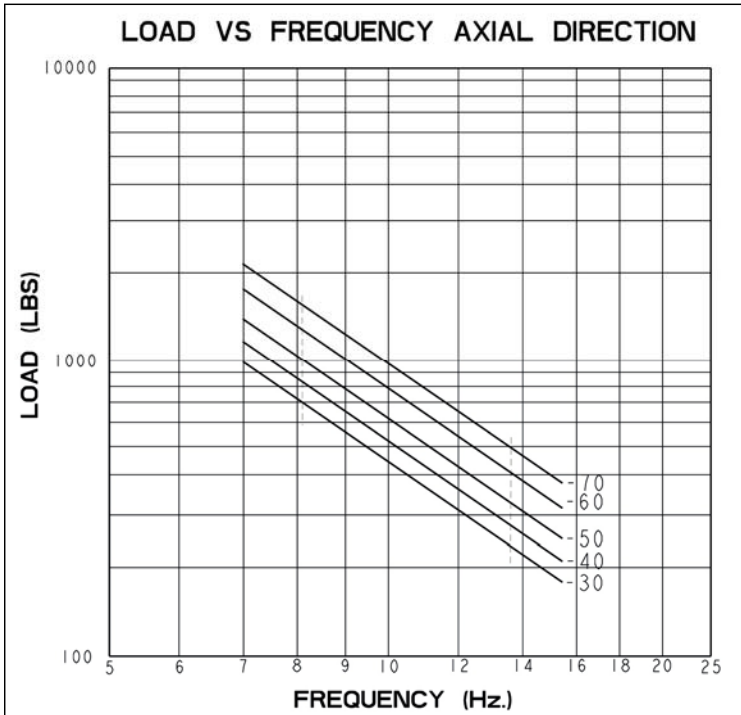
Dimension and Performance Characteristics



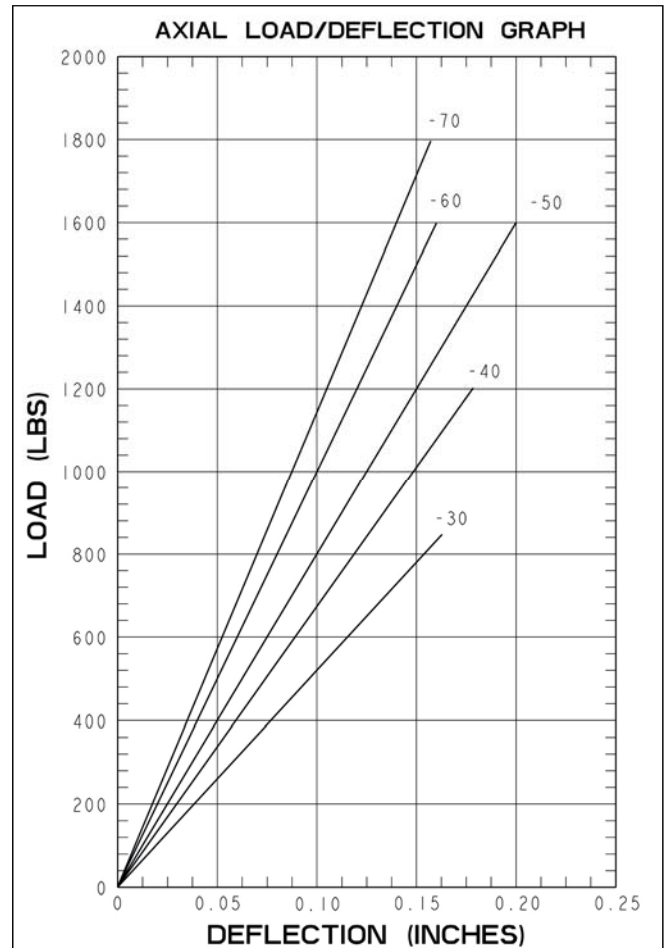
H

Fail-Safe Compression Mount Series: 1756

Dimension and Performance Characteristics



| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-2500-0780-0188-SZ |
| O.D. = Ø 2.50" |
| I.D. = Ø .780" |
| THICKNESS = .188" |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |



Fail-Safe Compression Mount Series: 1757

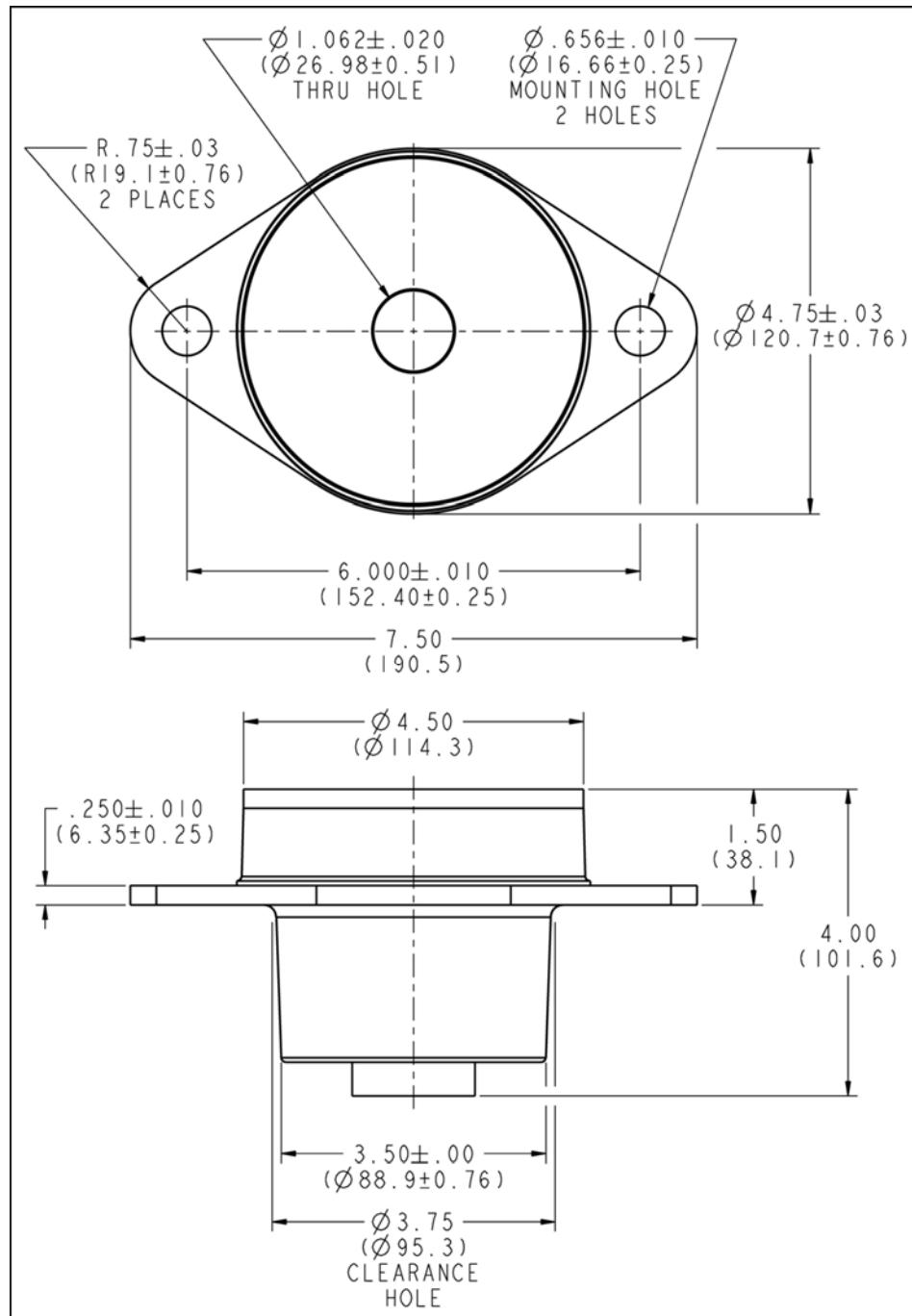
Dimension and Performance Characteristics



| Part # | Nominal Axial Load (lbs.) | Max. Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Radial Static Load Nominal | Radial Static Load Max. | Radial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Finish | Core Style | Center Hole | Flange Hole | Color Code |
|-----------|---------------------------|------------------------|---|----------------------------|-------------------------|--|------------------|------------------------|---------------------|----------------------|--------------------|------------|-------------|-------------|------------|
| 1757-30 | 830 | 1245 | 8300 | 415 | 830 | 4150 | 10:1 | 4.00 | Neoprene | Steel | Zinc | Thru Hole | 1.062 | .656 | Red |
| 1757-40 | 1000 | 1500 | 10000 | 500 | 1000 | 5000 | 10:1 | 4.00 | Neoprene | Steel | Zinc | Thru Hole | 1.062 | .656 | Orange |
| 1757-50 | 1210 | 1815 | 12100 | 605 | 1210 | 6050 | 10:1 | 4.00 | Neoprene | Steel | Zinc | Thru Hole | 1.062 | .656 | Yellow |
| 1757-60 | 1470 | 2205 | 14700 | 735 | 1470 | 7350 | 10:1 | 4.00 | Neoprene | Steel | Zinc | Thru Hole | 1.062 | .656 | Green |
| 1757-70 | 1780 | 2700 | 17800 | 890 | 1780 | 8900 | 10:1 | 4.00 | Neoprene | Steel | Zinc | Thru Hole | 1.062 | .656 | Blue |
| 1757-30BP | 830 | 1245 | 8300 | 415 | 830 | 4150 | 10:1 | 4.00 | Neoprene | Steel | Black Paint | Thru Hole | 1.062 | .656 | Red |
| 1757-40BP | 1000 | 1500 | 10000 | 500 | 1000 | 5000 | 10:1 | 4.00 | Neoprene | Steel | Black Paint | Thru Hole | 1.062 | .656 | Orange |
| 1757-50BP | 1210 | 1815 | 12100 | 605 | 1210 | 6050 | 10:1 | 4.00 | Neoprene | Steel | Black Paint | Thru Hole | 1.062 | .656 | Yellow |
| 1757-60BP | 1470 | 2205 | 14700 | 735 | 1470 | 7350 | 10:1 | 4.00 | Neoprene | Steel | Black Paint | Thru Hole | 1.062 | .656 | Green |
| 1757-70BP | 1780 | 2700 | 17800 | 890 | 1780 | 8900 | 10:1 | 4.00 | Neoprene | Steel | Black Paint | Thru Hole | 1.062 | .656 | Blue |
| 1757-30EN | 830 | 1245 | 8300 | 415 | 830 | 4150 | 10:1 | 4.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | 1.062 | .656 | Red |
| 1757-40EN | 1000 | 1500 | 10000 | 500 | 1000 | 5000 | 10:1 | 4.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | 1.062 | .656 | Orange |
| 1757-50EN | 1210 | 1815 | 12100 | 605 | 1210 | 6050 | 10:1 | 4.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | 1.062 | .656 | Yellow |
| 1757-60EN | 1470 | 2205 | 14700 | 735 | 1470 | 7350 | 10:1 | 4.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | 1.062 | .656 | Green |
| 1757-70EN | 1780 | 2700 | 17800 | 890 | 1780 | 8900 | 10:1 | 4.00 | Neoprene | Steel | Electroless Nickel | Thru Hole | 1.062 | .656 | Blue |

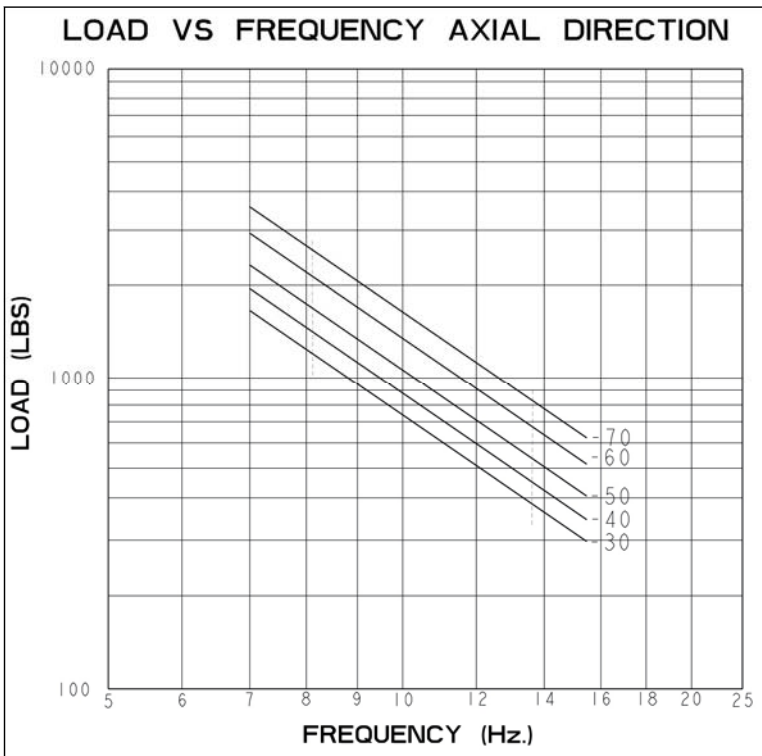
Fail-Safe Compression Mount Series: 1757

Dimension and Performance Characteristics

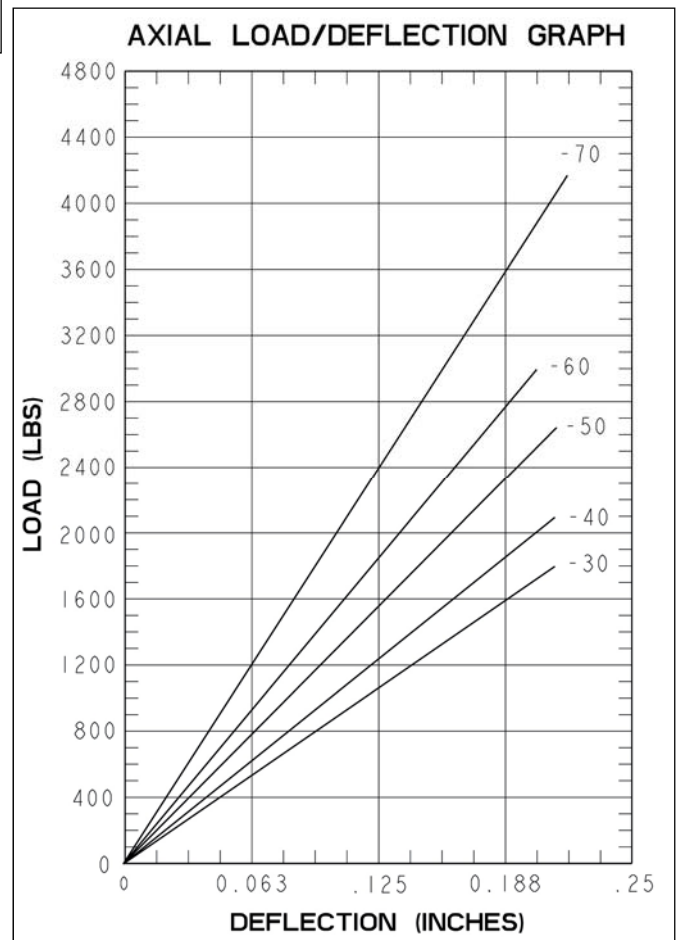


Fail-Safe Compression Mount Series: 1757

Dimension and Performance Characteristics

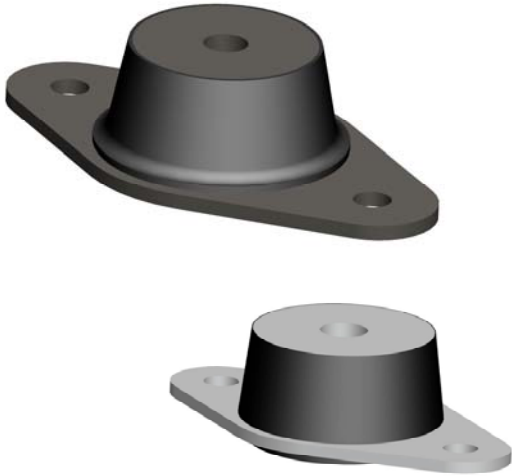


| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-3250-1010-0250-SZ |
| O.D. = Ø 3.25" |
| I.D. = Ø 1.01" |
| THICKNESS = .250" |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |



Fail-Safe Compression Mount Series 1804/1805

Compact, fail-safe isolation mounts for 4-cylinder or less diesel engines



Applications

- 1-4 cylinder diesel engines
- Power generation
- Construction equipment
- Agricultural equipment
- Electric motors
- Off road vehicles

Benefits

- Excellent isolation for 1-4 cylinder engines
- Fail-safe construction
- Multiple load ranges that overlap

Load Range

- 1804 = 5 load ratings to 300 lbs.
- 1805 = 5 load ratings to 420 lbs.

Attributes

- Rugged construction
- Easy to install
- Axial to radial stiffness of 6:1

SNUBBING WASHERS

| SERIES | P/N | O.D" | I.D" | THICKNESS" | MATERIAL | FINISH |
|--------|----------------------|-------|-------|------------|---------------|------------|
| 1804 | SW-2000-0450-0125-SW | 2.00" | .450" | .125" | 1010-1020 CRS | Clear Zinc |
| 1805 | SW-2130-0532-0134-SW | 2.13" | .532" | .134" | 1010-1020 CRS | Clear Zinc |

Specifications

- Natural Frequency—10-20 Hertz
- Transmissibility at resonance—10:1
- Resilient Element—Neoprene
- Standard materials—Zinc plated steel
- Weight— 1804 = 7 oz. / 1805 = 9 oz.

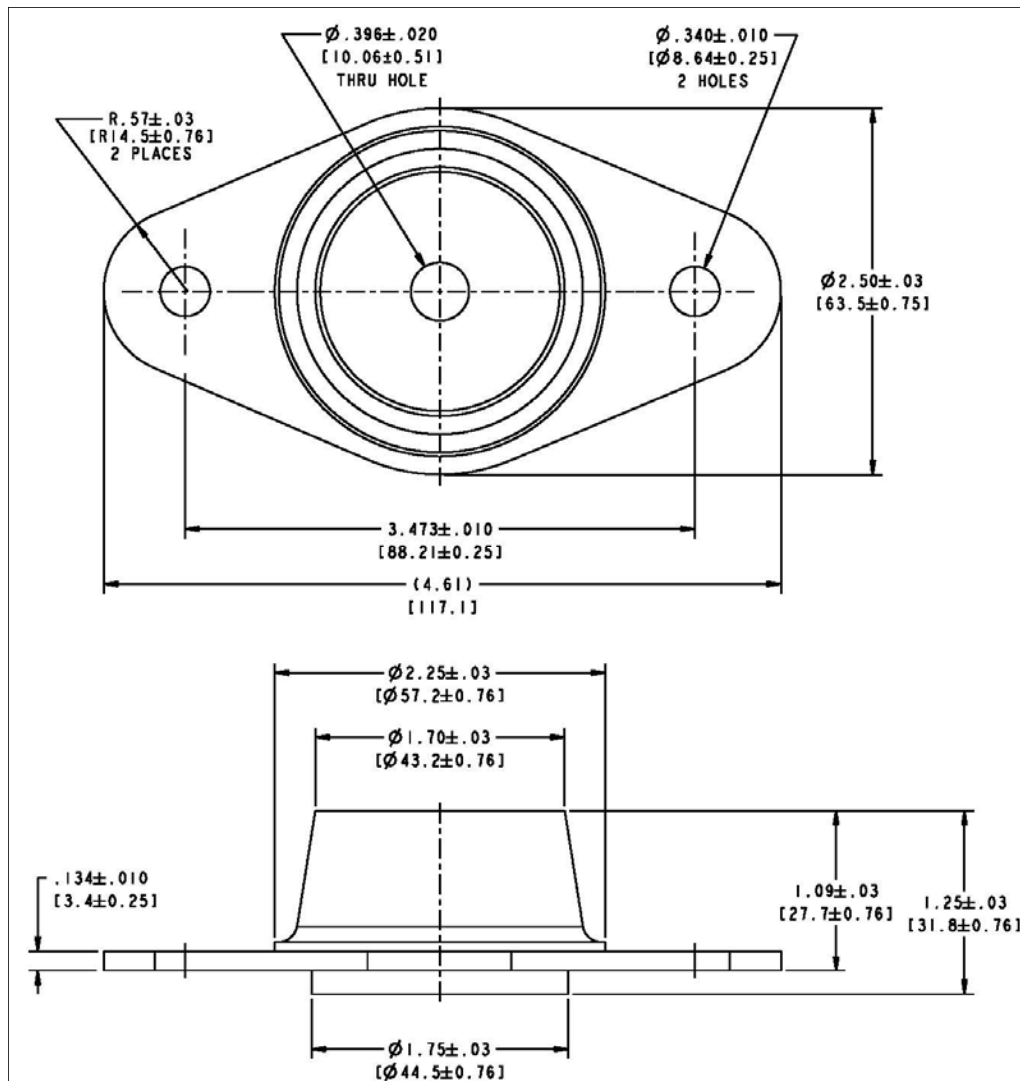
Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40°F to 200°F (-40°C to +93°C) and is resistant to most solvents, oils and ozone
- Other materials are available upon request

Fail-Safe Compression Mount Series: 1804

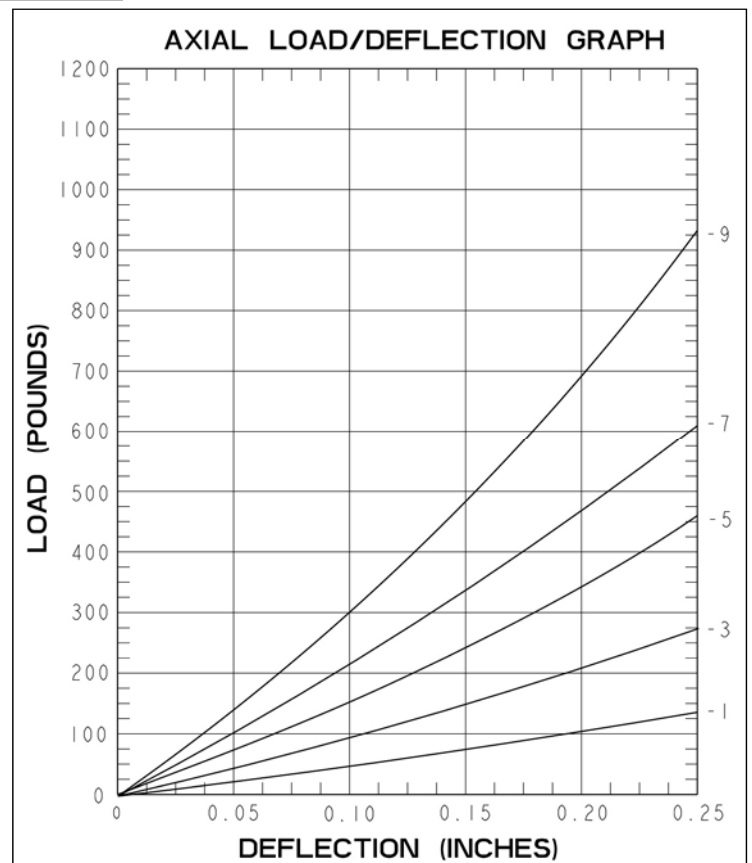
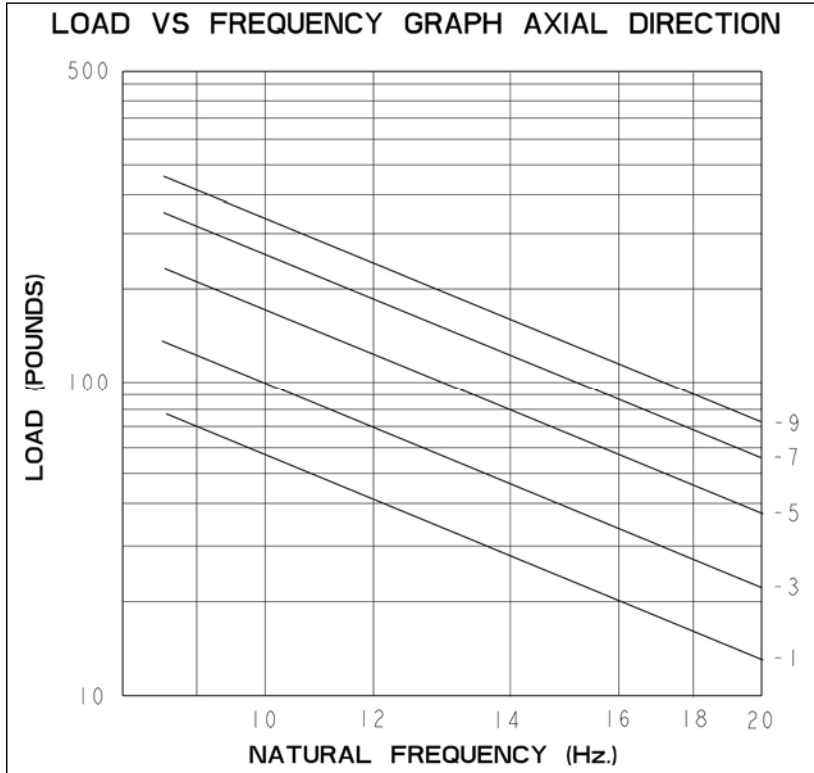
Dimension and Performance Characteristics

| Part # | Nominal Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Core Style | Center Hole | Flange Hole | Color Code |
|--------|---------------------------|---|------------------|------------------------|---------------------|----------------------|------------|-------------|-------------|------------|
| 1804-1 | 50 | 500 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .396 | .340 | Red |
| 1804-3 | 90 | 900 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .396 | .340 | Orange |
| 1804-5 | 150 | 1500 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .396 | .340 | Yellow |
| 1804-7 | 215 | 2150 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .396 | .340 | Green |
| 1804-9 | 300 | 3000 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .396 | .340 | Blue |



Fail-Safe Compression Mount Series: 1804

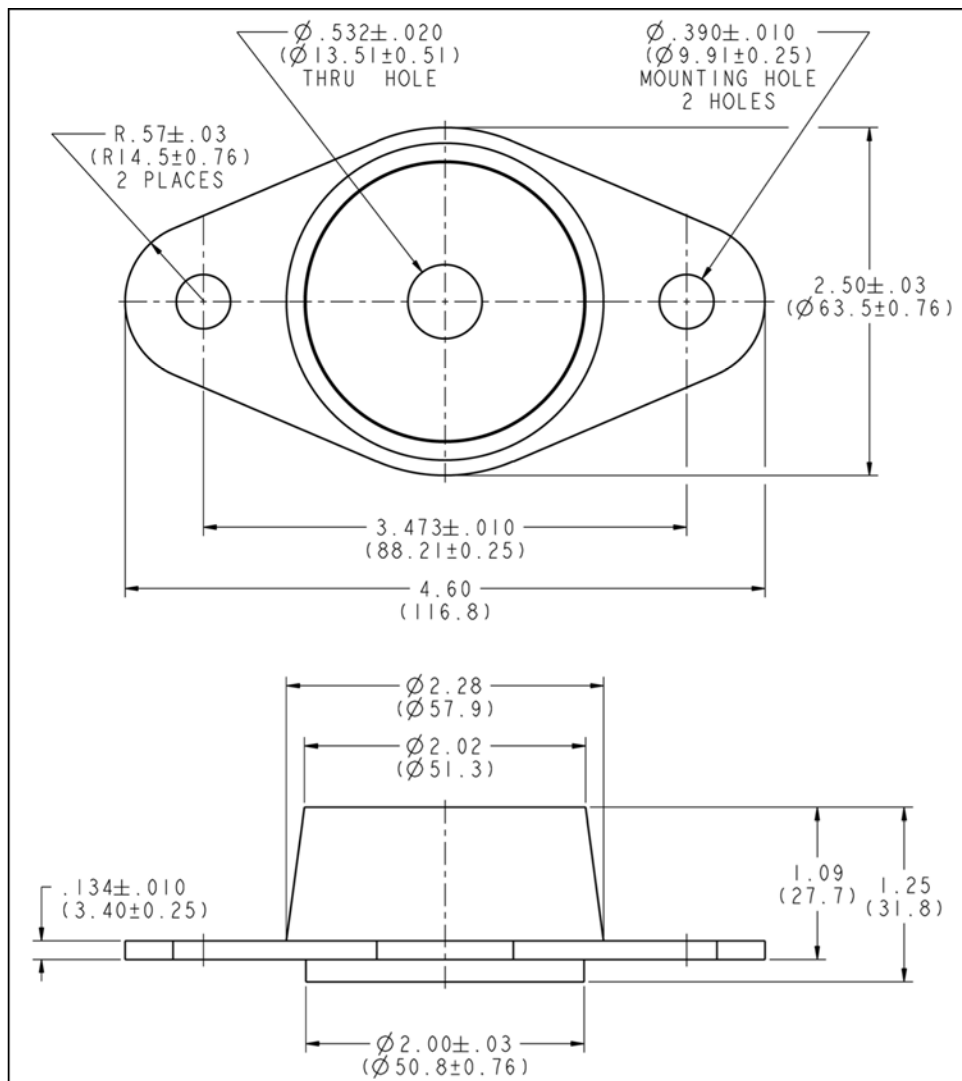
Dimension and Performance Characteristics



Fail-Safe Compression Mount Series: 1805

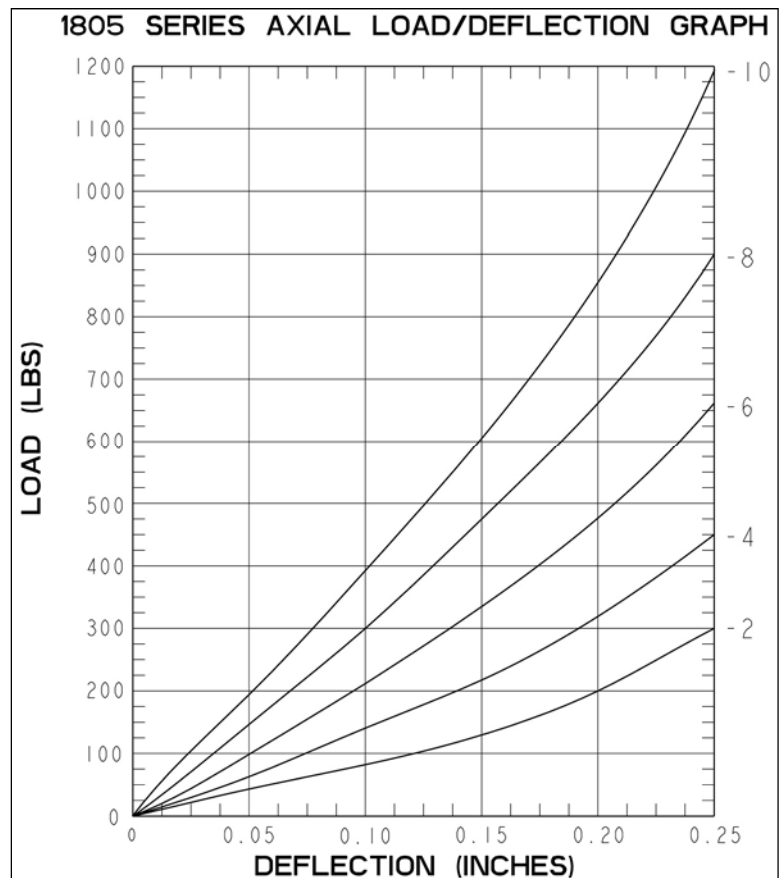
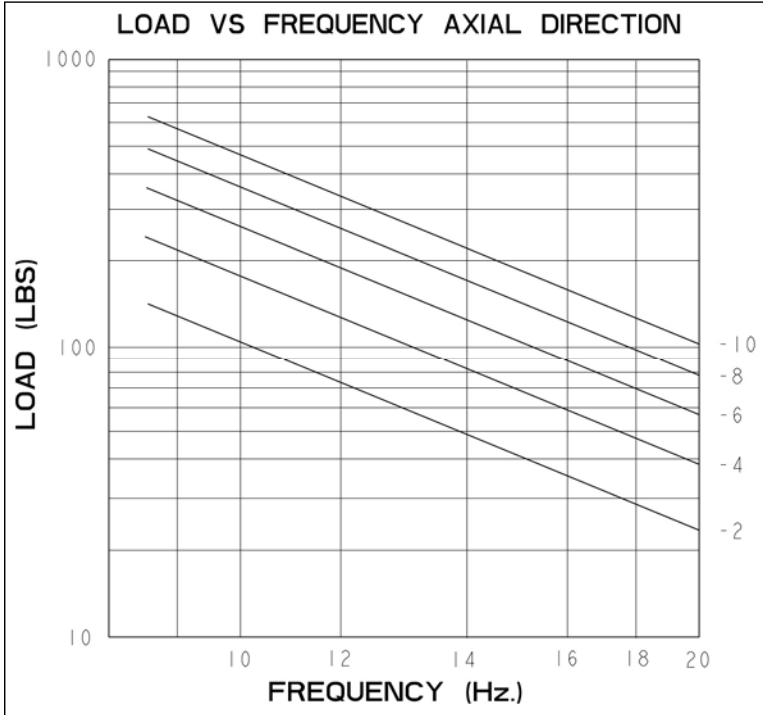
Dimension and Performance Characteristics

| Part # | Nominal Axial Load (lbs.) | Axial Stiffness at .10" Deflection (lbs./in.) | Transmissibility | Free Height (max. in.) | Resilient Materials | Structural Materials | Core Style | Center Hole | Flange Hole | Color Code |
|---------|---------------------------|---|------------------|------------------------|---------------------|----------------------|------------|-------------|-------------|------------|
| 1805-2 | 100 | 1000 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .532 | .390 | Yellow |
| 1805-4 | 155 | 1550 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .532 | .390 | Red |
| 1805-6 | 230 | 2300 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .532 | .390 | Green |
| 1805-8 | 320 | 3200 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .532 | .390 | Blue |
| 1805-10 | 420 | 4200 | 10:1 | 1.25 | Neoprene | Steel | Thru Hole | .532 | .390 | White |



Fail-Safe Compression Mount Series: 1805

Dimension and Performance Characteristics



FLUID MOUNT SERIES



1962 Fluid Mount Series

A compact, low frequency, highly damped large deflection mount for protection from severe vibration and shock loads



Attributes

- Silicone gel produces a high level of damping
- Axial to radial stiffness ratio 1:1
- Compact, low profile design
- Easy to install
- Silicone elastomer
- Stainless steel construction
- Designed for severe ground vehicle vibration inputs
- Outstanding dynamic fatigue life
- Fail-safe with ground strap

Applications

- Military ground vehicle COTS electronics (Mil-810)
- Military wheeled and tracked vehicle applications
- Airborne electronics (Mil-810)
- Shock and vibration applications where a high level of damping is required

Load Range

- Load ratings are 11-17 lbs.
- Can be custom tailored to specific applications

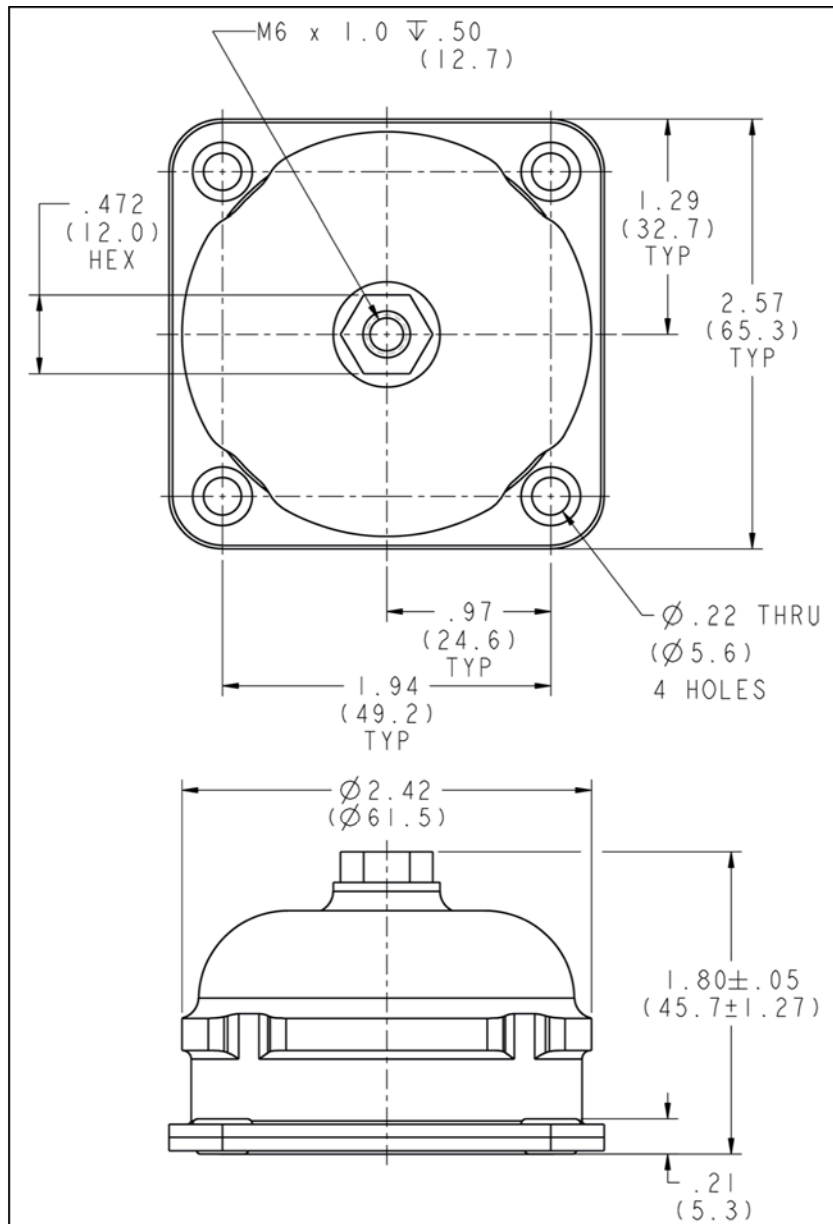
Elastomeric Data

- Silicone operating temperature range is -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$)
- Resistant to fungus, most solvents and ozone
- Other elastomeric formulations are available in Neoprene

Fluid Mount Series: 1962

Dimensions and Load Deflection Curves

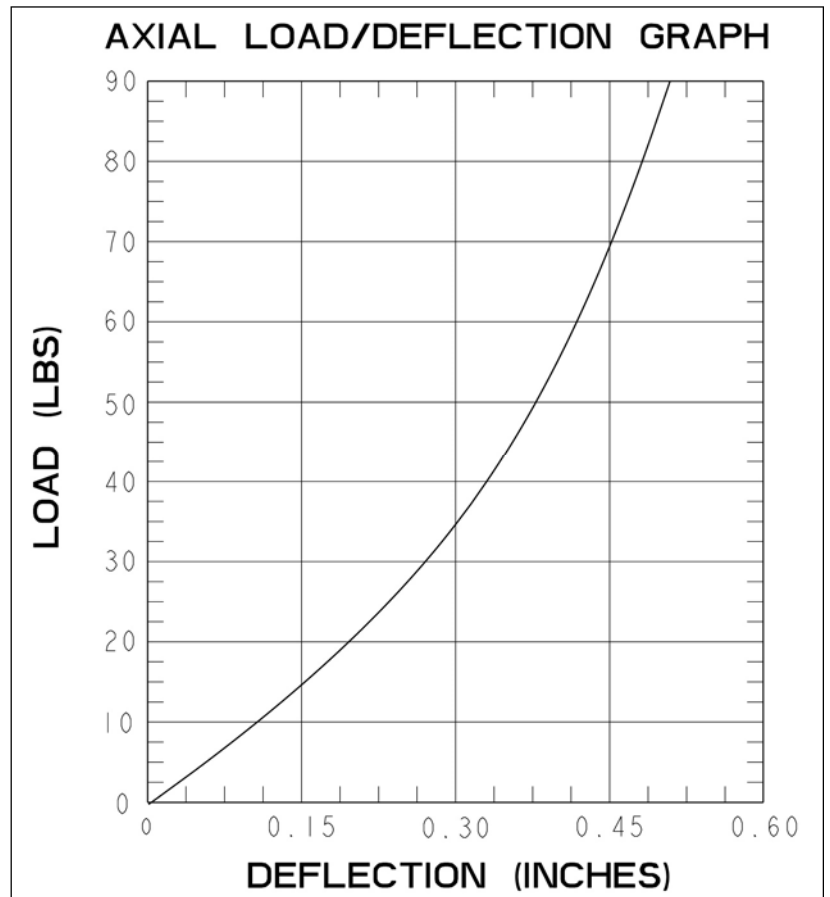
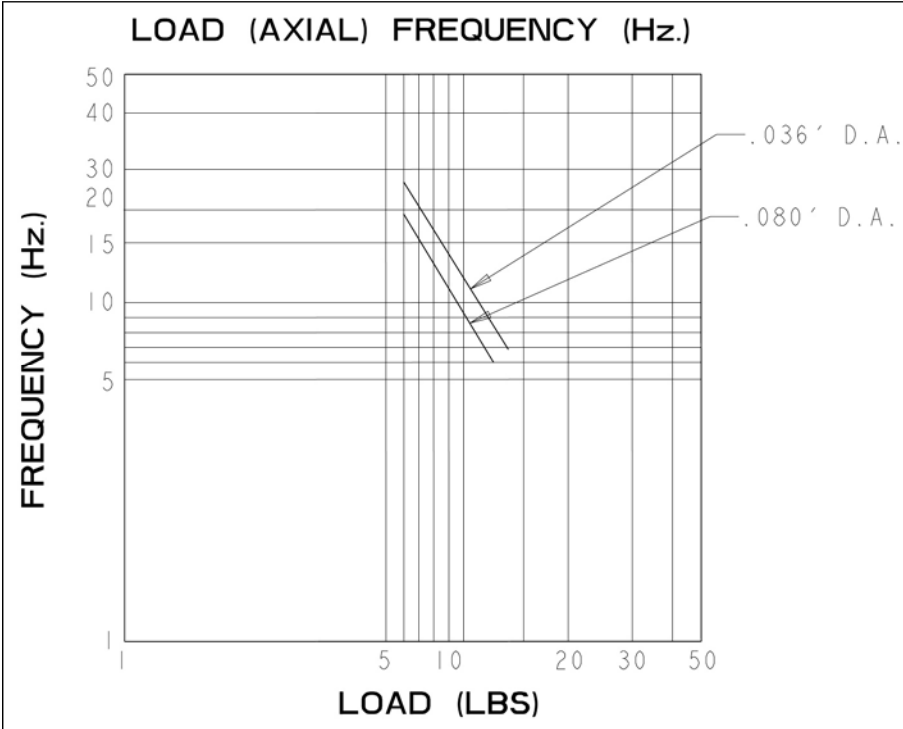
| Part # | Load Range Vehicular (lbs.) | Load Range Airborne (lbs.) | Axial Natural Frequency (hz) | Standard Material | Standard Elastomer | Transmissibility at Resonance Max. |
|---------|-----------------------------------|----------------------------------|---------------------------------------|----------------------|-----------------------|---------------------------------------|
| 1962-00 | 11-17 | 11-17 | 6-10 | 304 SS | Silicone/Silicone Gel | 2.5:1 |



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Fluid Mount Series: 1962

Dimensions and Load Deflection Curves



1969 Fluid Mount Series

A compact, low frequency, highly damped large deflection mount for protection from severe vibration and shock loads



Applications

- Military ground vehicle COTS electronics (Mil-810)
- Military wheeled and tracked vehicle applications
- Airborne electronics (Mil-810)
- Shock and vibration applications where a high level of damping is required

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Load Range

- Load ratings are .5-8 lbs.
- Can be custom tailored to specific applications
- Max axial deflection .57 inches

Attributes

- Silicone gel produces a high level of damping
- Axial to radial stiffness ratio 1:0.8
- Compact, low profile design
- Easy to install
- Silicone elastomer
- Stainless steel construction
- Designed for severe ground vehicle vibration inputs
- Outstanding dynamic fatigue life
- Fail-safe with ground strap

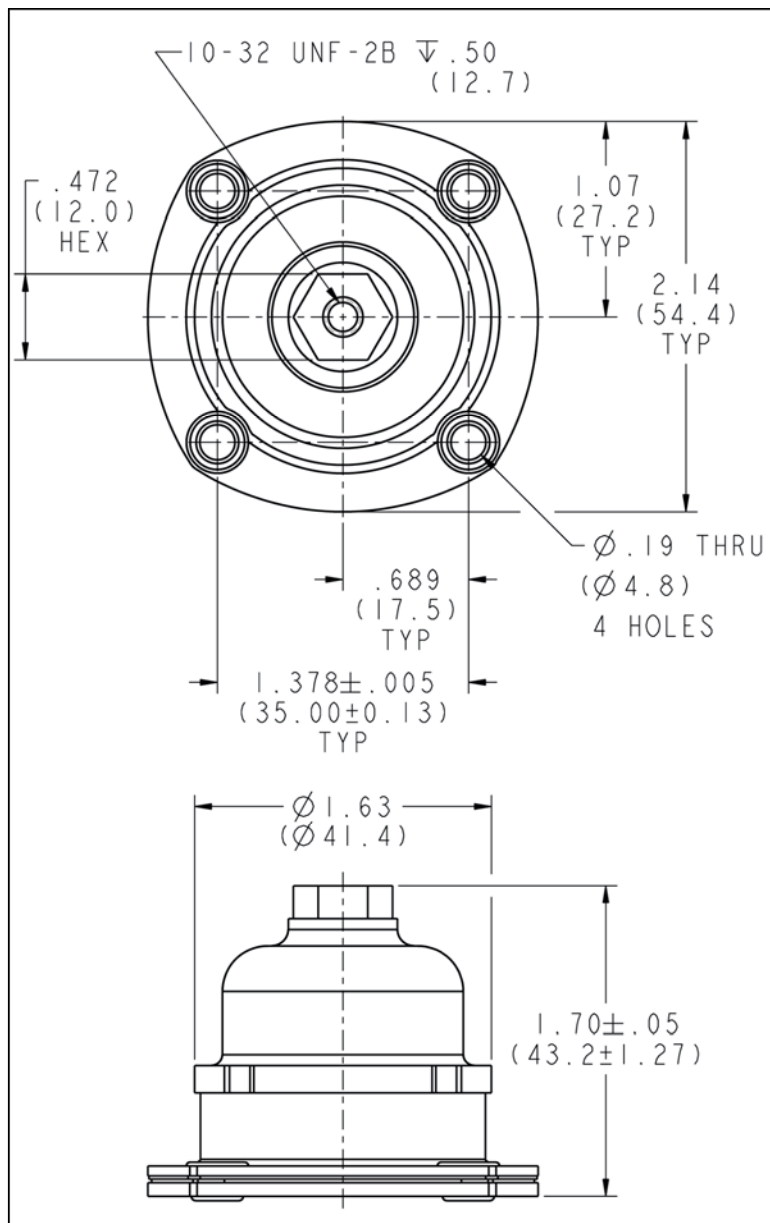
Elastomeric Data

- Silicone operating temperature range is -67°F to +300°F (-55°C to +150°C)
- Resistant to fungus, most solvents and ozone
- Other elastomeric formulations are available in Neoprene

Fluid Mount Series: 1969

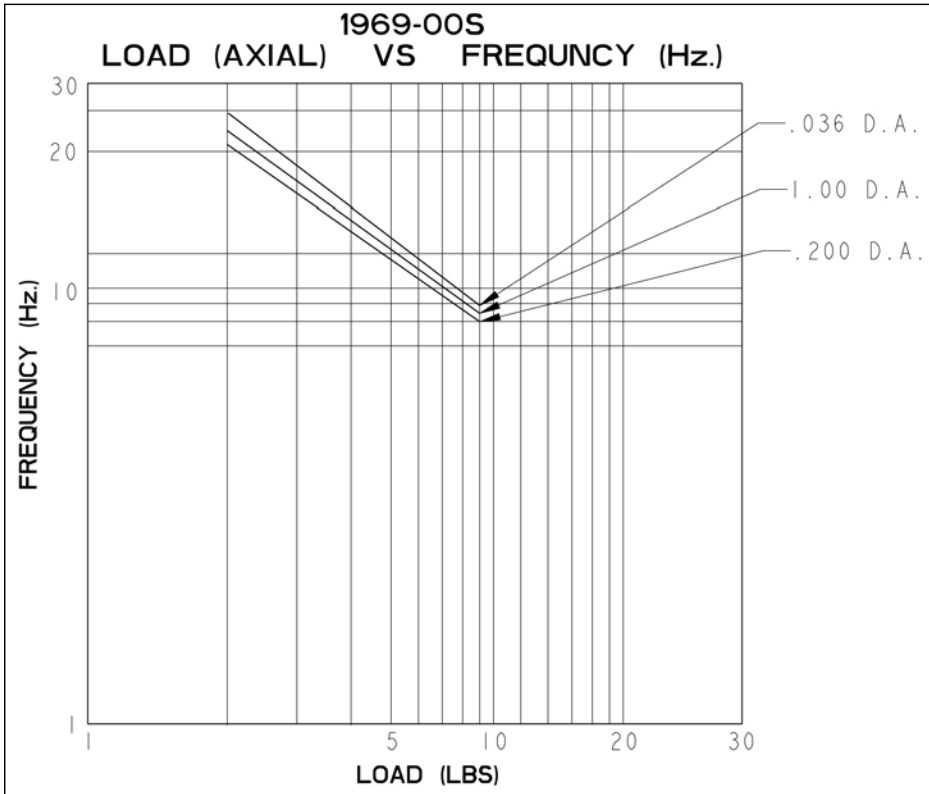
Dimensions and Load Deflection Curves

| Part # | Load Range Vehicular (lbs.) | Load Range Airborne (lbs.) | Axial Natural Frequency (hz) | Standard Material | Standard Elastomer | Transmissibility at Resonance Max. |
|----------|-----------------------------|----------------------------|------------------------------|-------------------|-----------------------|------------------------------------|
| 1969-00S | 3-8 | .5-5 | 10-25 | 304 SS | Silicone/Silicone Gel | 2.5:1 |
| 1969-00N | 8-18 | 5-11 | 10-25 | 304 SS | Neoprene | 10:1 |

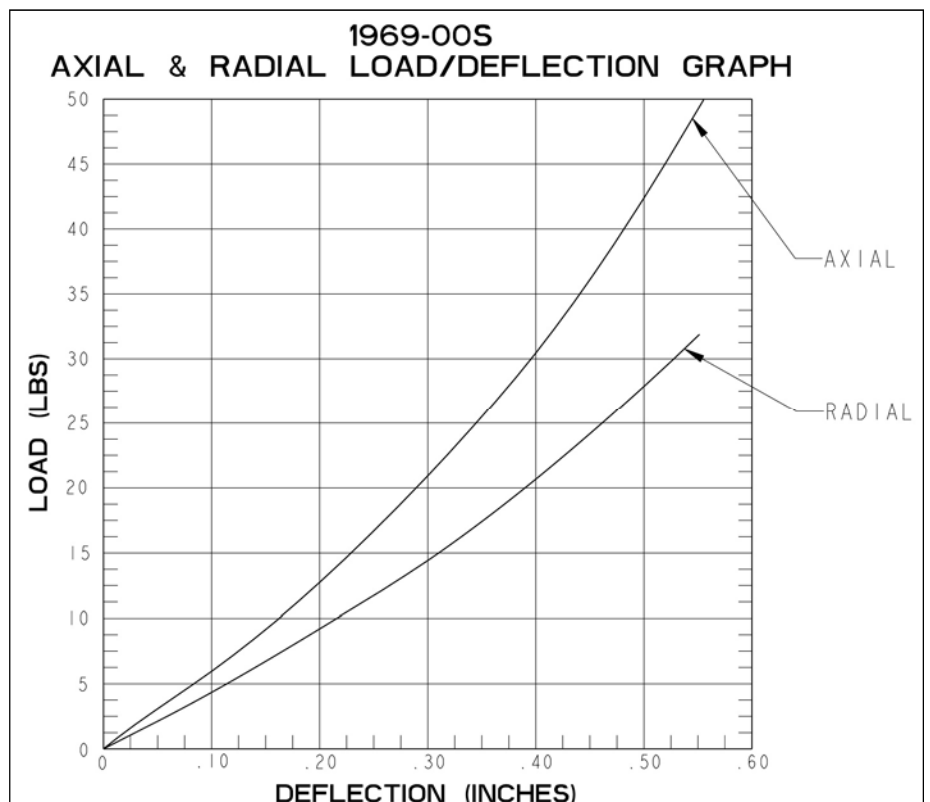


Fluid Mount Series: 1969

Dimensions and Load Deflection Curves

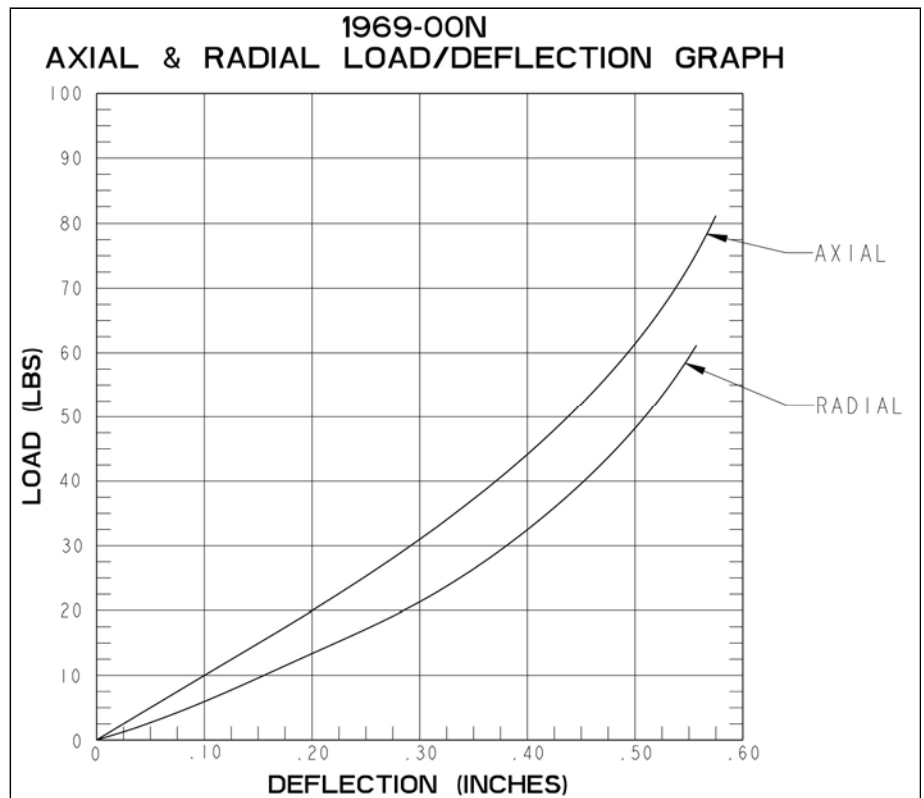
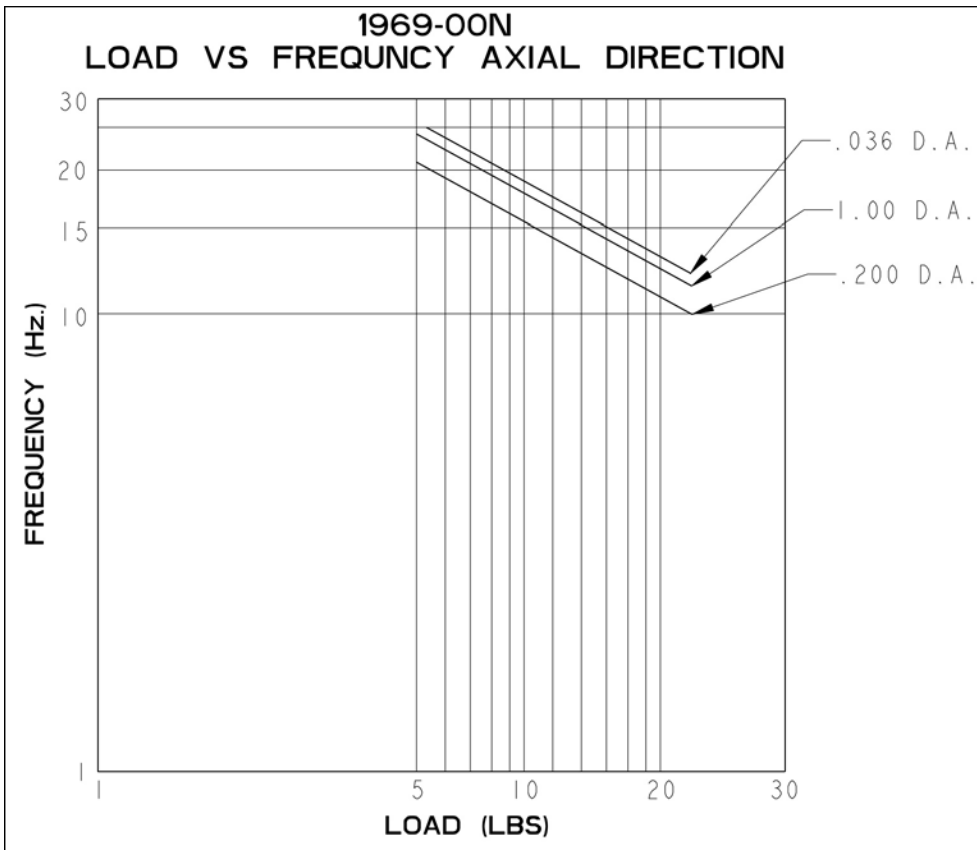


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Fluid Mount Series: 1969

Dimensions and Load Deflection Curves



2006 Fluid Mount Series

A compact, low frequency, highly damped large deflection mount for protection from severe vibration and shock loads



Attributes

- Silicone gel produces a high level of damping
- Axial to radial stiffness ratio 1:1
- Compact, low profile design
- Easy to install
- Silicone elastomer
- Stainless steel construction
- Designed for severe ground vehicle vibration inputs
- Outstanding dynamic fatigue life
- Fail-safe with ground strap

Applications

- Military ground vehicle COTS electronics (Mil-810)
- Military wheeled and tracked vehicle applications
- Airborne electronics (Mil-810)
- Shock and vibration applications where a high level of damping is required



Load Range

- Load ratings are 6-11 lbs.
- Can be custom tailored to specific applications
- Max axial deflection .60 inches

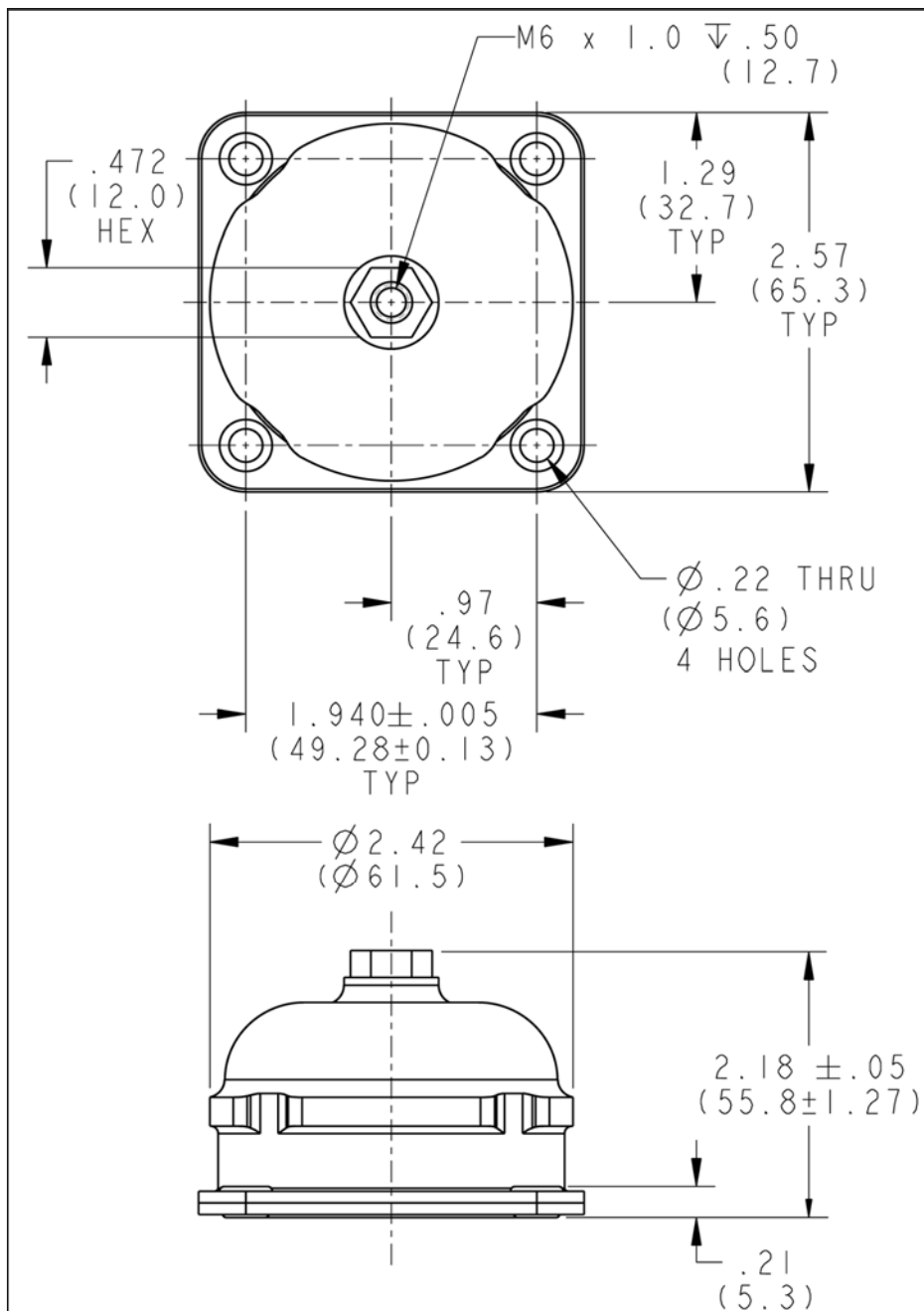
Elastomeric Data

- Silicone operating temperature range is -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$)
- Resistant to fungus, most solvents and ozone
- Other elastomeric formulations are available in Neoprene

Fluid Mount Series: 2006

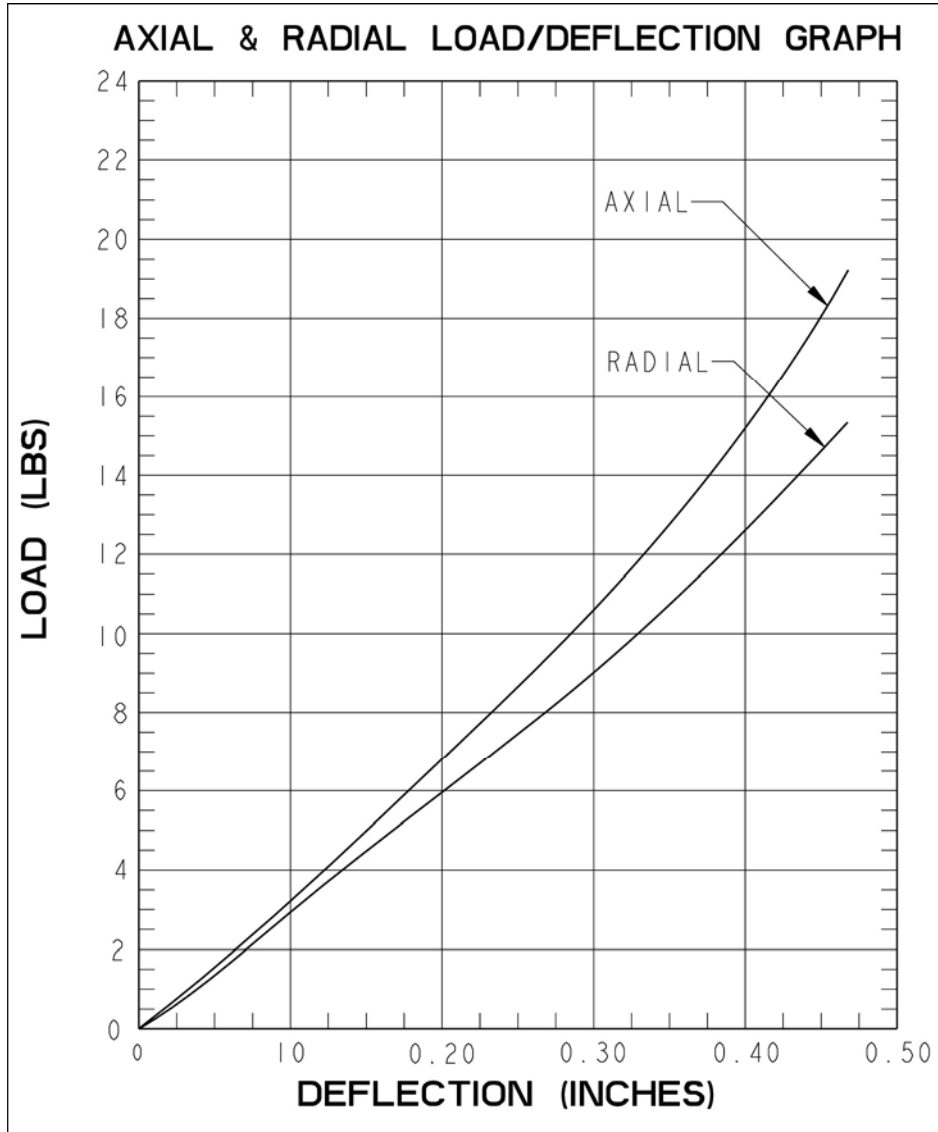
Dimensions and Load Deflection Curves

| Part # | Load Range Vehicular (lbs.) | Load Range Airborne (lbs.) | Axial Natural Frequency (hz) | Standard Material | Standard Elastomer | Transmissibility at Resonance Max. |
|---------|-----------------------------------|----------------------------------|---------------------------------------|----------------------|-----------------------|---------------------------------------|
| 2006-00 | 6-11 | 6-11 | 6-10 | 304 SS | Silicone/Silicone Gel | 2.5:1 |



Fluid Mount Series: 2006

Dimensions and Load Deflection Curves



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FRICTION STYLE MOUNT SERIES



Friction Style Mount Series

1772/1773

Friction damped mounts for vibration isolation and shock attenuation
of aircraft and helicopter application



Applications

- Aircraft avionics and equipment
- Naval electronics
- Sensitive electronic applications that require medical or NBC wash down
- Helicopter electronics

Load Range

- 1772 = 7 load ratings from .25-10 lbs. per mount
- 1773 = 7 load ratings from 2.0-40 lbs. per mount

Attributes

- Fail-safe design
- Friction damped stainless spring
- Axial to radial stiffness ratio 4:1
- Rugged construction

Specifications

- Natural Frequency — 7-10 Hertz
- Transmissibility at resonance — 2.5:1 max.
- Resilient Element — friction damped stainless steel spring
- Standard materials — clear anodized 6061-T6 aluminum
- Isolator weight — 1772 = 1.63 oz. / 1773 = 3.56 oz.

Environmental Data

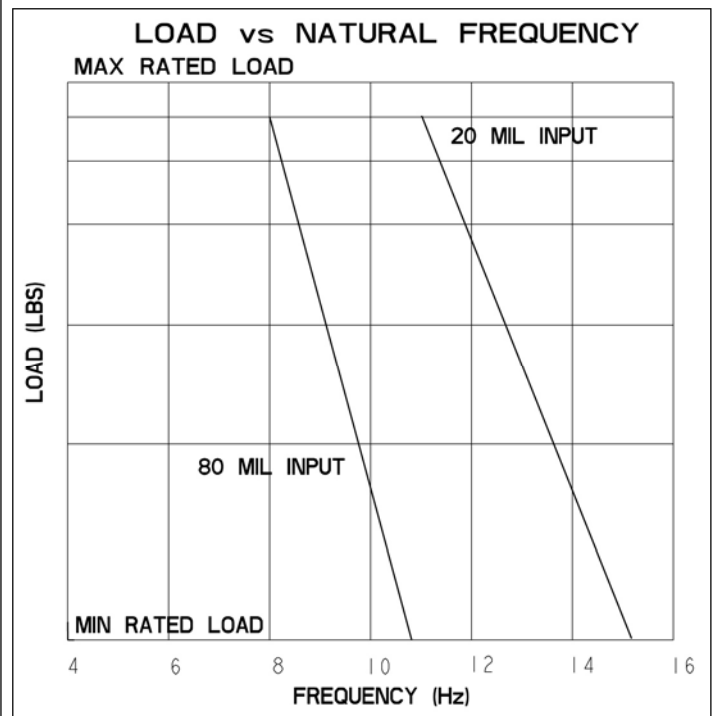
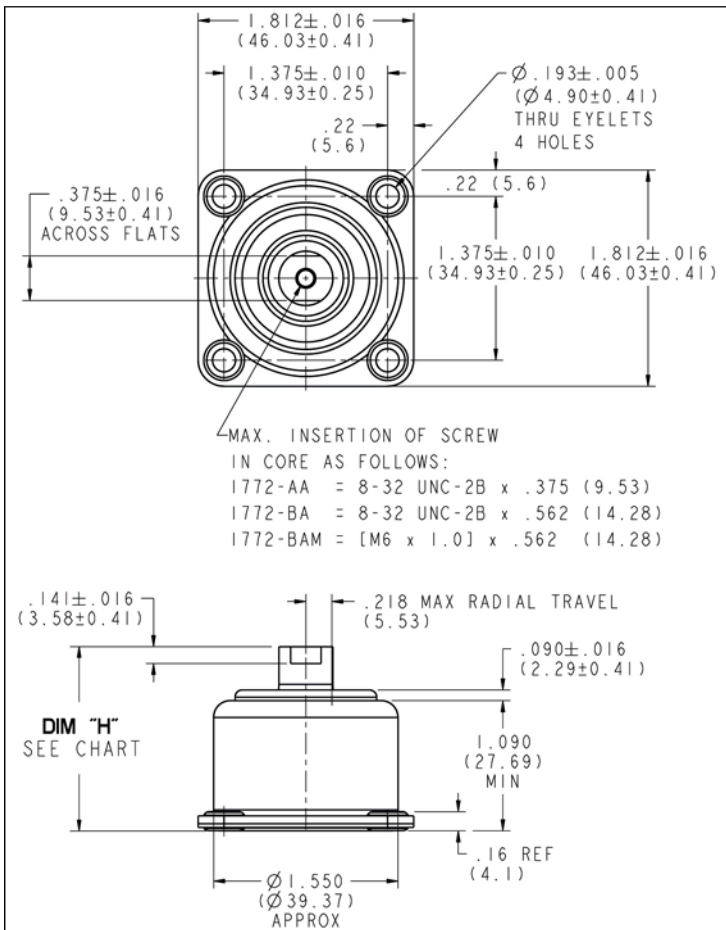
- Operating temperature ranges of -67°F to +250°F (-55°C to +120°C)
- Meets the requirements of MIL-STD-810F
- Meets the requirements of MIL-C-172C

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Friction Style Mount Series: 1772

Dimension and Performance Characteristics

| Part # | Static Load Range lbs | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended | Part # | Static Load Range lbs | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended | Part # | Static Load Range lbs | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended |
|------------|-----------------------|----------------------------------|---------------------------------------|--------------------------------|------------|-----------------------|----------------------------------|---------------------------------------|--------------------------------|-------------|-----------------------|----------------------------------|---------------------------------------|--------------------------------|
| 1772-AA-5 | 0.25-0.5 | .98 | 1.40 | 1.55 | 1772-BA-5 | 0.25-0.5 | 1.13 | 1.56 | 1.70 | 1772-BAM-5 | 0.25-0.5 | 1.13 | 1.56 | 1.70 |
| 1772-AA-1 | 0.5-1.0 | .98 | 1.40 | 1.55 | 1772-BA-1 | 0.5-1.0 | 1.13 | 1.56 | 1.70 | 1772-BAM-1 | 0.5-1.0 | 1.13 | 1.56 | 1.70 |
| 1772-AA-2 | 1.0-2.0 | .98 | 1.40 | 1.55 | 1772-BA-2 | 1.0-2.0 | 1.13 | 1.56 | 1.70 | 1772-BAM-2 | 1.0-2.0 | 1.13 | 1.56 | 1.70 |
| 1772-AA-3 | 1.5-3.0 | .98 | 1.40 | 1.55 | 1772-BA-3 | 1.5-3.0 | 1.13 | 1.56 | 1.70 | 1772-BAM-3 | 1.5-3.0 | 1.13 | 1.56 | 1.70 |
| 1772-AA-4 | 2.0-4.0 | .98 | 1.40 | 1.55 | 1772-BA-4 | 2.0-4.0 | 1.13 | 1.56 | 1.70 | 1772-BAM-4 | 2.0-4.0 | 1.13 | 1.56 | 1.70 |
| 1772-AA-6 | 4.0-6.0 | .98 | 1.40 | 1.55 | 1772-BA-6 | 4.0-6.0 | 1.13 | 1.56 | 1.70 | 1772-BAM-6 | 4.0-6.0 | 1.13 | 1.56 | 1.70 |
| 1772-AA-10 | 5.0-10.0 | .98 | 1.40 | 1.55 | 1772-BA-10 | 5.0-10.0 | 1.13 | 1.56 | 1.70 | 1772-BAM-10 | 5.0-10.0 | 1.13 | 1.56 | 1.70 |

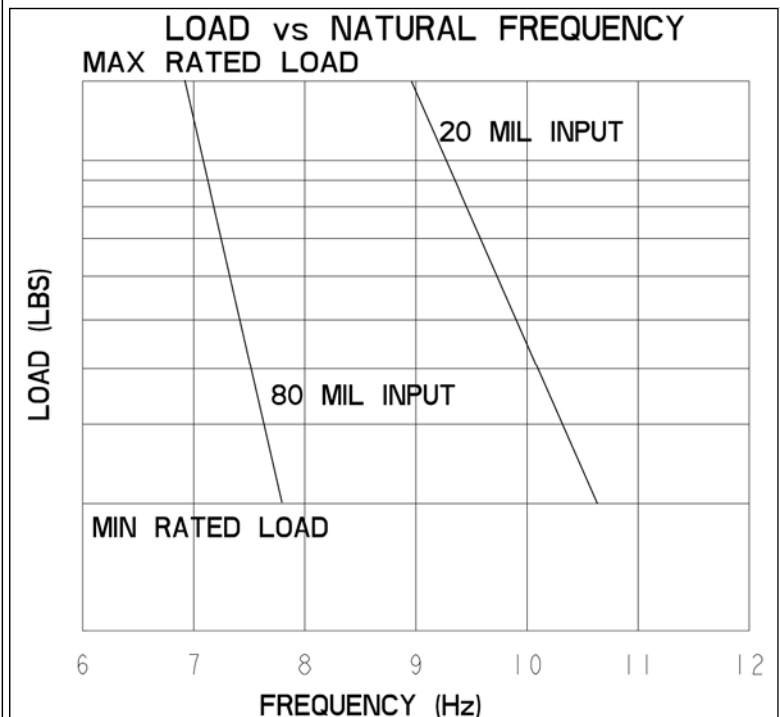
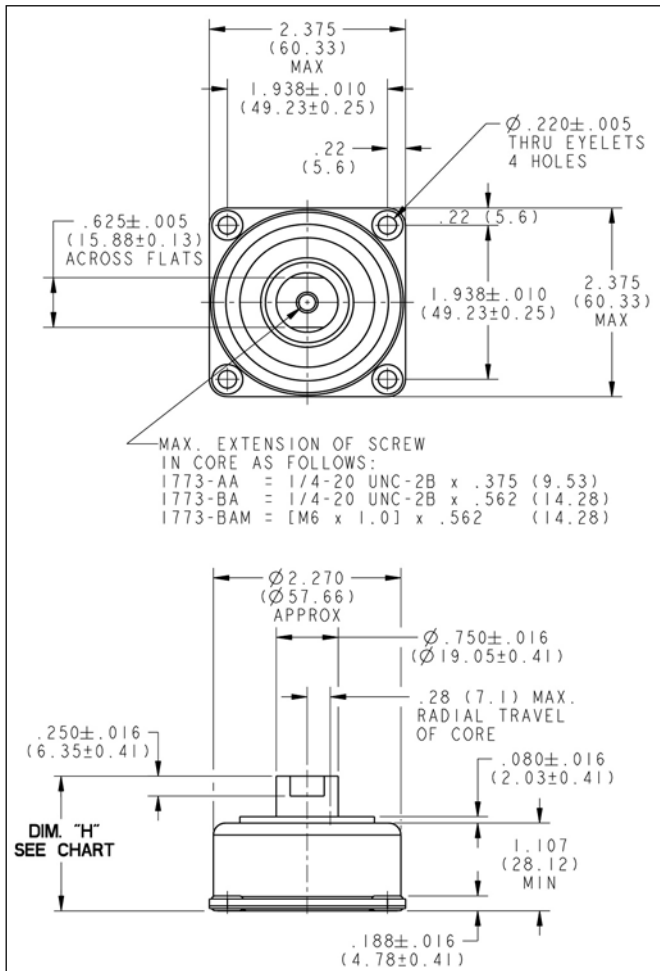


Friction Style Mount Series: 1773

Dimension and Performance Characteristics

| Part # | Static Load Range lbs. | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended | Part # | Static Load Range lbs. | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended | Part # | Static Load Range lbs. | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended |
|------------|------------------------|----------------------------------|---------------------------------------|--------------------------------|------------|------------------------|----------------------------------|---------------------------------------|--------------------------------|-------------|------------------------|----------------------------------|---------------------------------------|--------------------------------|
| 1773-AA-04 | 2.0-4.0 | .98 | 1.41 | 1.54 | 1773-BA-04 | 2.0-4.0 | 1.14 | 1.57 | 1.70 | 1773-BAM-04 | 2.0-4.0 | 1.14 | 1.57 | 1.70 |
| 1773-AA-06 | 3.0-6.0 | .98 | 1.41 | 1.54 | 1773-BA-06 | 3.0-6.0 | 1.14 | 1.57 | 1.70 | 1773-BAM-06 | 3.0-6.0 | 1.14 | 1.57 | 1.70 |
| 1773-AA-10 | 5.0-10.0 | .98 | 1.41 | 1.54 | 1773-BA-10 | 5.0-10.0 | 1.14 | 1.57 | 1.70 | 1773-BAM-10 | 5.0-10.0 | 1.14 | 1.57 | 1.70 |
| 1773-AA-15 | 9.0-15.0 | .98 | 1.41 | 1.54 | 1773-BA-15 | 9.0-15.0 | 1.14 | 1.57 | 1.70 | 1773-BAM-15 | 9.0-15.0 | 1.14 | 1.57 | 1.70 |
| 1773-AA-20 | 14.0-20.0 | .98 | 1.41 | 1.54 | 1773-BA-20 | 14.0-20.0 | 1.14 | 1.57 | 1.70 | 1773-BAM-20 | 14.0-20.0 | 1.14 | 1.57 | 1.70 |
| 1773-AA-30 | 18.0-30.0 | .98 | 1.41 | 1.54 | 1773-BA-30 | 18.0-30.0 | 1.14 | 1.57 | 1.70 | 1773-BAM-30 | 18.0-30.0 | 1.14 | 1.57 | 1.70 |
| 1773-AA-40 | 25.0-40.0 | .98 | 1.41 | 1.54 | 1773-BA-40 | 25.0-40.0 | 1.14 | 1.57 | 1.70 | 1773-BAM-40 | 25.0-40.0 | 1.14 | 1.57 | 1.70 |

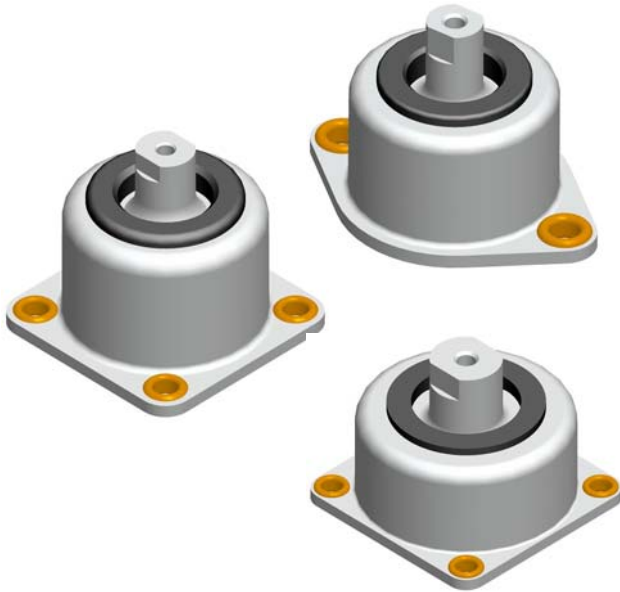
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Friction Style Mount Series

1900/1901/1902

Friction damped mounts for vibration isolation and shock attenuation of aircraft and helicopter application



Attributes

- Fail-safe design
- Friction damped stainless spring
- Axial to radial stiffness ratio 4:1
- Rugged construction

Applications

- Aircraft avionics and equipment
- Naval electronics
- Sensitive electronic applications that require medical or NBC wash down
- Helicopter electronics

Load Range

- 1900 = 7 load ratings from .35-4 lbs. per mount
- 1901 = 7 load ratings from .25-10 lbs. per mount
- 1902 = 7 load ratings from 2.0-40 lbs. per mount

Specifications

- Natural Frequency — 7-10 Hertz
- Transmissibility at resonance — 2.5:1 max.
- Resilient Element — friction damped stainless steel spring
- Standard materials — clear anodized 6061-T6 aluminum
- Isolator weight — 1900 = .03 lbs. 1901 = .10 lbs. 1902 = .23 lbs.

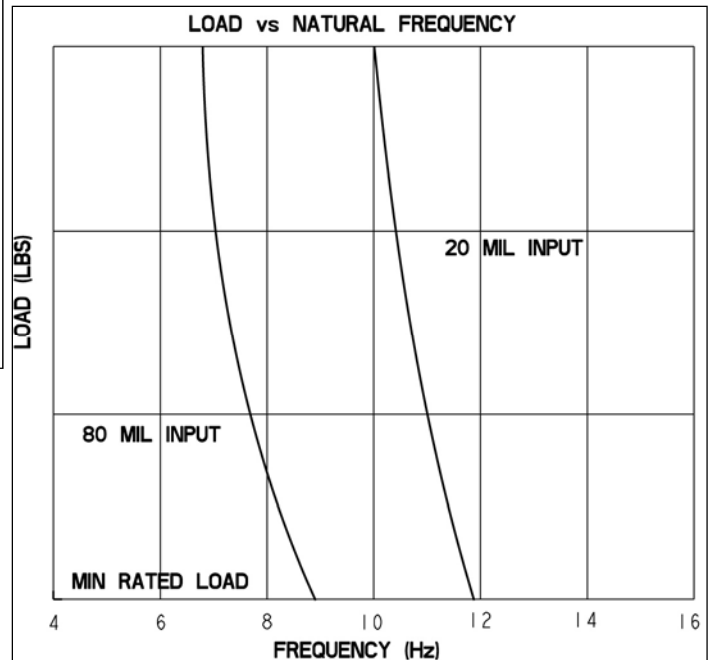
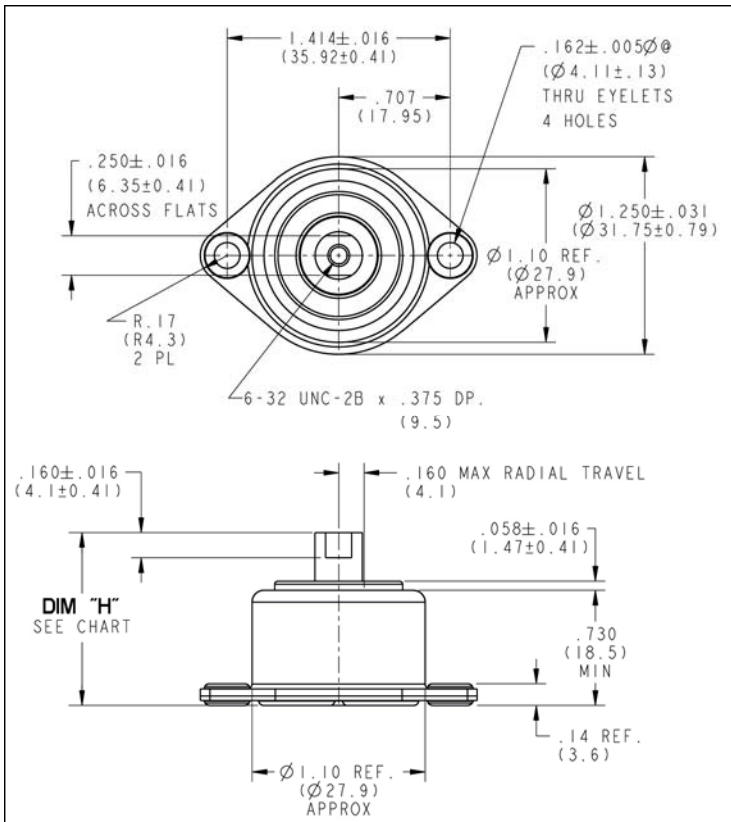
Environmental Data

- Operating temperature ranges of -67°F to +250°F (-55°C to +120°C)
- Meets the requirements of MIL-C-172C

Friction Style Mount Series: 1900

Dimension and Performance Characteristics

| Part # | Static Load Range (lbs.) | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended |
|-------------|--------------------------|--|--|--------------------------------------|
| 1900-BA-0.5 | 0.38-0.54 | .72 | 1.00 | 1.18 |
| 1900-BA-0.7 | 0.44-0.75 | .72 | 1.00 | 1.18 |
| 1900-BA-1.0 | 0.56-1.00 | .72 | 1.00 | 1.18 |
| 1900-BA-1.3 | 0.88-1.30 | .72 | 1.00 | 1.18 |
| 1900-BA-2.0 | 1.20-2.00 | .72 | 1.00 | 1.18 |
| 1900-BA-3.0 | 1.70-3.00 | .72 | 1.00 | 1.18 |
| 1900-BA-4.0 | 2.50-4.00 | .72 | 1.00 | 1.18 |



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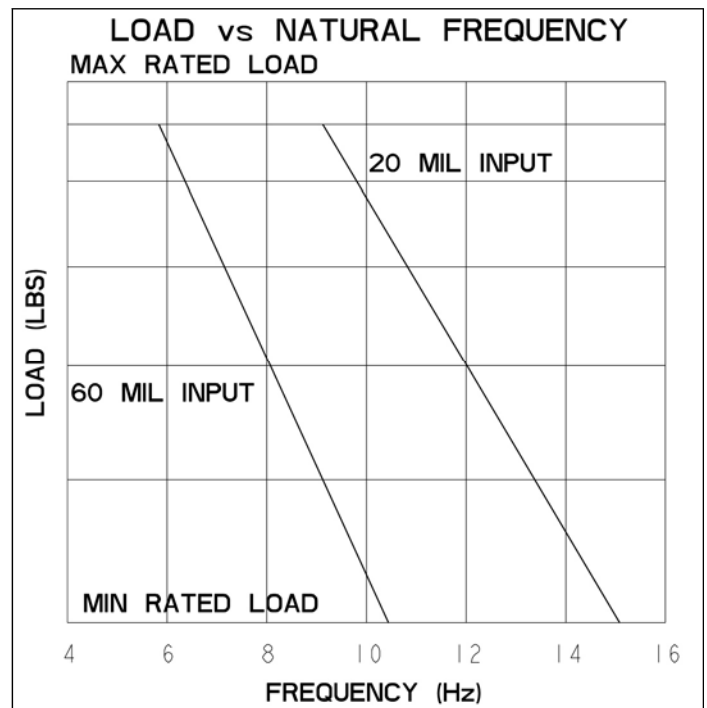
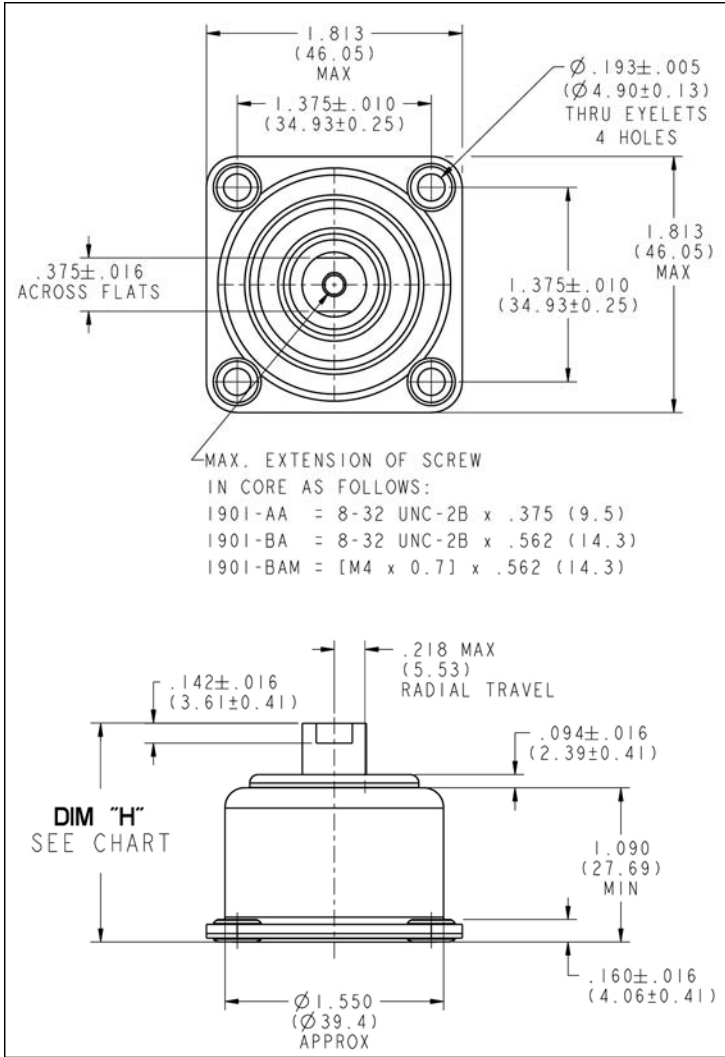
Friction Style Mount Series: 1901

Dimension and Performance Characteristics

| Part # | Static Load Range (lbs.) | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended |
|-------------|--------------------------|--|--|--------------------------------------|
| 1901-AA-5 | .25-.50 | .98 | 1.40 | 1.63 |
| 1901-AA-1 | .50-1.00 | .98 | 1.40 | 1.63 |
| 1901-AA-2 | 1.00-2.00 | .98 | 1.40 | 1.63 |
| 1901-AA-3 | 1.50-3.00 | .98 | 1.40 | 1.63 |
| 1901-AA-4 | 2.00-4.00 | .98 | 1.40 | 1.63 |
| 1901-AA-5 | 2.50-5.00 | .98 | 1.40 | 1.63 |
| 1901-AA-10 | 5.00-10.00 | .98 | 1.40 | 1.63 |
| 1901-BA-5 | .25-.50 | 1.13 | 1.56 | 1.79 |
| 1901-BA-1 | .50-1.00 | 1.13 | 1.56 | 1.79 |
| 1901-BA-2 | 1.00-2.00 | 1.13 | 1.56 | 1.79 |
| 1901-BA-3 | 1.50-3.00 | 1.13 | 1.56 | 1.79 |
| 1901-BA-4 | 2.00-4.00 | 1.13 | 1.56 | 1.79 |
| 1901-BA-5 | 2.50-5.00 | 1.13 | 1.56 | 1.79 |
| 1901-BA-10 | 5.00-10.00 | 1.13 | 1.56 | 1.79 |
| 1901-BAM-5 | .25-.50 | 1.13 | 1.56 | 1.79 |
| 1901-BAM-1 | .50-1.00 | 1.13 | 1.56 | 1.79 |
| 1901-BAM-2 | 1.00-2.00 | 1.13 | 1.56 | 1.79 |
| 1901-BAM-3 | 1.50-3.00 | 1.13 | 1.56 | 1.79 |
| 1901-BAM-4 | 2.00-4.00 | 1.13 | 1.56 | 1.79 |
| 1901-BAM-5 | 2.50-5.00 | 1.13 | 1.56 | 1.79 |
| 1901-BAM-10 | 5.00-10.00 | 1.13 | 1.56 | 1.79 |

Friction Style Mount Series: 1901

Dimension and Performance Characteristics



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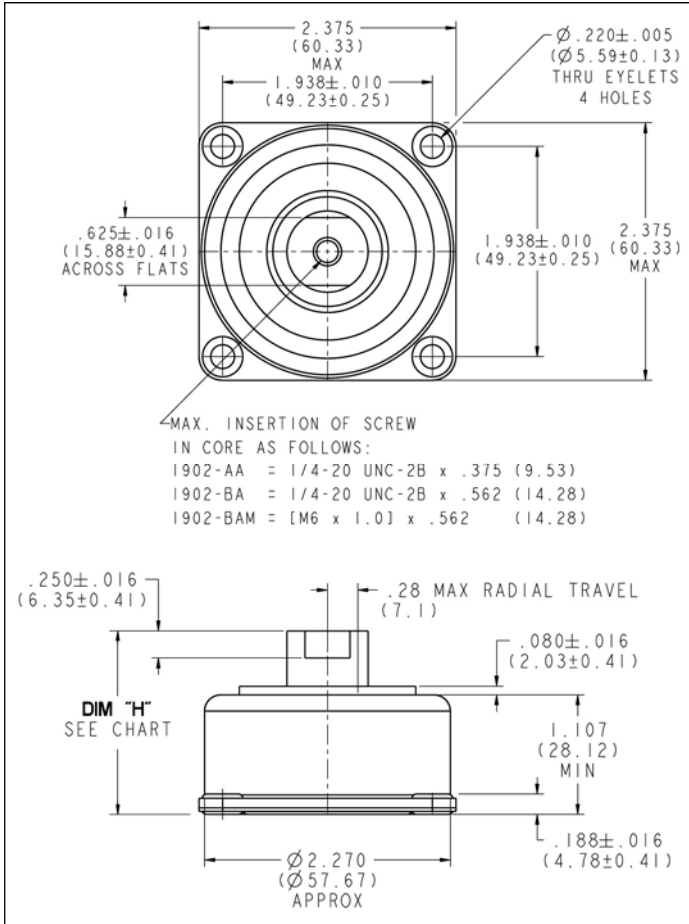
Friction Style Mount Series: 1902

Dimension and Performance Characteristics

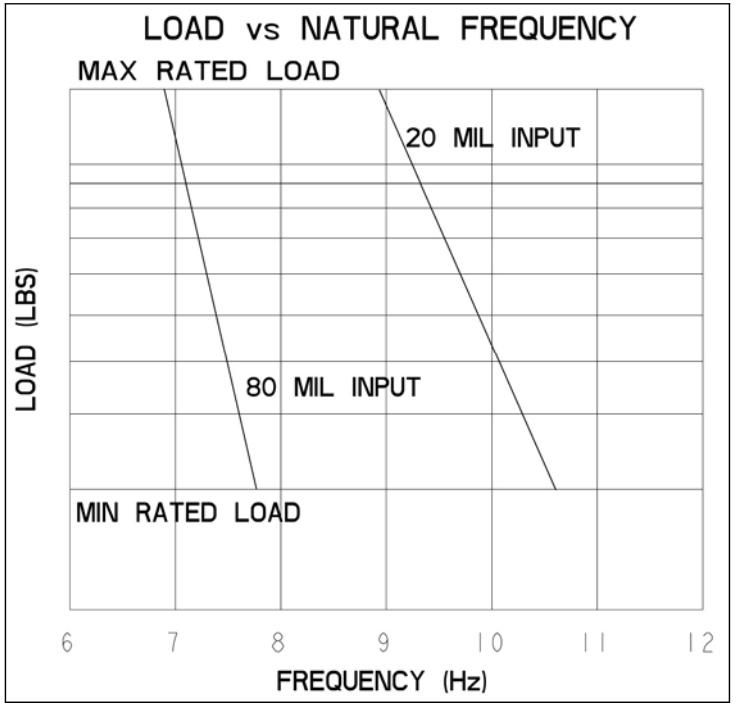
| Part # | Static Load Range (lbs.) | Dimension "H" Minimum Compressed | Dimension "H" Approx. Under Min. Load | Dimension "H" Maximum Extended |
|-------------|--------------------------|--|--|--------------------------------------|
| 1902-AA-04 | 2.0-4.5 | .98 | 1.41 | 1.54 |
| 1902-AA-06 | 3.0-6.0 | .98 | 1.41 | 1.54 |
| 1902-AA-10 | 4.5-10.0 | .98 | 1.41 | 1.54 |
| 1902-AA-12 | 6.25-12.5 | .98 | 1.41 | 1.54 |
| 1902-AA-16 | 9.0-16.0 | .98 | 1.41 | 1.54 |
| 1902-AA-20 | 10.0-20.0 | .98 | 1.41 | 1.54 |
| 1902-AA-40 | 20.0-40.0 | .98 | 1.41 | 1.54 |
| 1902-BA-04 | 2.0-4.5 | 1.14 | 1.57 | 1.70 |
| 1902-BA-06 | 3.0-6.0 | 1.14 | 1.57 | 1.70 |
| 1902-BA-10 | 4.5-10.0 | 1.14 | 1.57 | 1.70 |
| 1902-BA-12 | 6.25-12.5 | 1.14 | 1.57 | 1.70 |
| 1902-BA-16 | 9.0-16.0 | 1.14 | 1.57 | 1.70 |
| 1902-BA-20 | 10.0-20.0 | 1.14 | 1.57 | 1.70 |
| 1902-BA-40 | 20.0-40.0 | 1.14 | 1.57 | 1.70 |
| 1902-BAM-04 | 2.0-4.5 | 1.14 | 1.57 | 1.70 |
| 1902-BAM-06 | 3.0-6.0 | 1.14 | 1.57 | 1.70 |
| 1902-BAM-10 | 4.5-10.0 | 1.14 | 1.57 | 1.70 |
| 1902-BAM-12 | 6.25-12.5 | 1.14 | 1.57 | 1.70 |
| 1902-BAM-16 | 9.0-16.0 | 1.14 | 1.57 | 1.70 |
| 1902-BAM-20 | 10.0-20.0 | 1.14 | 1.57 | 1.70 |
| 1902-BAM-40 | 20.0-40.0 | 1.14 | 1.57 | 1.70 |

Friction Style Mount Series: 1902

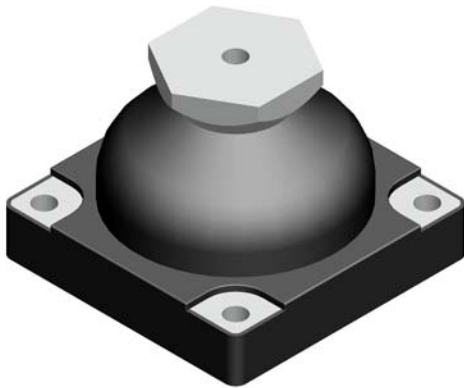
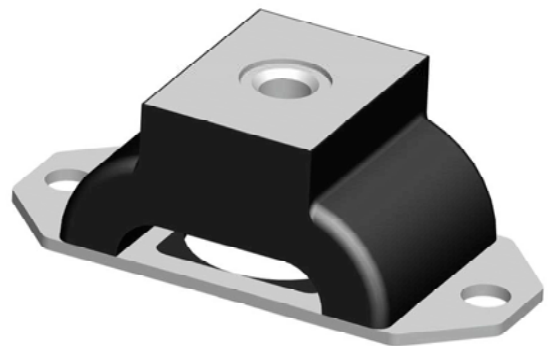
Dimension and Performance Characteristics



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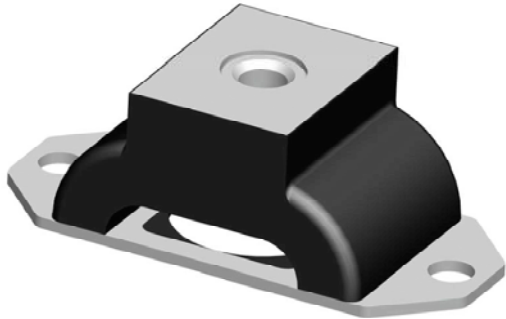


HIGH DEFLECTION MOUNT SERIES



Low Profile Buckling Mount Series 1774/1775

Low profile, buckling design vibration isolators for industrial equipment



Attributes

- Vibration attenuation below 15 Hz
- Effectively isolate disturbing frequencies as low as 900 rpm (15 Hz)
- Neoprene and zinc plated steel construction
- Cold-rolled steel construction
- Stainless steel version available for marine applications
- All attitude design
- Axial to radial stiffness ratio 4:1

Applications

- Marine applications
- Industrial applications
- HVAC
- Power generation
- Fans and blowers
- Pumps

Load Range

- 1774 = load ratings to 130 lbs.
- 1775 = load ratings to 260 lbs.

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Specifications

- Natural Frequency — 8 Hertz
- Transmissibility at resonance — 10:1
- Resilient Element — Neoprene
- Standard materials — zinc plated cold rolled steel
- Weight—1774-1 through 3 = 7 oz. / 1775-1 and 2 = 16 oz.

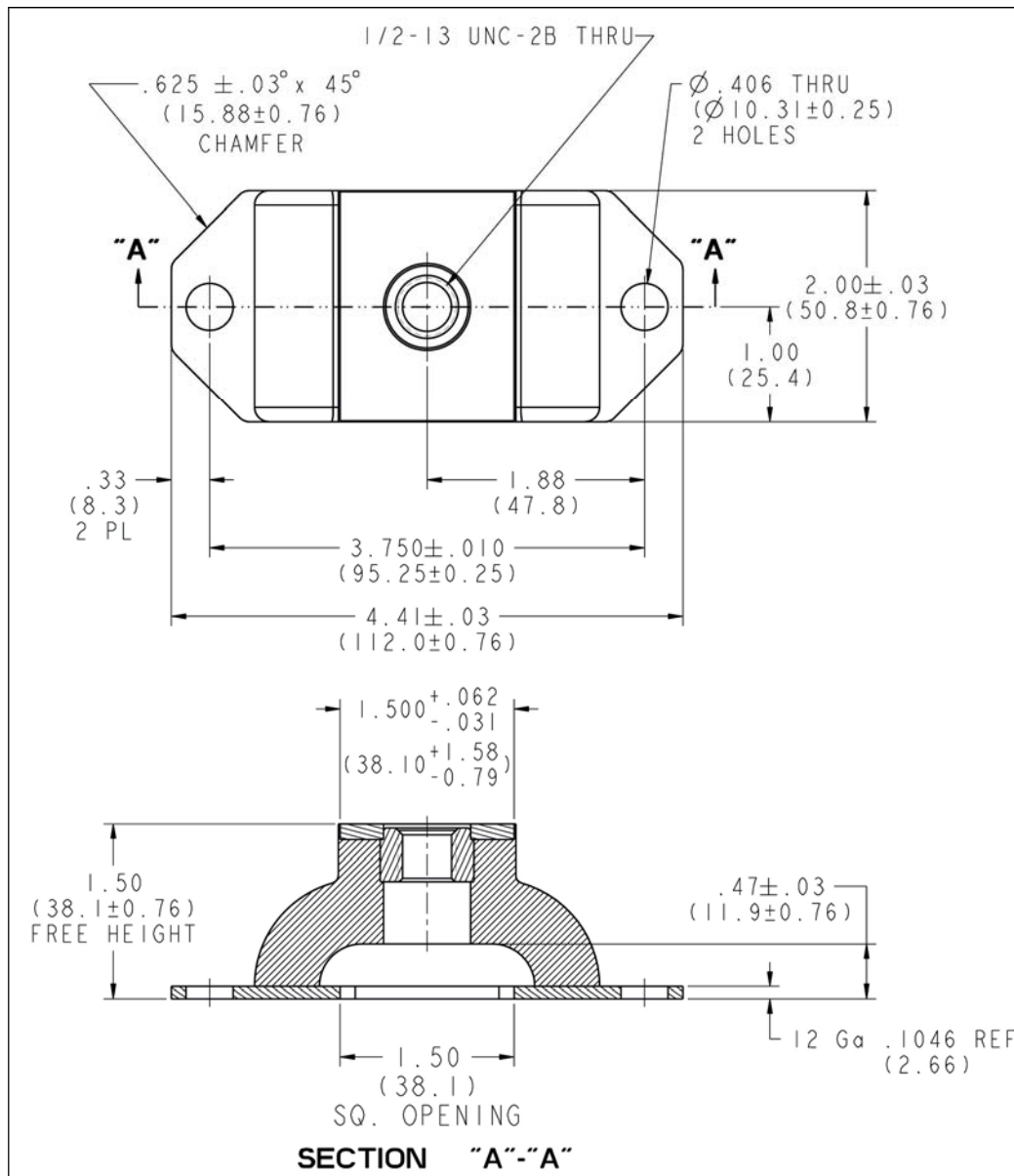
Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40°F to 200°F (-40°C to +93°C) and is resistant to oils, most solvents and ozone
- Stainless steel version is corrosion resistant for marine applications and are available upon request

Low Profile Buckling Mount Series: 1774

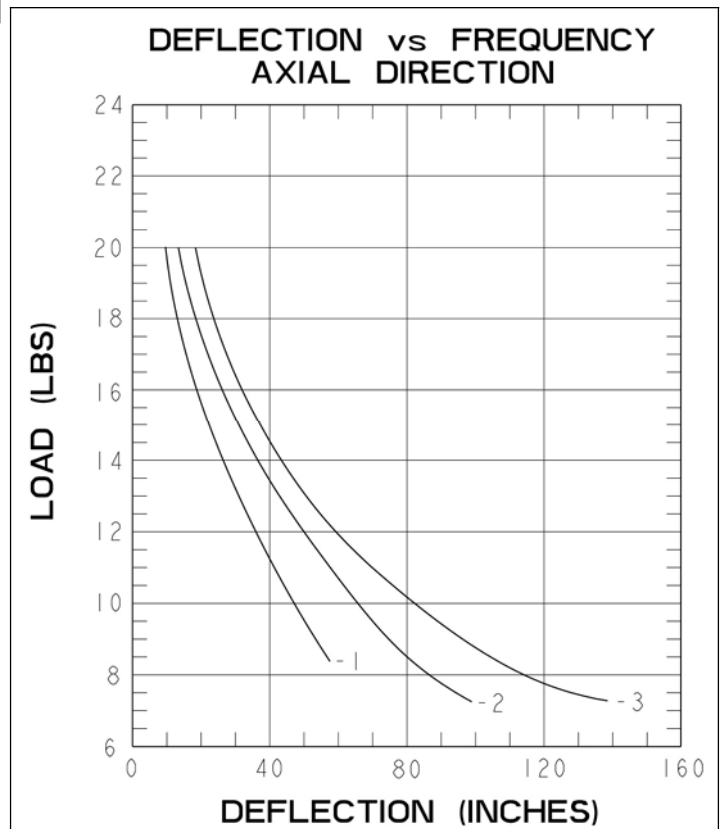
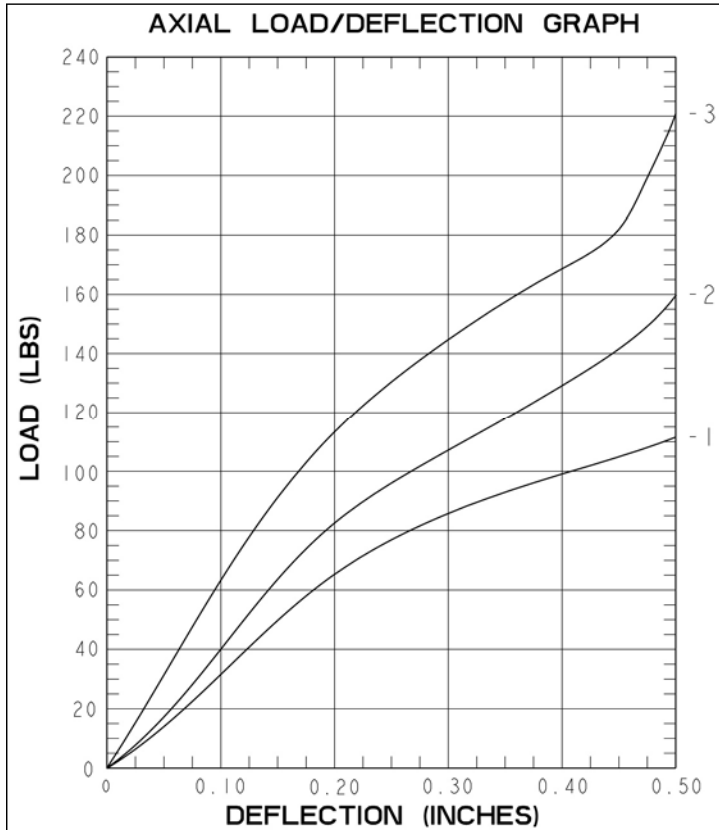
Dimension and Performance Characteristics

| Part # | Maximum Static Load / Isolator (lbs.) | Durometer |
|----------|---------------------------------------|-----------|
| 1774-1 | 60 | 40 |
| 1774-2 | 100 | 50 |
| 1774-3 | 130 | 60 |
| 1774-1SS | 60 | 40 |
| 1774-2SS | 100 | 50 |
| 1774-3SS | 130 | 60 |



Low Profile Buckling Mount Series: 1774

Dimension and Performance Characteristics

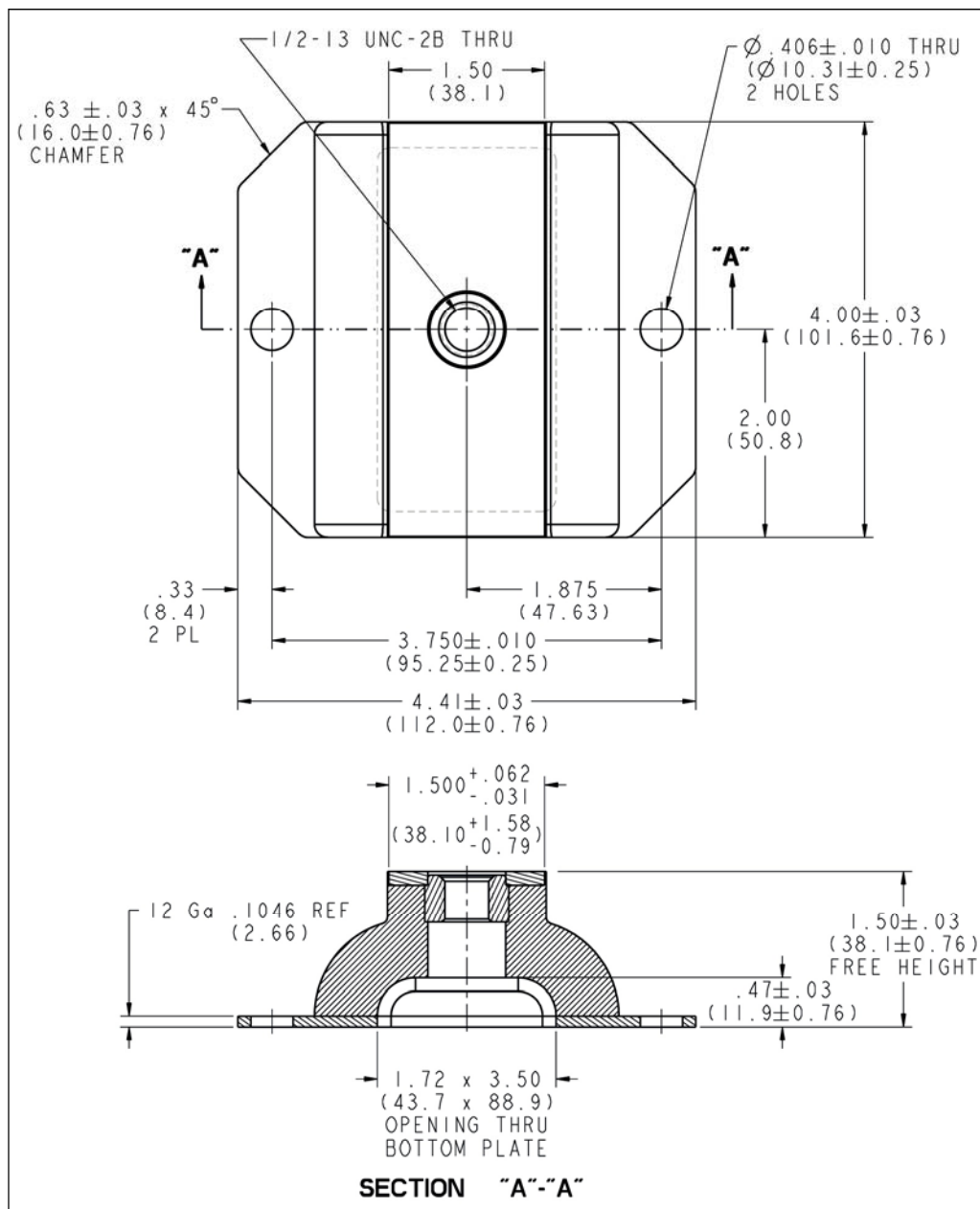


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Low Profile Buckling Mount Series: 1775

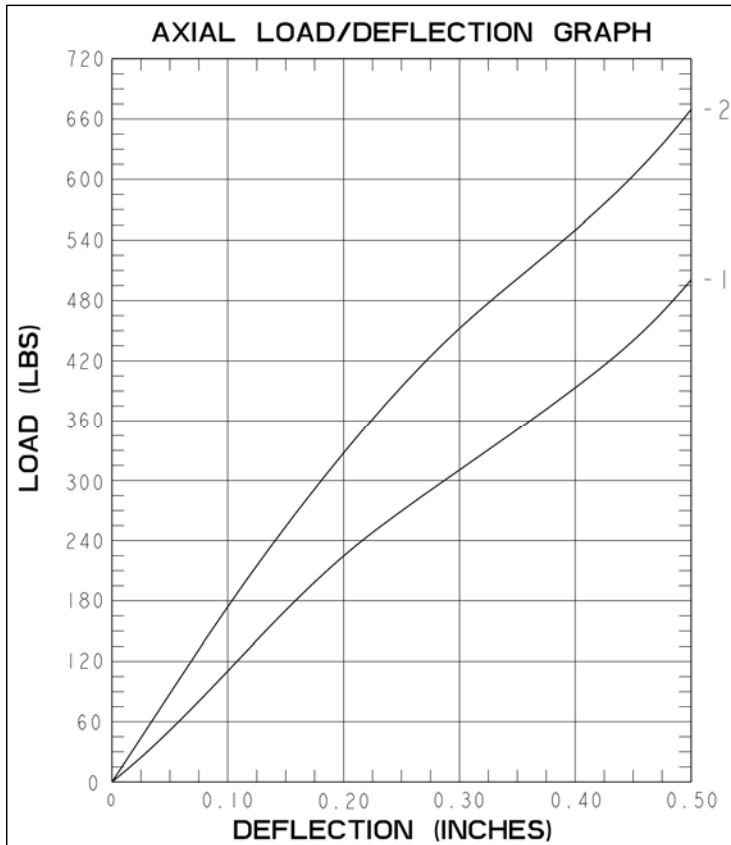
Dimension and Performance Characteristics

| Part # | Maximum Static Load / Isolator (lbs.) | Durometer |
|----------|---------------------------------------|-----------|
| 1775-1 | 200 | 40 |
| 1775-2 | 260 | 50 |
| 1775-1SS | 200 | 40 |
| 1775-2SS | 260 | 50 |

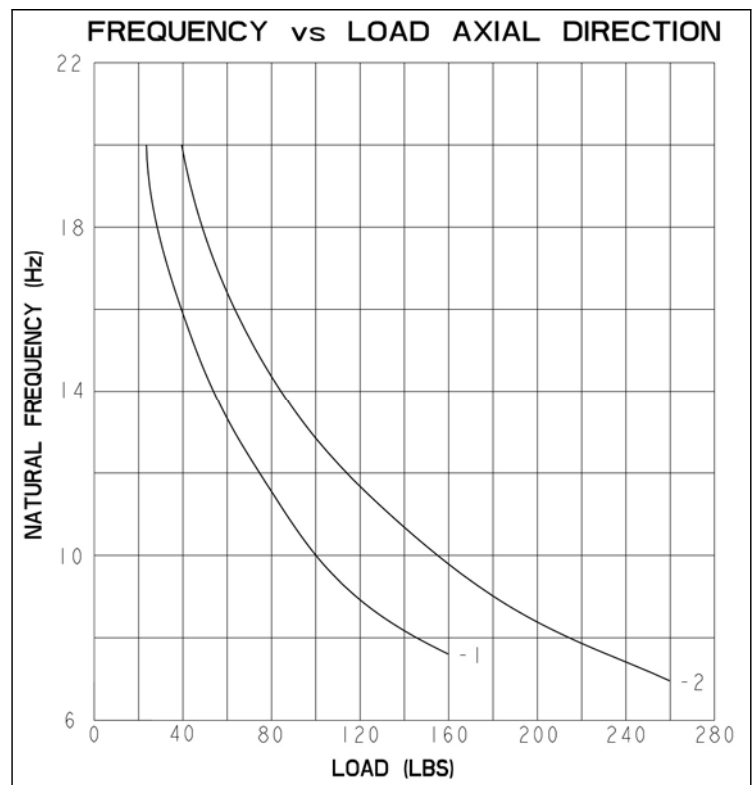


Low Profile Buckling Mount Series: 1775

Dimension and Performance Characteristics



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High Deflection Dome Mounts 1824

A low profile, high deflection mount for protection
from severe vibration and shock inputs



Attributes

- High deflection capability for shock load
- Axial to radial stiffness ratio 2.3:1
- Compact, low profile design
- Easy to install
- High Damped Silicone or Neoprene
- Aluminum construction
- Can be used in tandem for higher deflection capability
- Can be custom tailored to specific applications

Applications

- Military computer applications
- Transit cases
- Avionics and racking
- Shipboard electronics
- Random vibration environments

Shock and Vibe

- Attenuates a 15g, 11 millisecond half-sine shock to 6 g's
- Survives a 30g, 11 millisecond half-sine crash safety shock to 15 g's

Load Range

- 1824-1S = load ratings to 10 lbs.
- 1824-2S = load ratings to 18 lbs.
- 1824-3S = load ratings to 25 lbs.
- 1824-1N = load ratings to 12 lbs.
- 1824-2N = load ratings to 20 lbs.
- 1824-3N = load ratings to 30 lbs.

Specifications

- Natural Frequency — 25-35 Hertz
- Transmissibility at resonance — 4.0 max. (Hi-damped Silicone) 10:1 max. (Neoprene)
- Resilient Element — Hi-Damped Silicone or Neoprene
- Standard materials — Aluminum (Grounding Strap Beryllium Copper)
- Weight = 6.5 oz.

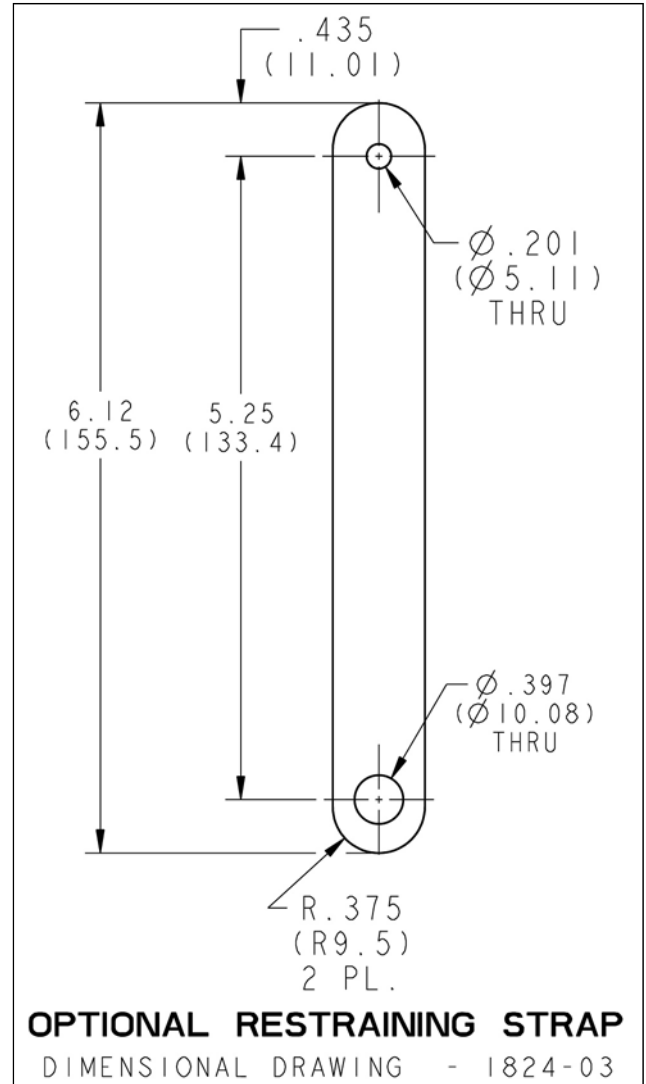
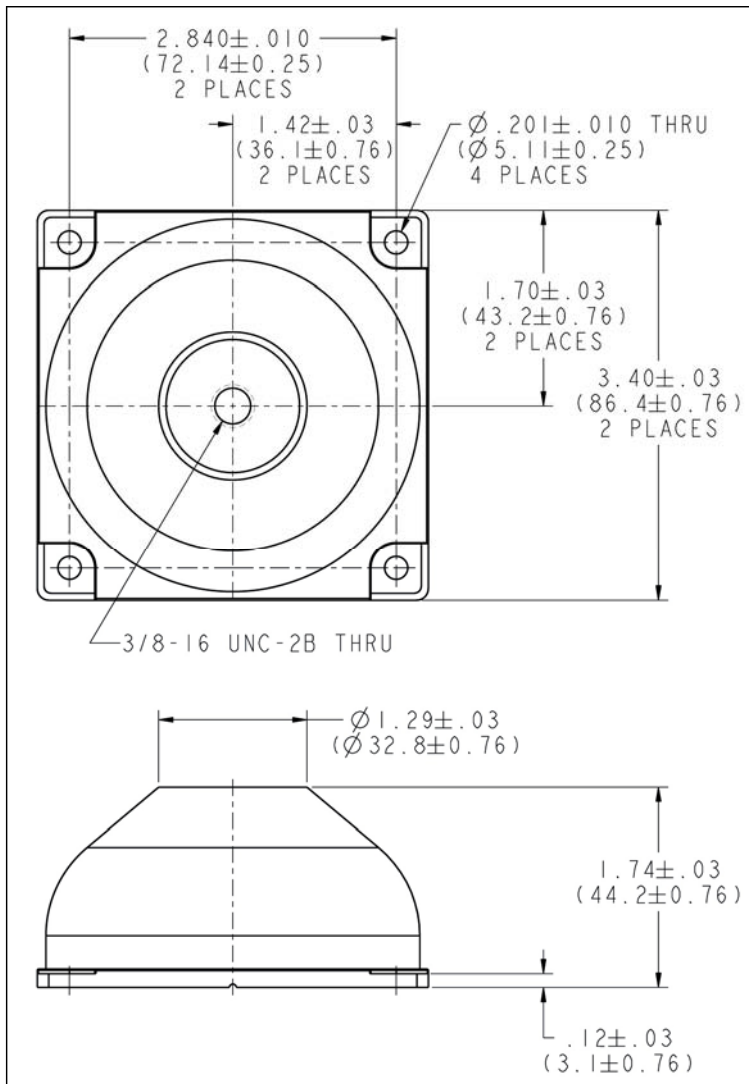
Elastomeric Data

- Hi-Damp Silicone operating temperature range of -67°F to +300°F (-55°C to +150°C) and is resistant to fungus and ozone
- Neoprene operating temperature range of -40°F to 200°F (-40°C to +93°C) and is oil and ozone resistant

High Deflection Dome Mounts: 1824

Dimension and Performance Characteristics

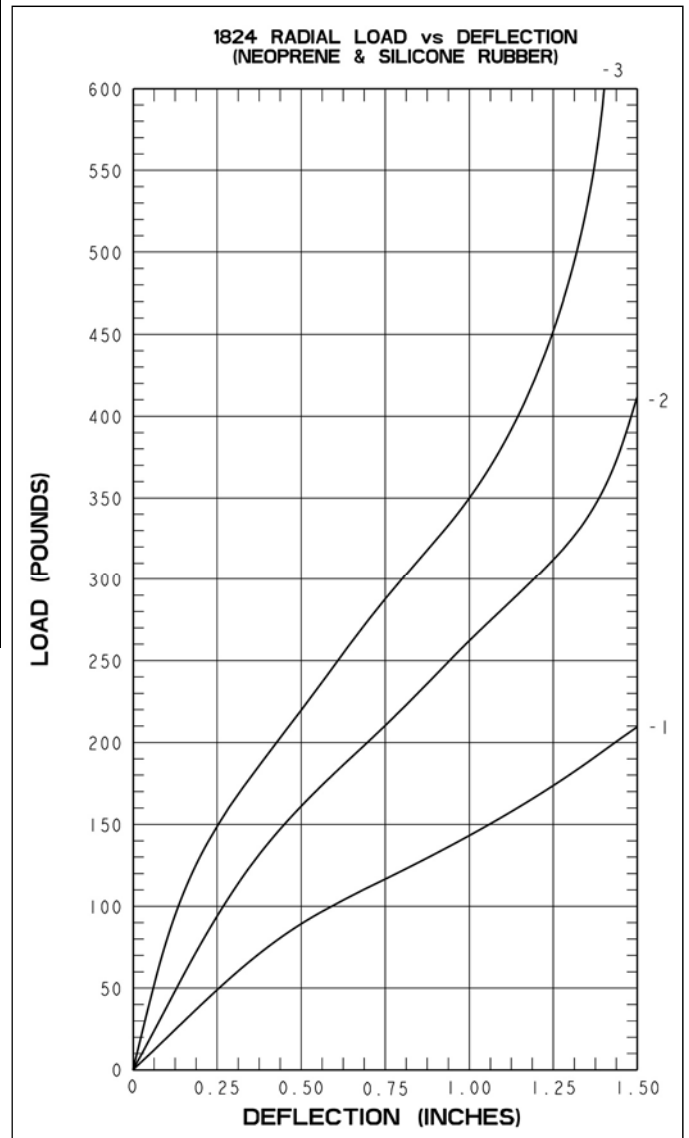
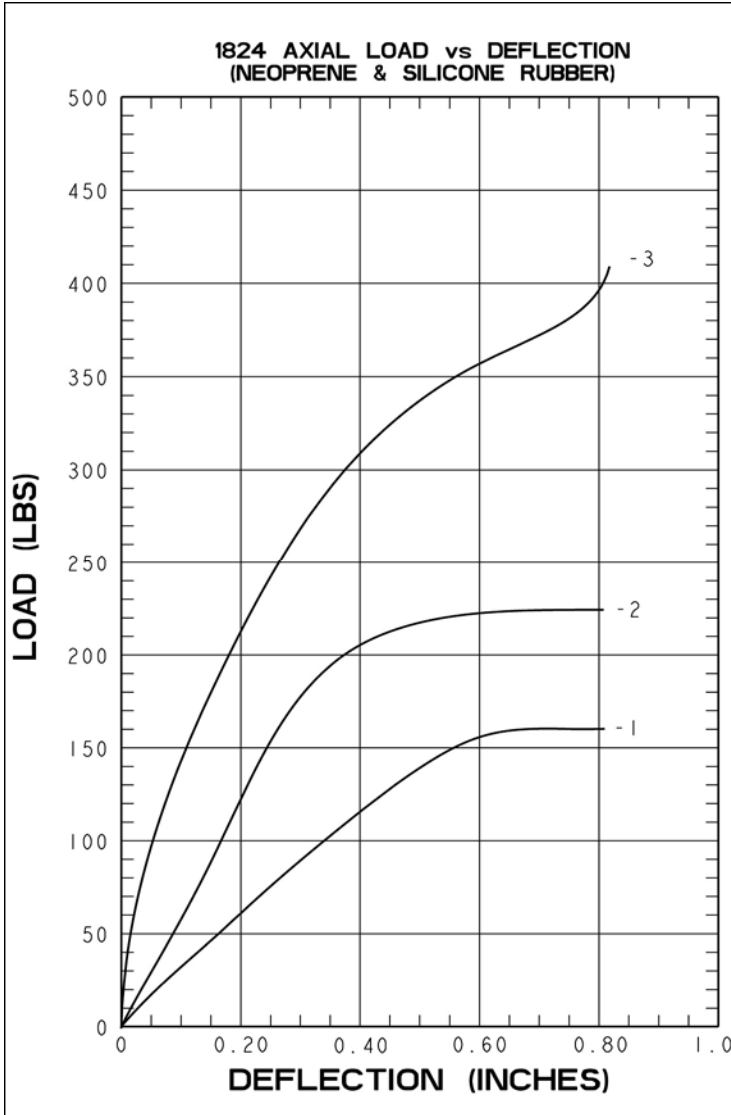
| Part # | Maximum Axial Compression | Load (lbs.) Radial | Axial Natural Frequency (hz) | Standard Material | Standard Elastomer | Transmissibility at Resonance |
|---------|---------------------------|--------------------|------------------------------|-------------------|--------------------|-------------------------------|
| 1824-1S | 10 | 10 | 23 | 6061-T6 Aluminum | Hi-Damp Silicone | 4:1 |
| 1824-2S | 18 | 18 | 22 | 6061-T6 Aluminum | Hi-Damp Silicone | 4:1 |
| 1824-3S | 25 | 25 | 25 | 6061-T6 Aluminum | Hi-Damp Silicone | 4:1 |
| 1824-1N | 12 | 12 | 30 | 6061-T6 Aluminum | Neoprene Rubber | 10:1 |
| 1824-2N | 20 | 20 | 32 | 6061-T6 Aluminum | Neoprene Rubber | 10:1 |
| 1824-3N | 30 | 30 | 34 | 6061-T6 Aluminum | Neoprene Rubber | 10:1 |



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High Deflection Dome Mounts: 1824

Dimension and Performance Characteristics



High Deflection Dome Mounts 1829

A low profile, high deflection mount for protection
from severe vibration and shock inputs



Attributes

- High deflection capability for shock load
- Axial to radial stiffness ratio 1:1
- Compact, low profile design
- Easy to install
- High Damped Silicone
- Aluminum construction
- Can be used in tandem for higher deflection capability

Applications

- Military computer applications
- Electronics on aircraft applications
- Avionics and racking
- Random vibration environments

Shock and Vibe

- Attenuates a 15g, 11 millisecond half-sine shock to 6 g's
- Survives a 30g, 11 millisecond half-sine crash safety shock

Load Range

- 1829-1N = load ratings to 7 lbs.
- 1829-2N = load ratings to 10 lbs.
- 1829-3N = load ratings to 15 lbs.
- 1829-1S = load ratings to 7 lbs.
- 1829-2S = load ratings to 10 lbs.
- 1829-3S = load ratings to 15 lbs.

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Specifications

- Natural Frequency—12-20 Hertz
- Transmissibility at resonance — 4.0 max. (Hi-damped Silicone), 10:1 max. (Neoprene)
- Resilient Element — Hi-Damped Silicone or Neoprene
- Standard materials — Aluminum (Grounding Strap Beryllium Copper)
- Weight = 2.0 oz.

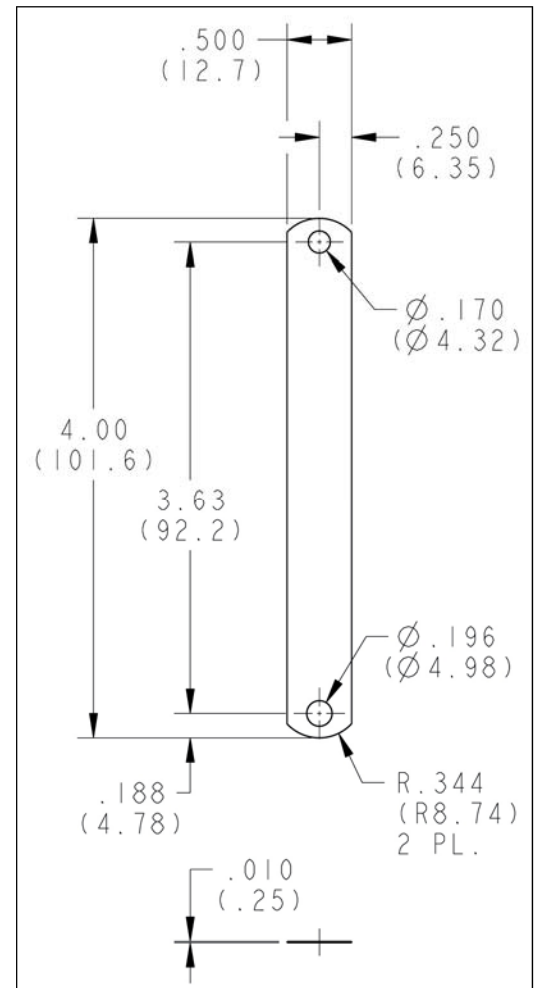
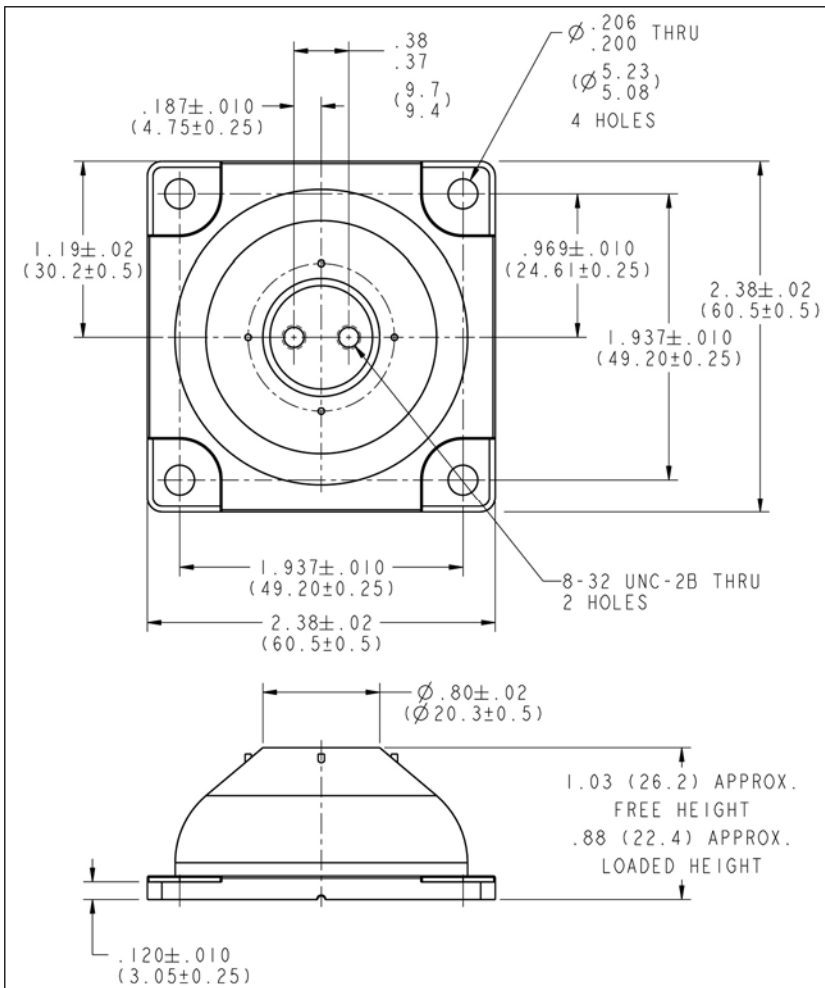
Elastomeric Data

- Hi-Damp Silicone operating temperature range of -67F to +300°F (-55°C to +150°C) and is resistant to fungus and ozone
- Neoprene operating temperature range of -40°F to 200°F (-40°C to +93°C) and is resistant to oil and ozone

High Deflection Dome Mounts: 1829

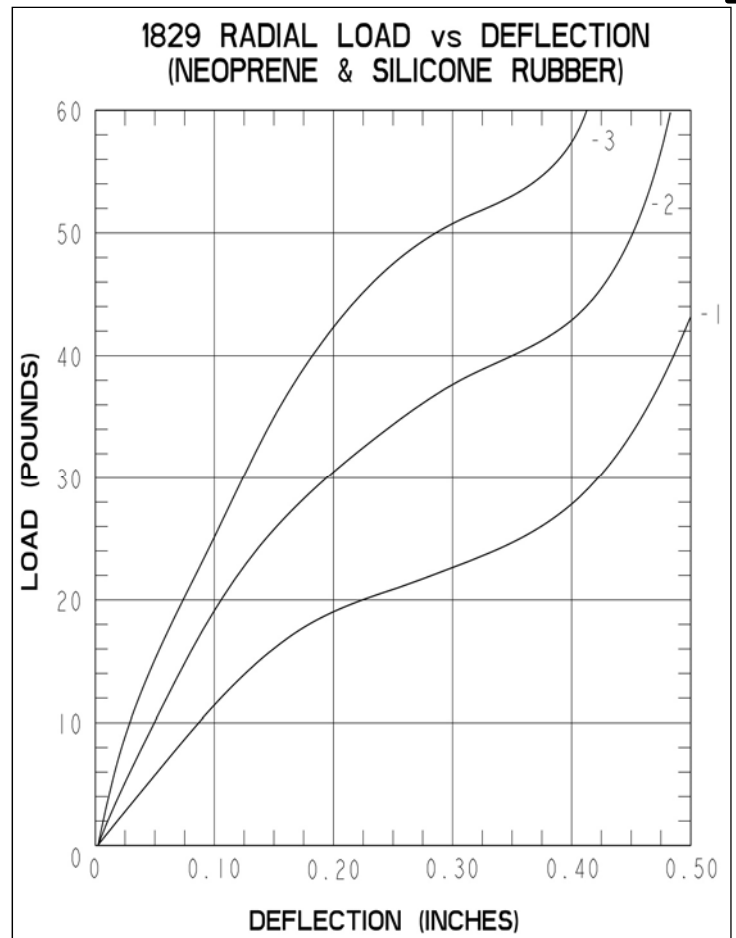
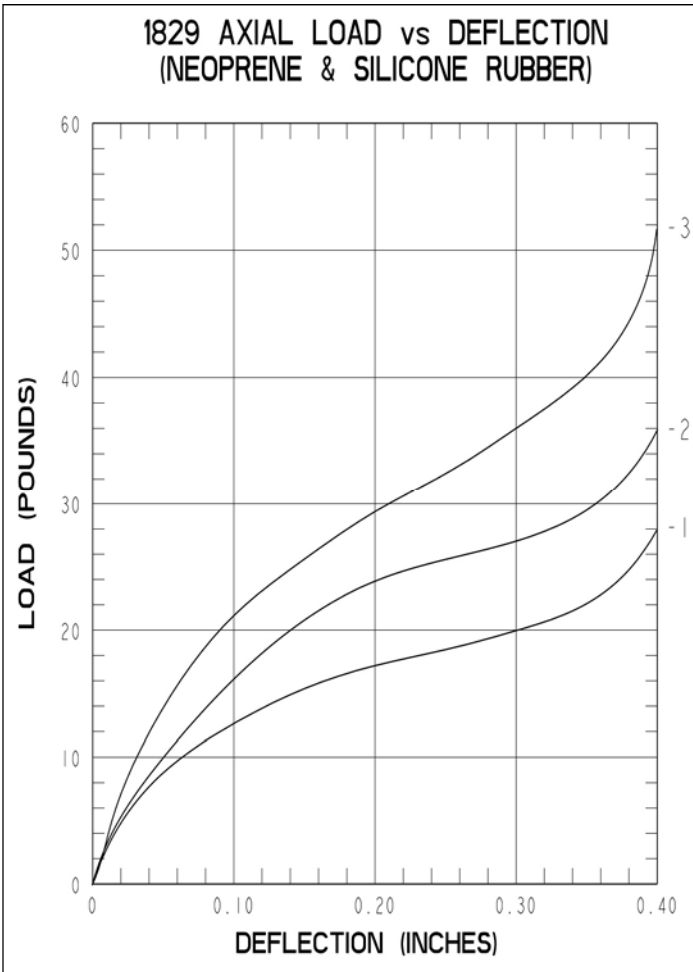
Dimension and Performance Characteristics

| Part # | Maximum Axial Compression | Load (lbs.) Radial | Axial Natural Frequency (HZ) | Standard Material | Standard Elastomer | Transmissibility at Resonance |
|---------|---------------------------|--------------------|------------------------------|-------------------|--------------------|-------------------------------|
| 1829-1N | 5-7 | 5-7 | 14 | 6061-T6 Aluminum | Neoprene Rubber | 10:1 |
| 1829-2N | 7-10 | 7-10 | 15 | 6061-T6 Aluminum | Neoprene Rubber | 10:1 |
| 1829-3N | 10-15 | 10-15 | 14 | 6061-T6 Aluminum | Neoprene Rubber | 10:1 |
| 1829-1S | 5-7 | 5-7 | 14 | 6061-T6 Aluminum | Hi-Damp Silicone | 4:1 |
| 1829-2S | 7-10 | 7-10 | 14 | 6061-T6 Aluminum | Hi-Damp Silicone | 4:1 |
| 1829-3S | 10-15 | 10-15 | 14 | 6061-T6 Aluminum | Hi-Damp Silicone | 4:1 |



High Deflection Dome Mounts: 1829

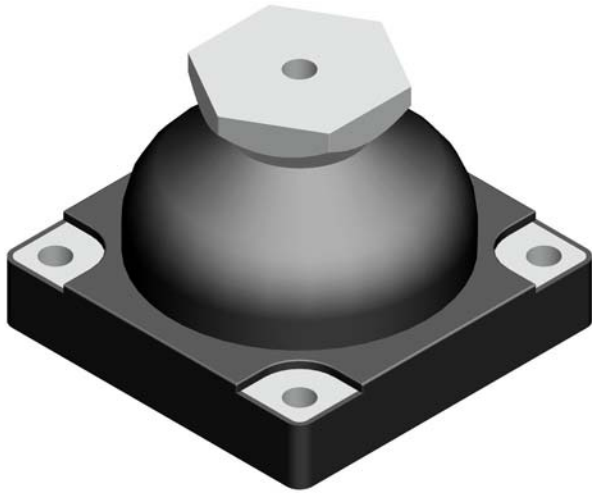
Dimension and Performance Characteristics



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1825 Mount Series

Low frequency, highly damped mounts for high level shock and vibration isolation



Attributes

- High deflection capability for shock loads
- Axial to radial stiffness is 1:1.4
- Aluminum construction
- High damped silicone
- Easy to install

Applications

- MIL-STD-810C helicopter environments
- High deflection, random vibration environments

Shock and Vibe

- Attenuates a 15g, 11 millisecond half-sine shock to 6 g's
- Survives a 30g, 11 millisecond half-sine crash safety shock

Load Range

- 1825-1 = load ratings from 5-8 lbs.
- 1825-2 = load ratings from 7-13 lbs.
- 1825-3 = load ratings from 13-20 lbs.

Specifications

- Natural Frequency — 10-13 Hertz
- Transmissibility at resonance — 4.0 max.
- Resilient Element — Hi-Damped Silicone
- Standard materials — Aluminum (Grounding Strap Beryllium Copper)
- Weight = 4 oz.

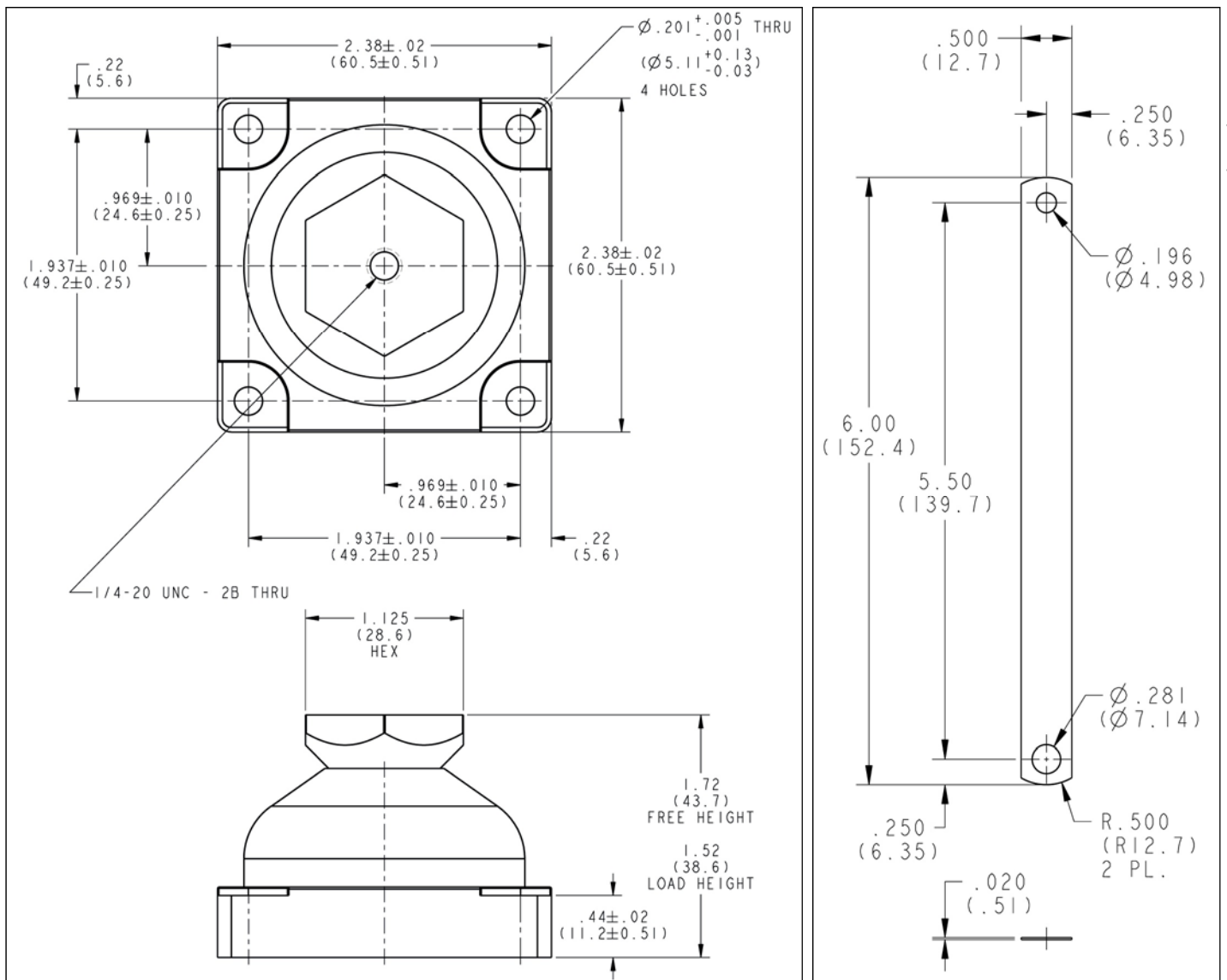
Elastomeric Data

- Hi-Damp Silicone operating temperature range of -67°F to $+300^{\circ}\text{F}$ (-55°C to $+150^{\circ}\text{C}$) and is resistant to fungus and ozone

Mount Series: 1825

Dimension and Performance Characteristics

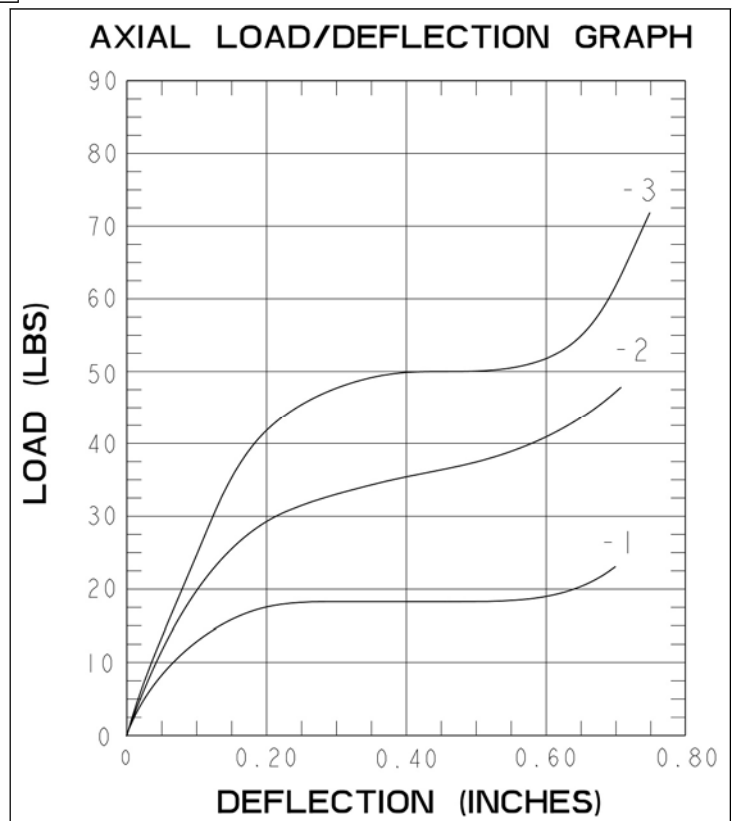
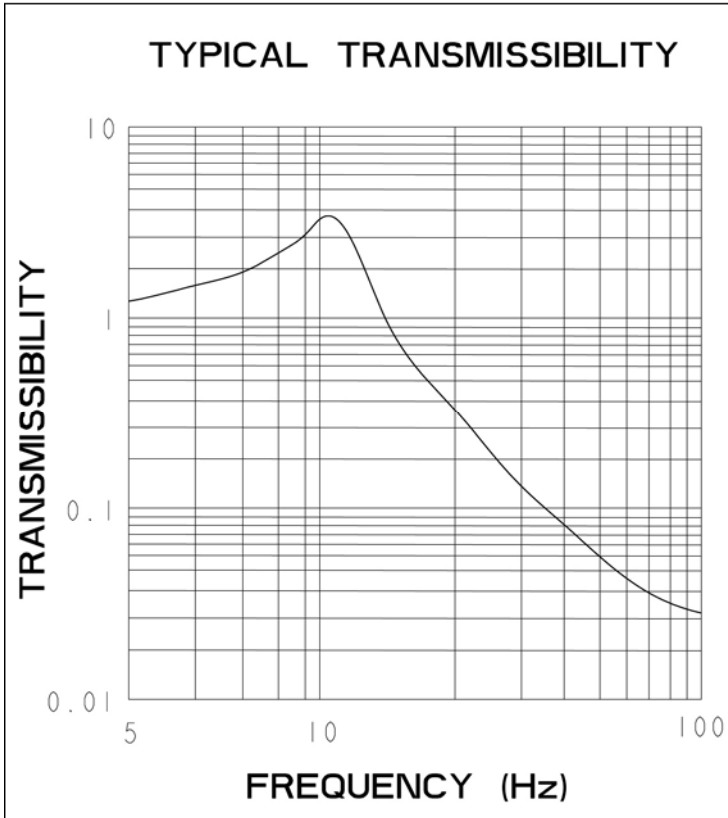
| Part # | Axial Load Range (lbs) | Transmissibility | Axial Natural Frequency (hz) | Free Height | Resilient Materials | Structural Materials | Core Style | Center Hole | Flange Holes |
|--------|------------------------|------------------|------------------------------|-------------|---------------------|----------------------|------------|-------------|--------------|
| 1825-1 | 5-8 | 4:1 | 10-13 | 1.72 | Hi-Damp Silicone | Aluminum | Threaded | 1/4-20 | .201 |
| 1825-2 | 7-13 | 4:1 | 10-13 | 1.72 | Hi-Damp Silicone | Aluminum | Threaded | 1/4-20 | .201 |
| 1825-3 | 13-20 | 4:1 | 10-13 | 1.72 | Hi-Damp Silicone | Aluminum | Threaded | 1/4-20 | .201 |



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Mount Series: 1825

Dimension and Performance Characteristics



1975 Arch Mount Series

High deflection, buckling design, shock and vibration isolators for sensitive equipment



Applications

- Shipboard equipment
- Transit cases
- Vehicle electronics
- Missile transportation
- Lab equipment

Load Range

- 1975-1 = load ratings to 45 lbs.
- 1975-2 = load ratings to 70 lbs.
- 1975-3 = load ratings to 100 lbs.
- 1975-4 = load ratings to 145 lbs.

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Attributes

- Steel construction
- Buckling design
- Axial to radial stiffness ratio 2:1
- Designed to carry static loads in the axial direction but can accommodate dynamic inputs in the radial direction
- Attenuates 18" freefall drop input to 12g's

Specifications

- Natural Frequency — 12-20 Hertz
- Transmissibility at resonance — 10:1 max. for Neoprene, 5.1 max. for Polybutadiene
- Resilient Element — Neoprene
- Standard materials — Steel (Grounding Strap Beryllium Copper)
- Weight = 4 lbs.

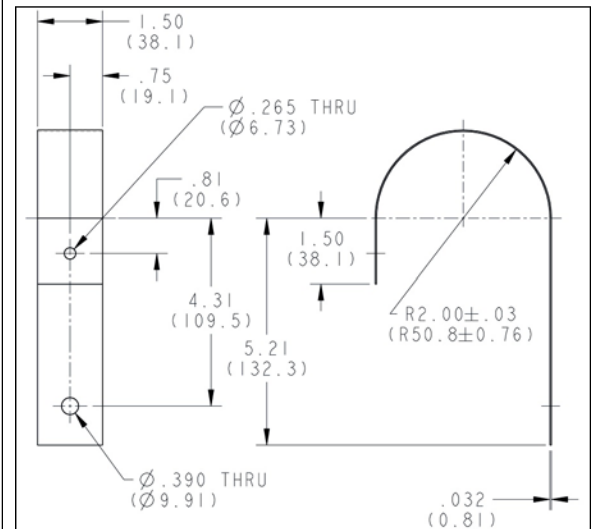
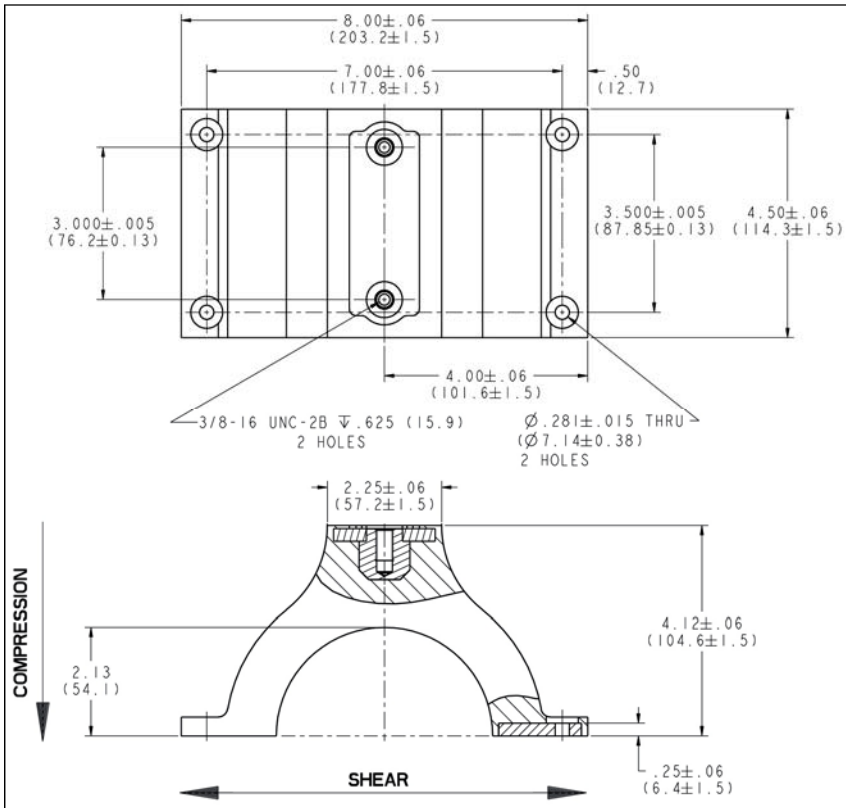
Elastomeric Data

- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to fungus and ozone
- Polybutadiene (low temperature) compound has an operating temperature range of -60°F to $+180^{\circ}\text{F}$ (-50°C to 82°C) and resists oil and ozone

Arch Mount Series: 1975

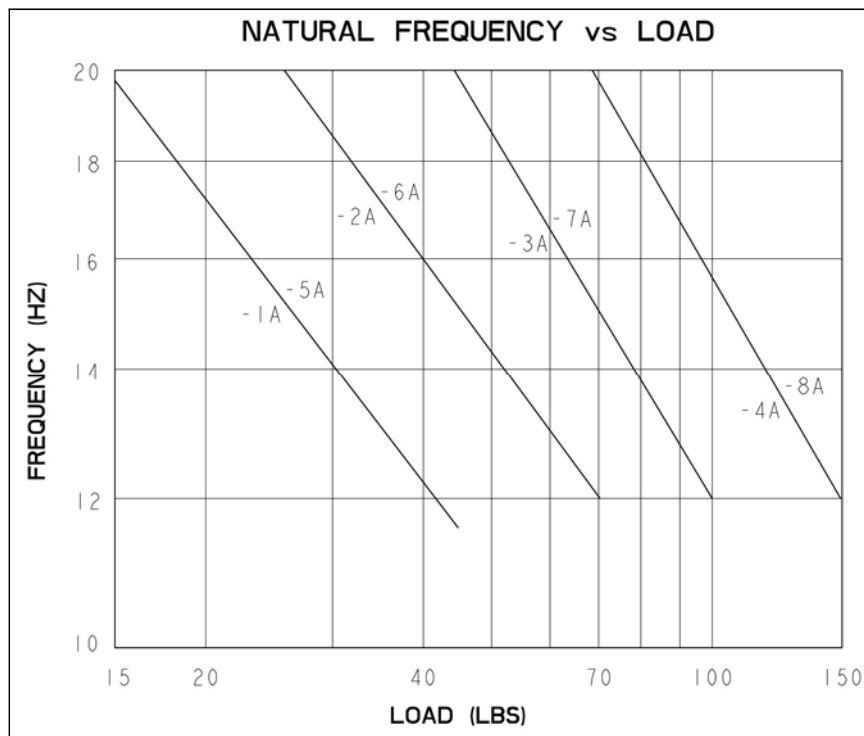
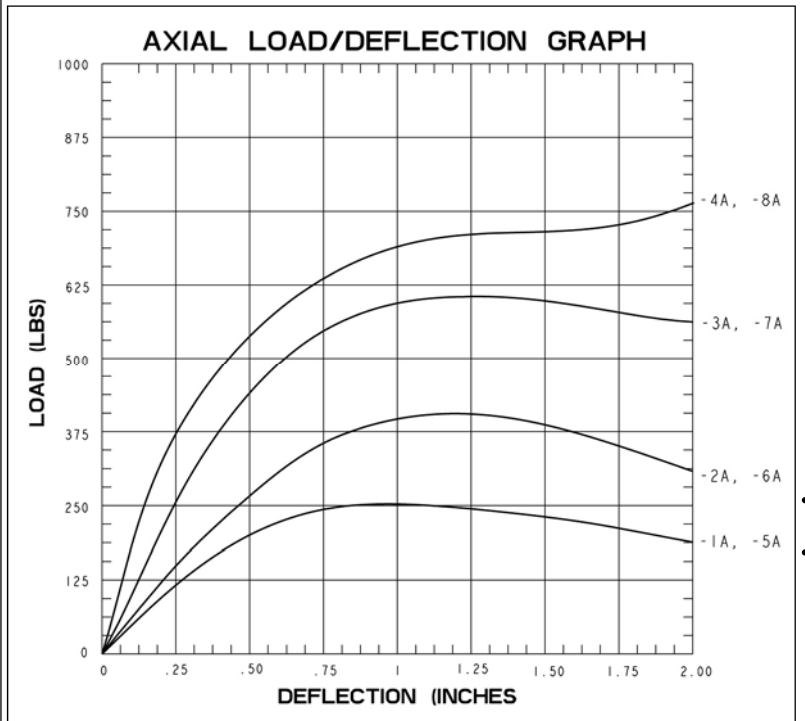
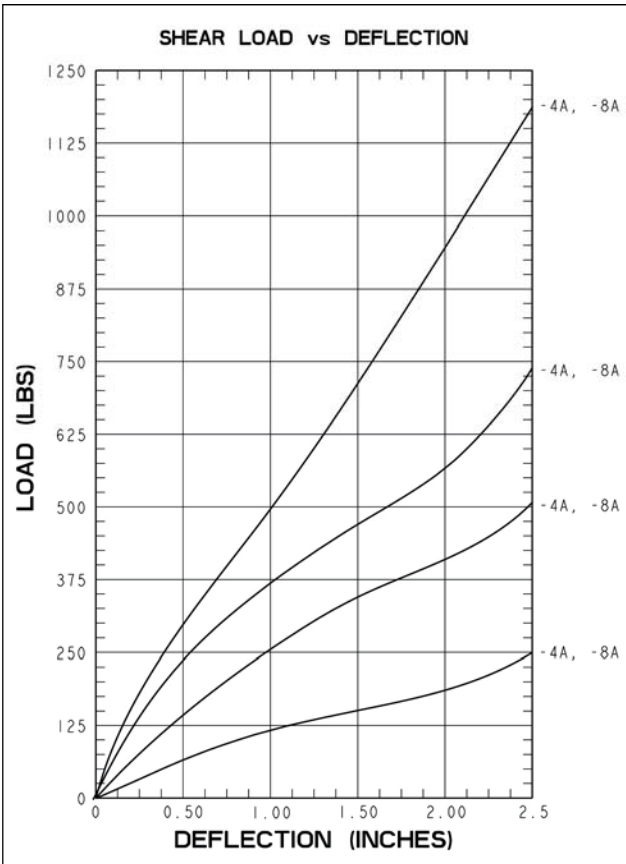
Dimension and Performance Characteristics

| Part # | | Maximum Axial Load Ratings (lbs.) |
|----------|---------------|-----------------------------------|
| Neoprene | Polybutadiene | |
| 1975-1A | 1975-5A | 45 |
| 1975-2A | 1975-6A | 70 |
| 1975-3A | 1975-7A | 100 |
| 1975-4A | 1975-8A | 145 |



Arch Mount Series: 1975

Dimension and Performance Characteristics



K

LOW PROFILE MOUNT SERIES



1830/1831 Mount Series

A compact, low profile, all attitude shock and vibration isolation solution where instrumentation subjected to serve environmental conditions



Applications

- Military computer applications
- Vehicular equipment
- Missile Electronics
- Light weight electrical equipment in random vibration environments

Load Range

- 1830-1 = load ratings to 3 lbs.
- 1830-2 = load ratings to 4.5 lbs.
- 1830-3 = load ratings to 7 lbs.
- 1830-4 = load ratings to 10 lbs.
- 1831-1 = load ratings to 3 lbs.
- 1831-2 = load ratings to 4.5 lbs.
- 1831-3 = load ratings to 7 lbs.
- 1831-4 = load ratings to 10 lbs.

Attributes

- High deflection capability for shock load
- Axial to radial stiffness ratio 1:1
- Compact, low profile design
- Easy to install
- Fail-safe
- Survives a 30G, 11 millisecond shock load

Specifications

- Natural Frequency — 25-40 Hertz
- Transmissibility at resonance — 4.0 max
- Resilient element — Hi-damp silicone
- Standard materials — Aluminum w/zinc plated core
- Weight — 1831 = .023 lbs./1830 = .045 lbs.

Elastomeric Data

- Hi-Damp Silicone operating temperature range is -67°F to +300°F (-55°C to +150°C), elastomer is fungus and ozone resistant
- Other elastomers are available upon request

L

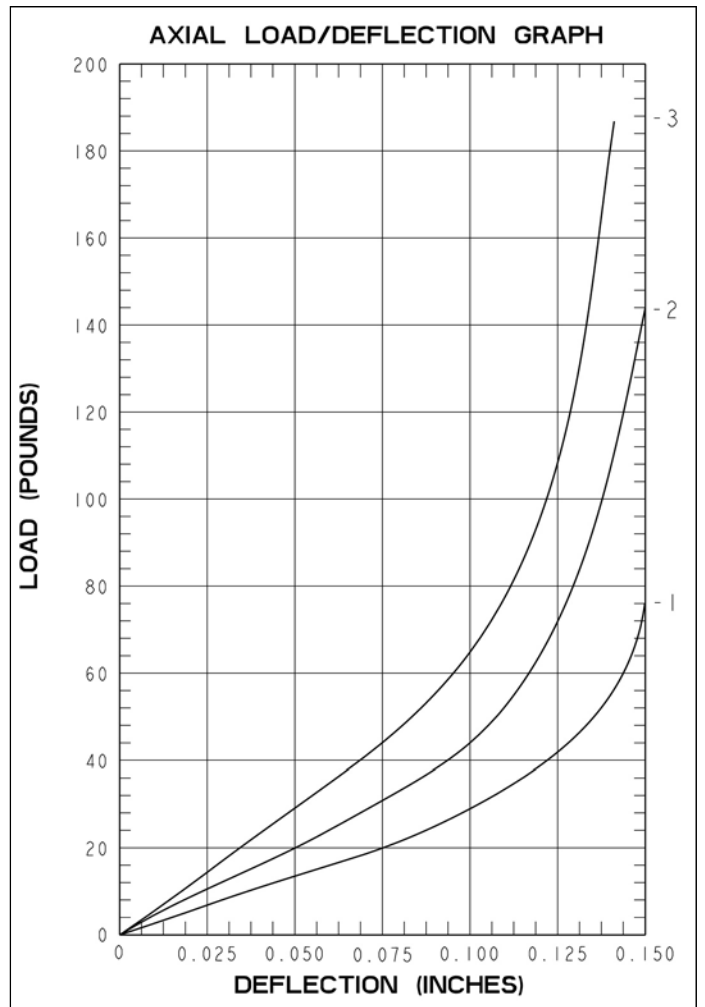
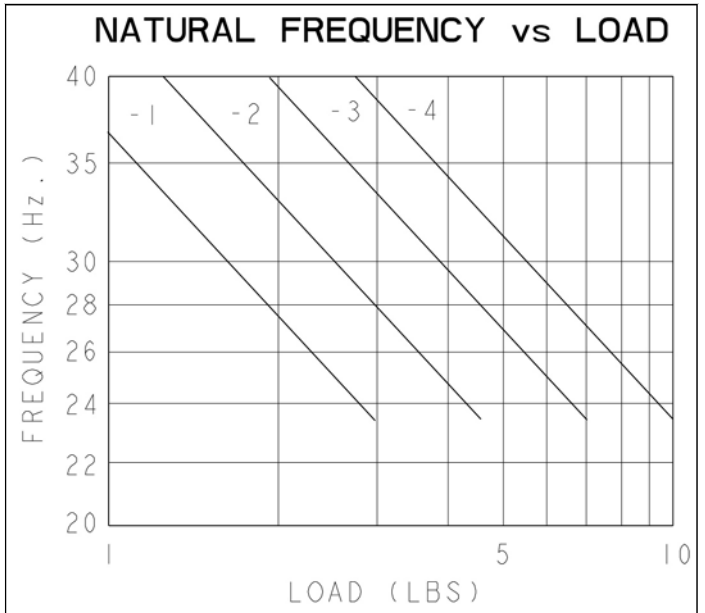
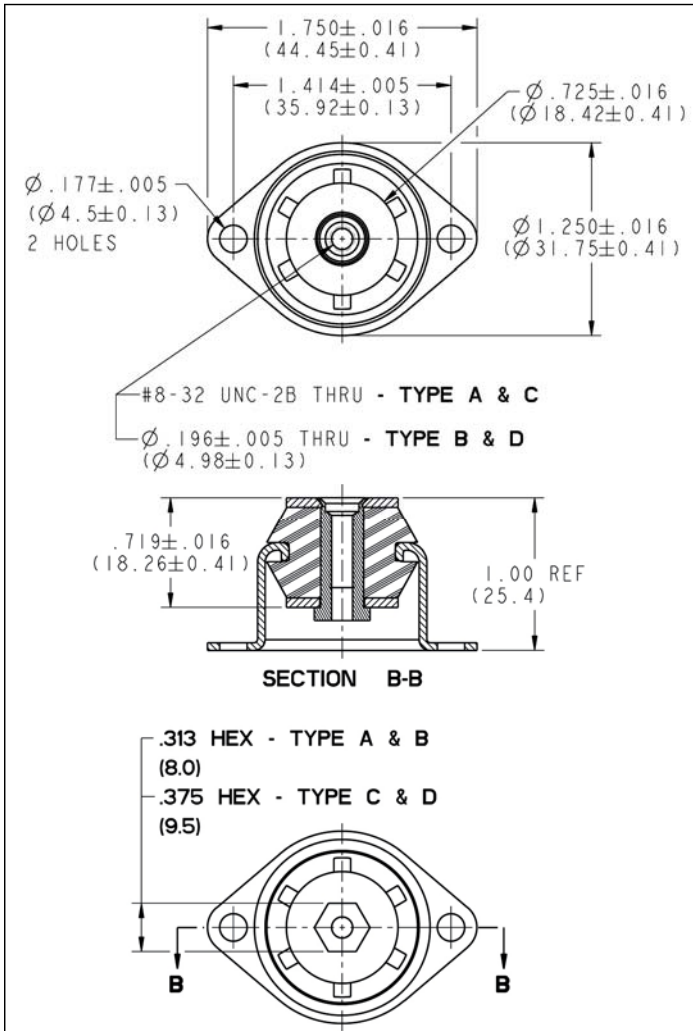
Mount Series: 1830

Dimension and Performance Characteristics

| Part # | Maximum Axial | Load (lbs.) Radial | Axial Natural Frequency (hz) | Standard Material | Standard Elastomer | Core | Hex |
|---------|---------------|--------------------|------------------------------|-------------------|--------------------|-------------|------|
| 1830-1A | 3.0 | 3.0 | 23 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1830-1B | 3.0 | 3.0 | 23 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1830-1C | 3.0 | 3.0 | 23 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1830-1D | 3.0 | 3.0 | 23 | Aluminum | Silicone | .196 Thru | 3/8 |
| 1830-2A | 4.5 | 4.5 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1830-2B | 4.5 | 4.5 | 24 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1830-2C | 4.5 | 4.5 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1830-2D | 4.5 | 4.5 | 24 | Aluminum | Silicone | .196 Thru | 3/8 |
| 1830-3A | 7.0 | 7.0 | 25 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1830-3B | 7.0 | 7.0 | 25 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1830-3C | 7.0 | 7.0 | 25 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1830-3D | 7.0 | 7.0 | 25 | Aluminum | Silicone | .196 Thru | 3/8 |
| 1830-4A | 10 | 10 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1830-4B | 10 | 10 | 24 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1830-4C | 10 | 10 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1830-4D | 10 | 10 | 24 | Aluminum | Silicone | .196 Thru | 3/8 |

Mount Series: 1830

Dimension and Performance Characteristics



L

Mount Series: 1831

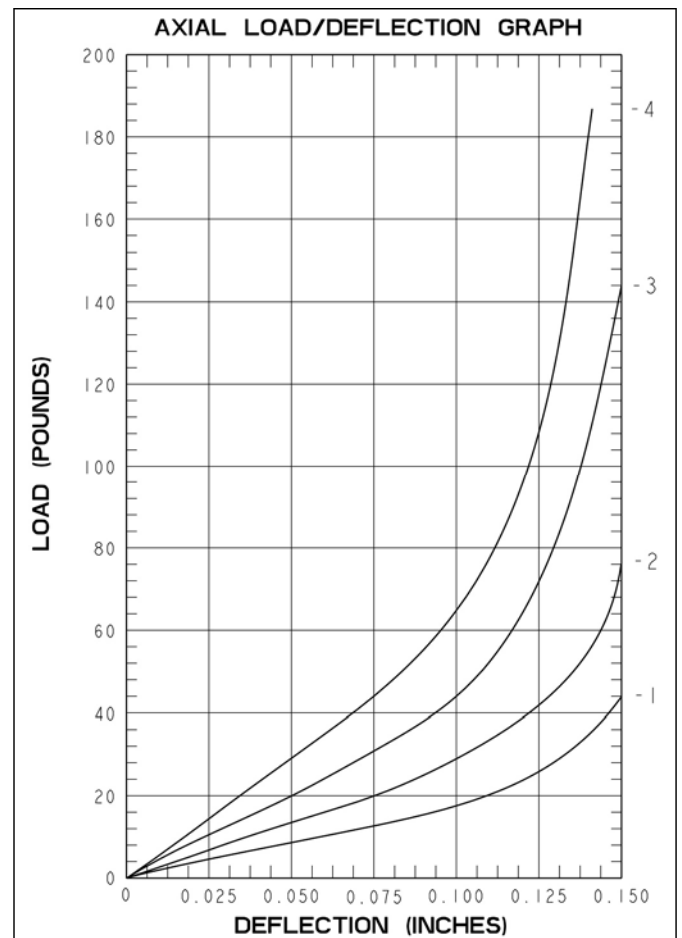
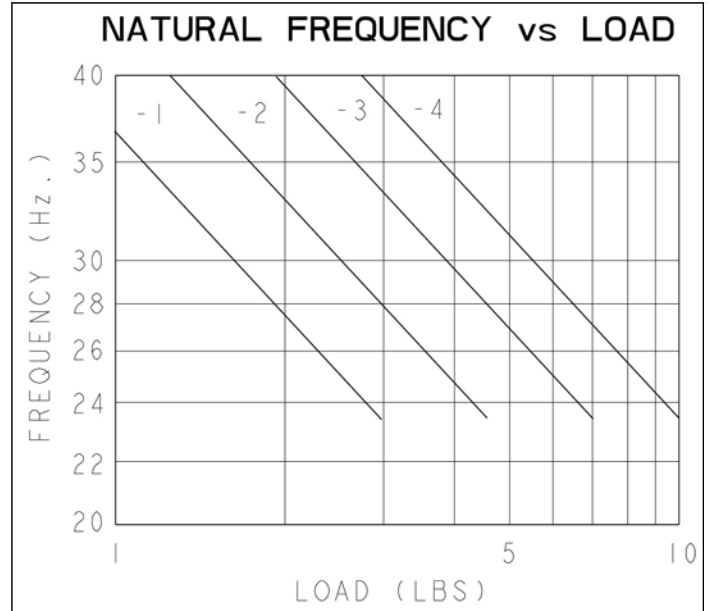
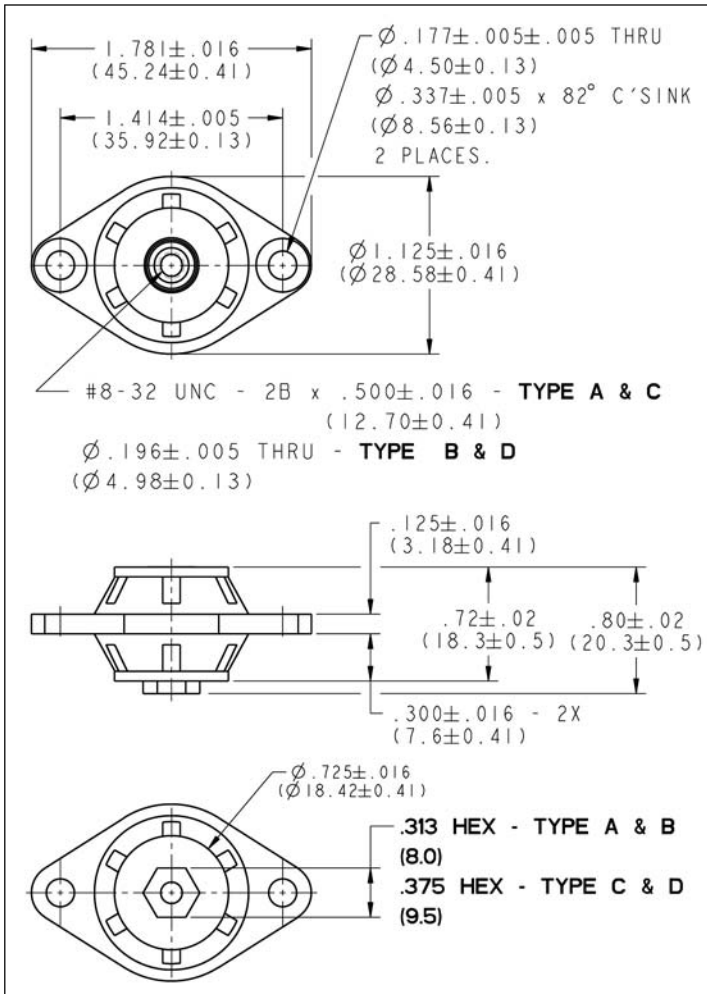
Dimension and Performance Characteristics

| Part # | Maximum Axial | Load (lbs.) Radial | Axial Natural Frequency (HZ) | Standard Material | Standard Elastomer | Core | Hex |
|---------|---------------|--------------------|------------------------------|-------------------|--------------------|-------------|------|
| 1831-1A | 3.0 | 3.0 | 23 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1831-1B | 3.0 | 3.0 | 23 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1831-1C | 3.0 | 3.0 | 23 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1831-1D | 3.0 | 3.0 | 23 | Aluminum | Silicone | .196 Thru | 3/8 |
| 1831-2A | 4.5 | 4.5 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1831-2B | 4.5 | 4.5 | 24 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1831-2C | 4.5 | 4.5 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1831-2D | 4.5 | 4.5 | 24 | Aluminum | Silicone | .196 Thru | 3/8 |
| 1831-3A | 7.0 | 7.0 | 25 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1831-3B | 7.0 | 7.0 | 25 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1831-3C | 7.0 | 7.0 | 25 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1831-3D | 7.0 | 7.0 | 25 | Aluminum | Silicone | .196 Thru | 3/8 |
| 1831-4A | 10 | 10 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 5/16 |
| 1831-4B | 10 | 10 | 24 | Aluminum | Silicone | .196 Thru | 5/16 |
| 1831-4C | 10 | 10 | 24 | Aluminum | Silicone | 8-32 UNC-2B | 3/8 |
| 1831-4D | 10 | 10 | 24 | Aluminum | Silicone | .196 Thru | 3/8 |

Mount Series: 1831

Dimension and Performance Characteristics

**Recommended hole size
is $1.000 \pm .005$ (25.4)**



L

Small Equipment Mount Series

SEM100/SEM500

A compact, low profile shock and vibration isolation solution where instrumentation subjected to serve environmental conditions



Attributes

- High deflection capability for shock load
- Axial to radial stiffness ratio 2:1
- Compact, low profile design
- Easy to install
- Can be used in tandem for higher deflection capability

Applications

- Computer applications
- Avionics
- Electronics
- Commercial/GPS navigation

Load Range

- SEM100-1 = load ratings to 2.5 lbs.
- SEM100-2 = load ratings to 3.75 lbs.
- SEM100-3 = load ratings to 4.25 lbs.
- SEM100-4 = load ratings to 6.5 lbs.
- SEM100-5 = load ratings to 10 lbs.
- SEM500-1 = load ratings to 2 lbs.
- SEM500-2 = load ratings to 3 lbs.
- SEM500-3 = load ratings to 5 lbs.
- SEM500-4 = load ratings to 7.5 lbs.
- SEM500-5 = load ratings to 10 lbs.

Specifications

- Natural Frequency — 12-20 Hertz
- Transmissibility at resonance — 10:1 max.
- Resilient Element — Neoprene
- Standard materials — Aluminum
- Weight — SEM100 = 0.2 oz. SEM500 = 0.5 oz.

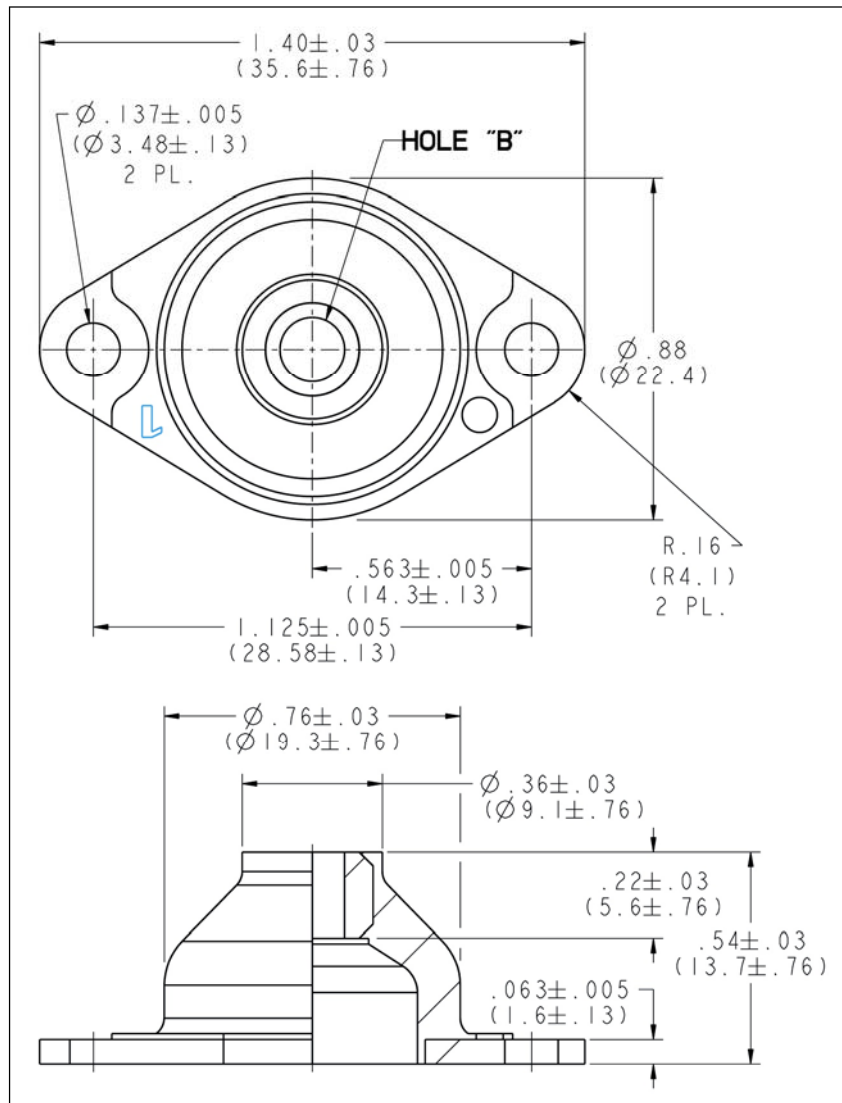
Elastomeric Data

- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to oil, most solvents and ozone
- Other elastomeric formulations are available in BUNA-N, Silicone, Butyl and Polybutadiene for improved damping, low and high temperature resistance

Small Equipment Mount Series: SEM100

Dimension and Load Range Specifications

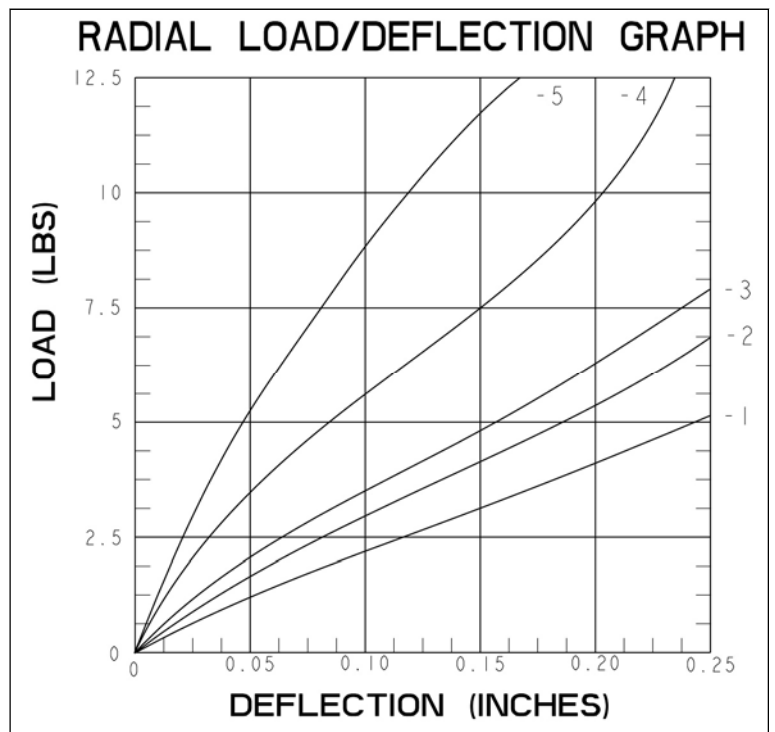
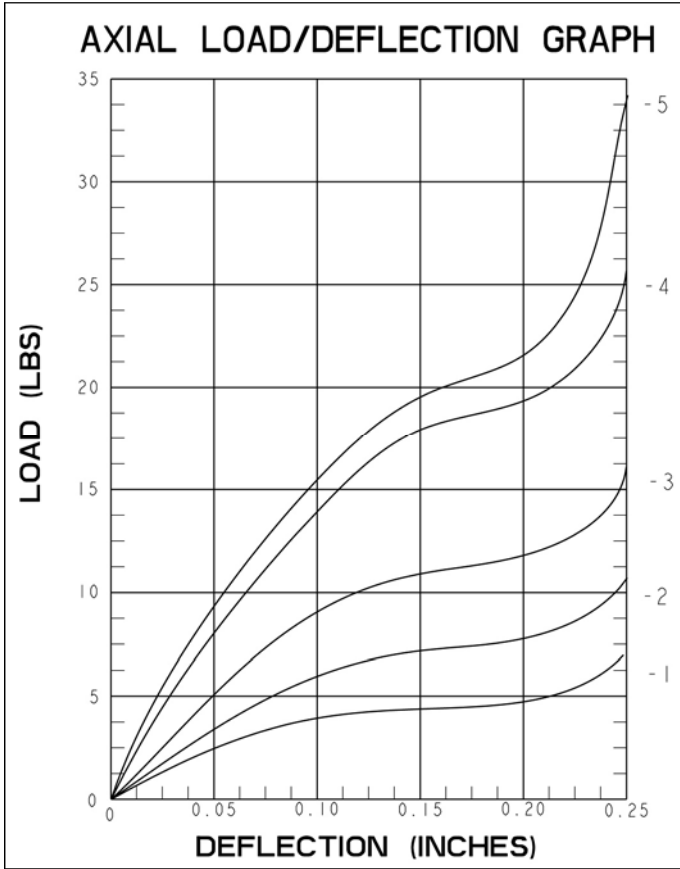
| Part # | Maximum Axial Compression | Load Radial (lbs.) | Axial Natural Frequency (hz) | Transmissibility at Resonance | Standard Elastomer | Standard Material | Core Style | Core Hole "B" |
|-----------|---------------------------|--------------------|------------------------------|-------------------------------|--------------------|-------------------|------------|---------------|
| SEM100-1 | 2.5 | 1.4 | 14 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM100-2 | 3.75 | 1.90 | 14 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM100-3 | 4.25 | 2.75 | 16 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM100-4 | 6.5 | 3.75 | 16 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM100-5 | 10.0 | 6.25 | 16 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM100-1T | 2.5 | 1.4 | 14 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM100-2T | 3.75 | 1.90 | 14 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM100-3T | 4.25 | 2.75 | 16 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM100-4T | 6.5 | 3.75 | 16 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM100-5T | 10.0 | 6.25 | 16 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |



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Small Equipment Mount Series: SEM100

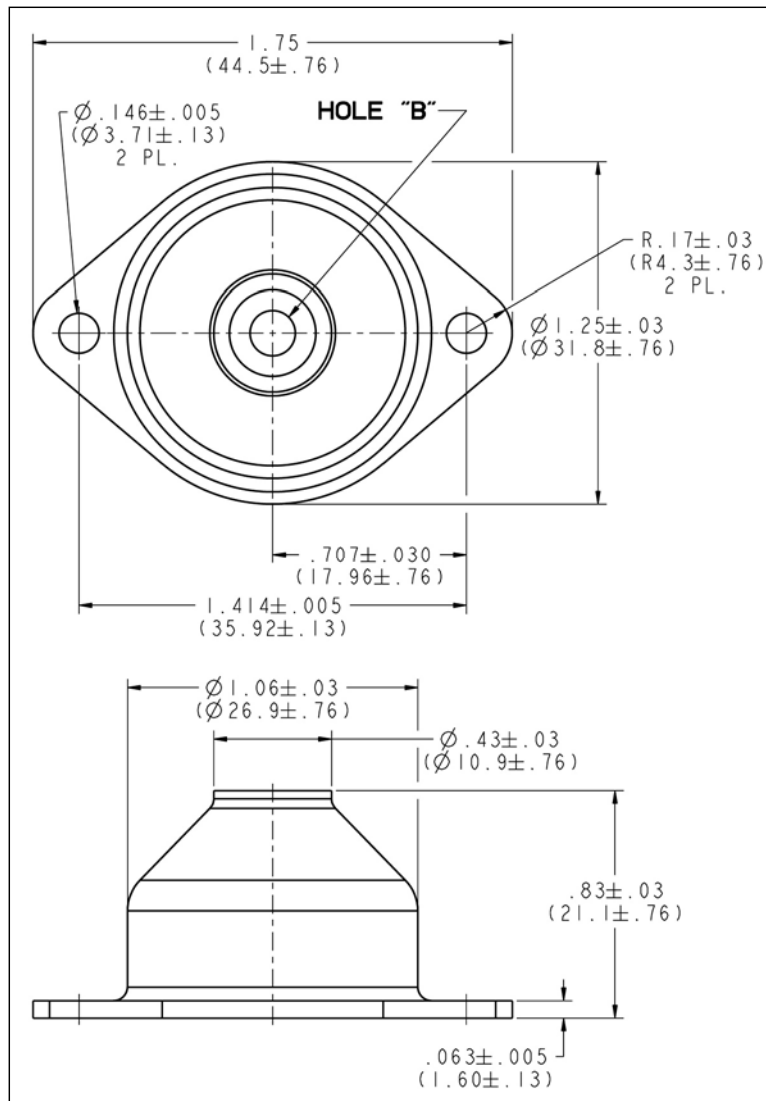
Dimension and Load Range Specifications



Small Equipment Mount Series: SEM500

Dimension and Load Range Specifications

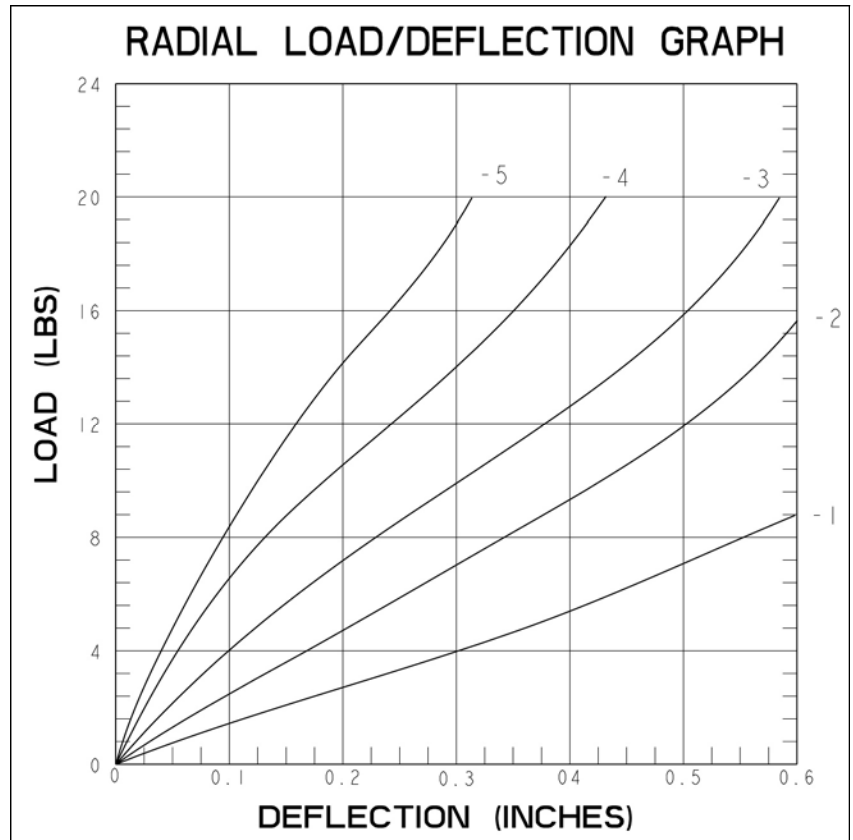
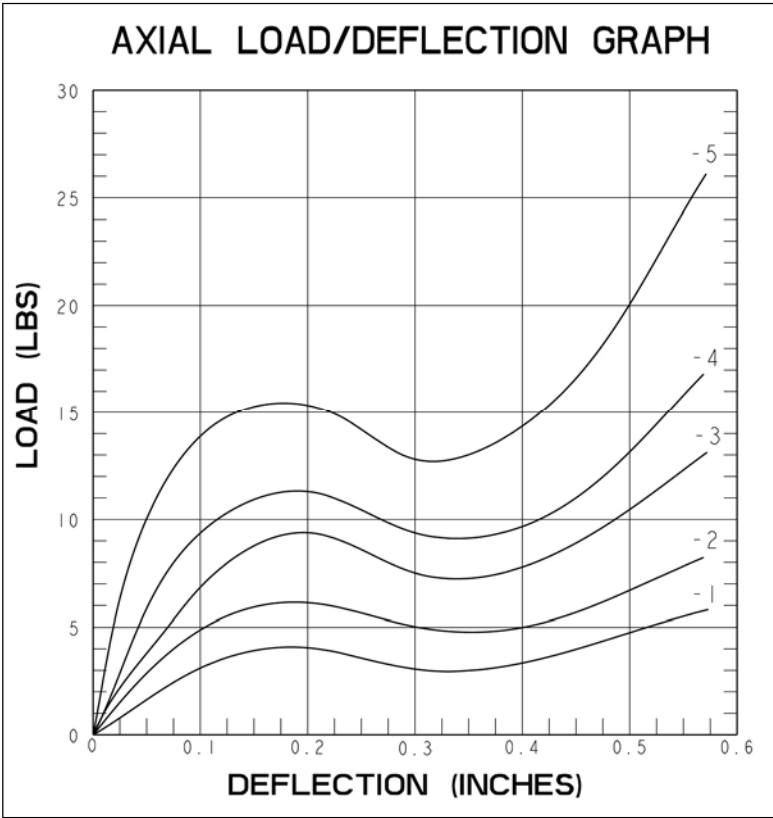
| Part # | Maximum Axial Compression | Load Radial (lbs.) | Axial Natural Frequency (hz) | Transmissibility at Resonance | Standard Elastomer | Standard Material | Core Style | Core Hole "B" |
|-----------|---------------------------|--------------------|------------------------------|-------------------------------|--------------------|-------------------|------------|---------------|
| SEM500-1 | 2.0 | .75 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM500-2 | 3.0 | 1.50 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM500-3 | 5.0 | 2.25 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM500-4 | 7.5 | 4.0 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM500-5 | 10.0 | 5.0 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Thru Hole | Ø.166 |
| SEM500-1T | 2.0 | .75 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM500-2T | 3.0 | 1.50 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM500-3T | 5.0 | 2.25 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM500-4T | 7.5 | 4.0 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |
| SEM500-5T | 10.0 | 5.0 | 12 | 10:1 | Neoprene | 6061-T6 Aluminum | Threaded | 8-32 UNC-2B |



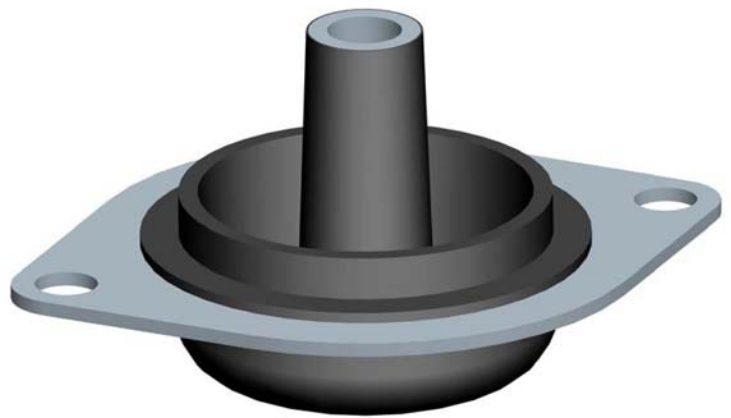
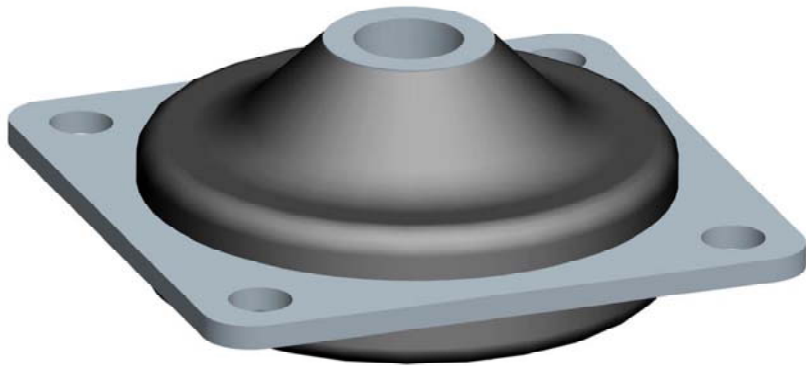
L

Small Equipment Mount Series: SEM500

Dimension and Load Range Specifications

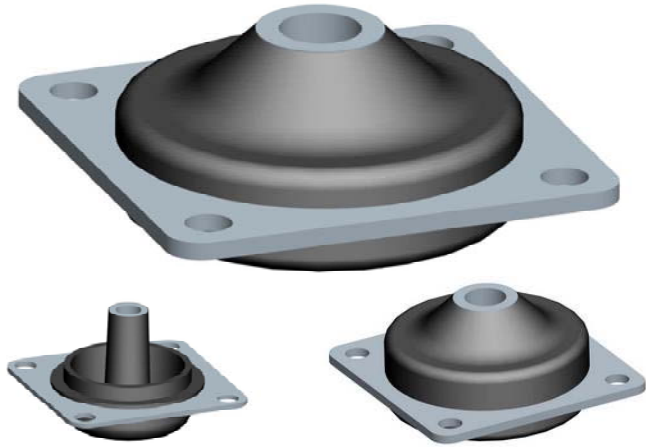


PLATFORM MOUNT SERIES



Platform Mount Series

Versatile, low frequency isolators recommended to isolate steady state vibration and control occasional shock inputs. These lightweight and compact isolators provide multi-directional isolation from lower frequency disturbances



Applications

- Oxygen concentrators
- Gensets
- Engine mounts
- Cab mounts
- Medical equipment
- Compressors
- Electronic equipment

Attributes

- All attitude
- Low cost
- Compact, low profile design
- Available in a square or diamond shaped flange
- Easy to install
- Low natural frequency

Load Range

- EP3001 = 8 load ratings from 4 to 20 lbs.
- EP3002 = 16 load ratings from 3 to 26 lbs.
- EP3003 = 10 load ratings from 12 to 60 lbs.
- EP3004 = 12 load ratings from 20 to 90 lbs.
- EP3106 = 10 load ratings from 1 to 6 lbs.
- EP3156 = 8 load ratings from 6 to 16 lbs.

Specifications

- Natural Frequency — 8-20 Hertz
- Transmissibility at resonance — 10:1
- Resilient Element — Neoprene
- Standard materials — Cold-rolled steel
- Weight — varies with model

Elastomeric Data

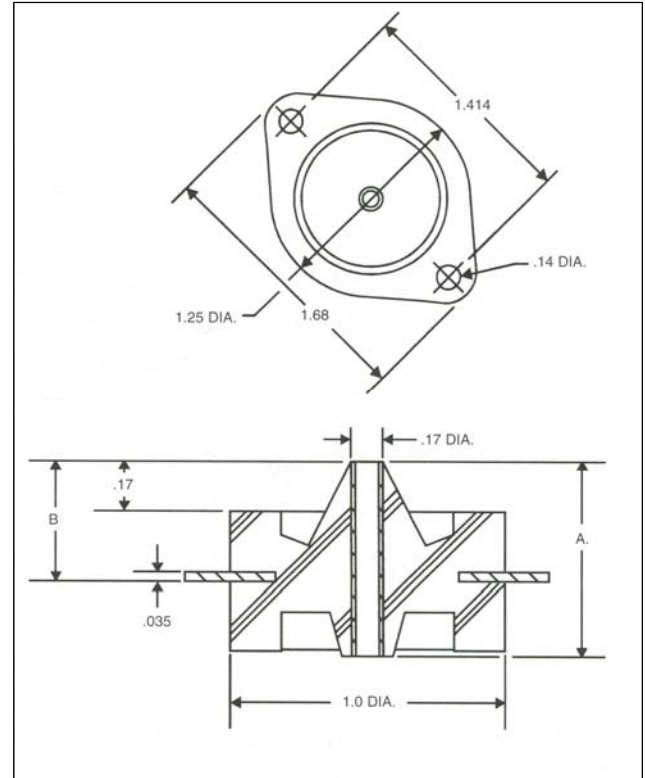
- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to oil, most solvents and ozone
- Other elastomeric formulations are available in BUNA-N, Silicone, Butyl and Polybutadiene for improved damping, low and high temperature resistance

Platform Mount Series: 3001

Dimension and Load Range Specifications

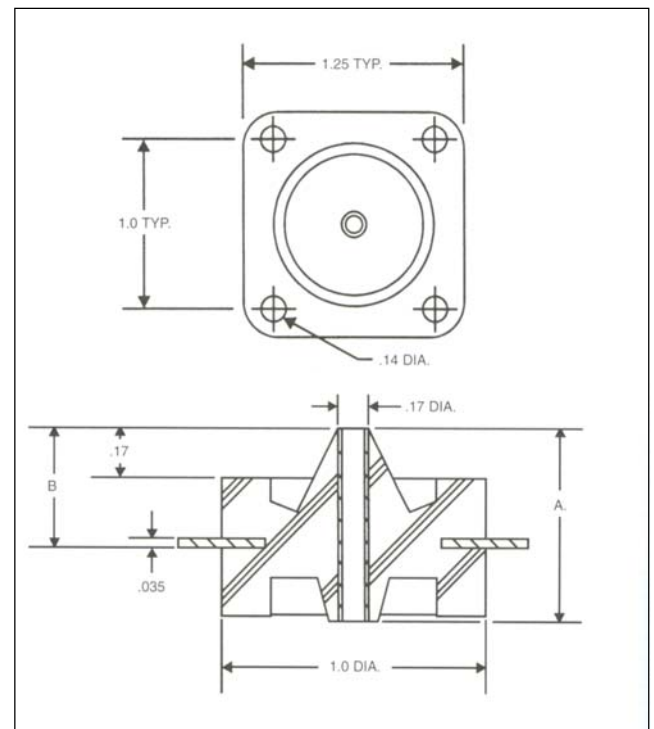
| PART NUMBER | MAX STATIC LOAD (lbs.) | AXIAL SPRING RATE (lbs./in.) | A height | B height |
|-------------|------------------------|------------------------------|----------|----------|
| EP3001-01 | 4 | 62 | .75 | .45 |
| EP3001-02 | 8 | 125 | .75 | .45 |
| EP3001-03 | 12 | 190 | .75 | .45 |
| EP3001-04 | 20 | 330 | .75 | .45 |

Diamond Flange



Square Flange

| PART NUMBER | MAX STATIC LOAD (lbs.) | AXIAL SPRING RATE (lbs./in.) | A height | B height |
|-------------|------------------------|------------------------------|----------|----------|
| EP3001-51 | 4 | 62 | .75 | .45 |
| EP3001-52 | 8 | 125 | .75 | .45 |
| EP3001-53 | 12 | 190 | .75 | .45 |
| EP3001-54 | 20 | 330 | .75 | .45 |

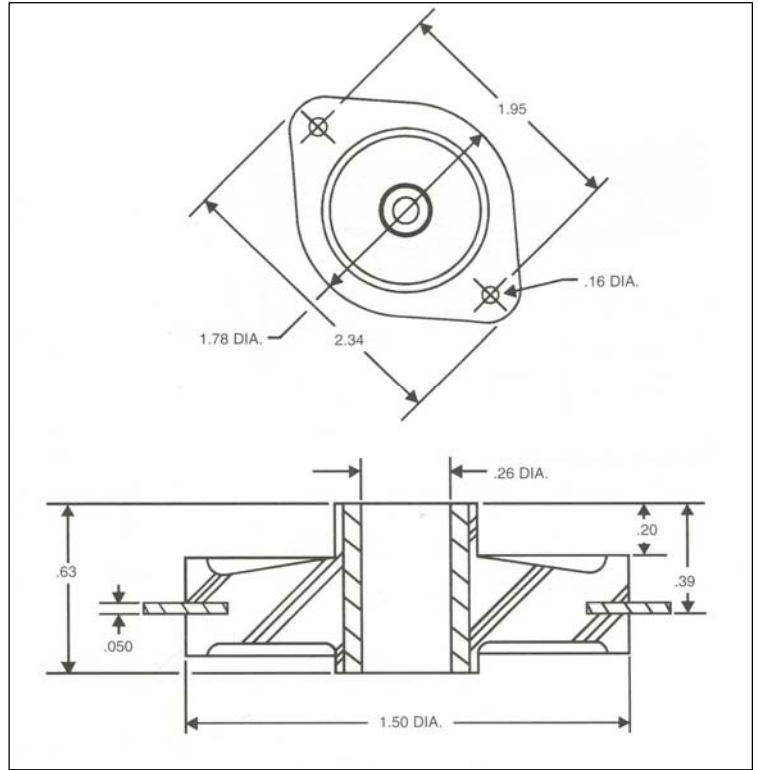


Platform Mount Series: 3002

Dimension and Load Range Specifications

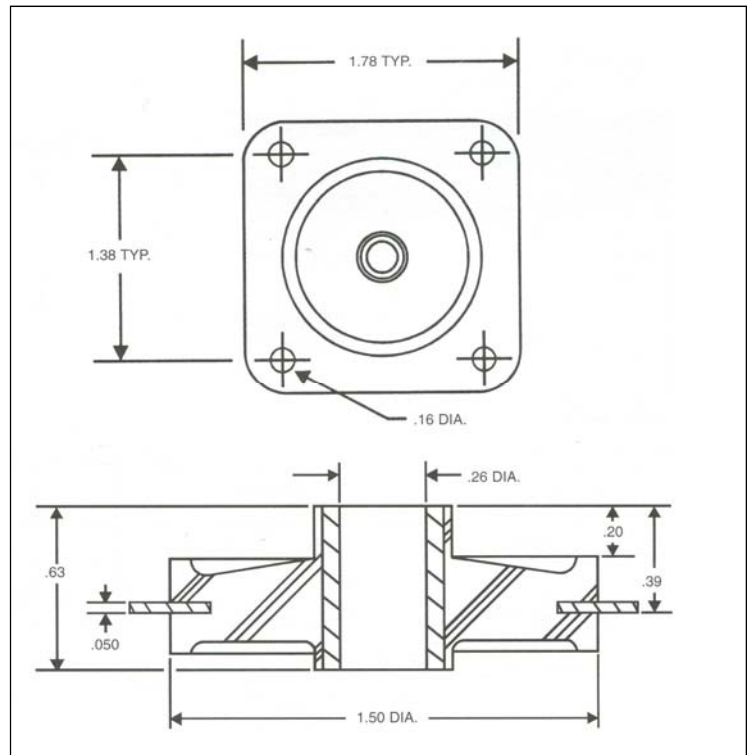
| PART NUMBER | MAXIMUM STATIC (lbs.) | AXIAL SPRING RATE (lbs./in.) |
|-------------|-----------------------|------------------------------|
| EP3002-01 | 3 | 33 |
| EP3002-02 | 6 | 63 |
| EP3002-03 | 9 | 100 |
| EP3002-04 | 12 | 130 |
| EP3002-05 | 14 | 163 |
| EP3002-06 | 17 | 192 |
| EP3002-07 | 20 | 220 |
| EP3002-08 | 26 | 290 |

Diamond Flange



| PART NUMBER | MAXIMUM STATIC (lbs.) | AXIAL SPRING RATE (lbs./in.) |
|-------------|-----------------------|------------------------------|
| EP3002-51 | 3 | 33 |
| EP3002-52 | 6 | 63 |
| EP3002-53 | 9 | 100 |
| EP3002-54 | 12 | 130 |
| EP3002-55 | 14 | 163 |
| EP3002-56 | 17 | 192 |
| EP3002-57 | 20 | 220 |
| EP3002-58 | 26 | 290 |

Square Flange

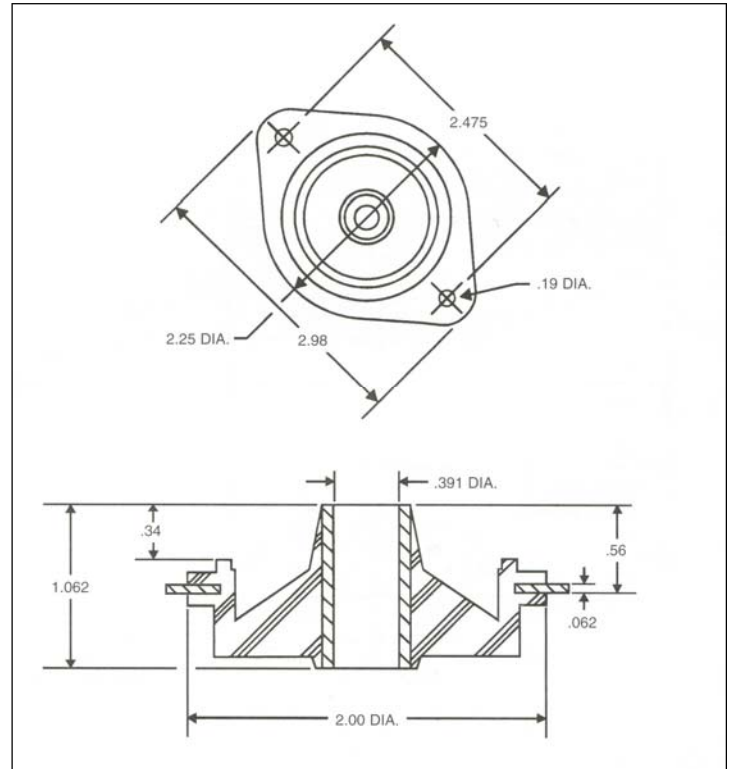


Platform Mount Series: 3003

Dimension and Load Range Specifications

| PART NUMBER | MAXIMUM STATIC (lbs.) | AXIAL SPRING RATE (lbs./in.) |
|-------------|-----------------------|------------------------------|
| EP3003-01 | 12 | 67 |
| EP3003-02 | 20 | 110 |
| EP3003-03 | 30 | 155 |
| EP3003-04 | 45 | 240 |
| EP3003-05 | 60 | 315 |

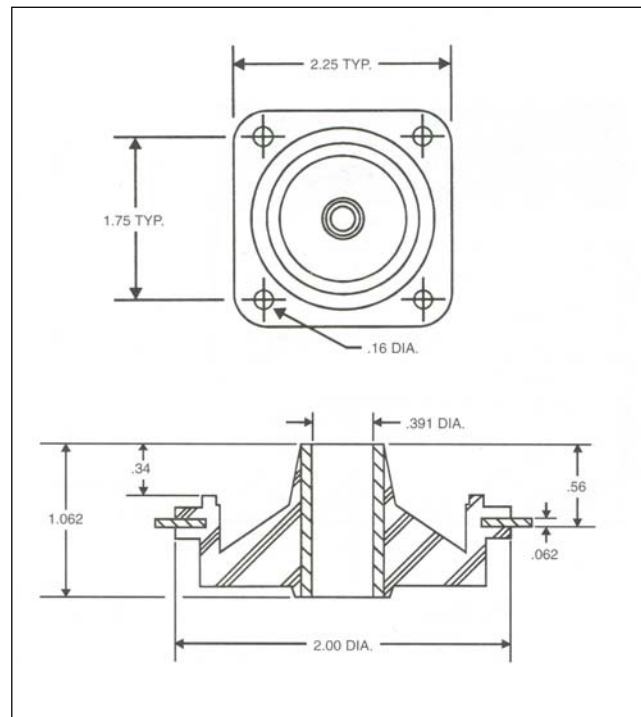
Diamond Flange



M

Square Flange

| PART NUMBER | MAXIMUM STATIC (lbs.) | AXIAL SPRING RATE (lbs./in.) |
|-------------|-----------------------|------------------------------|
| EP3003-51 | 12 | 67 |
| EP3003-52 | 20 | 110 |
| EP3003-53 | 30 | 155 |
| EP3003-54 | 45 | 240 |
| EP3003-55 | 60 | 315 |

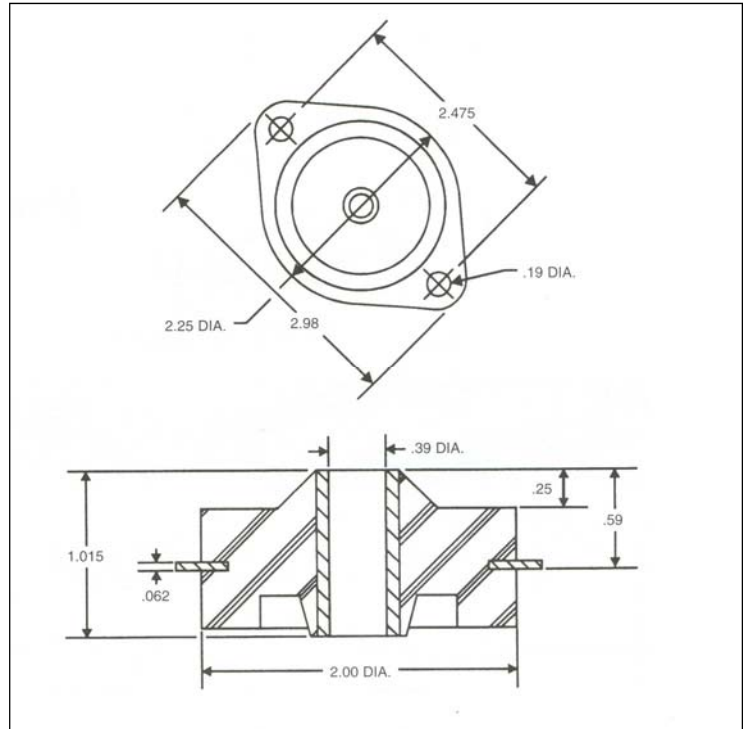


Platform Mount Series: 3004

Dimension and Load Range Specifications

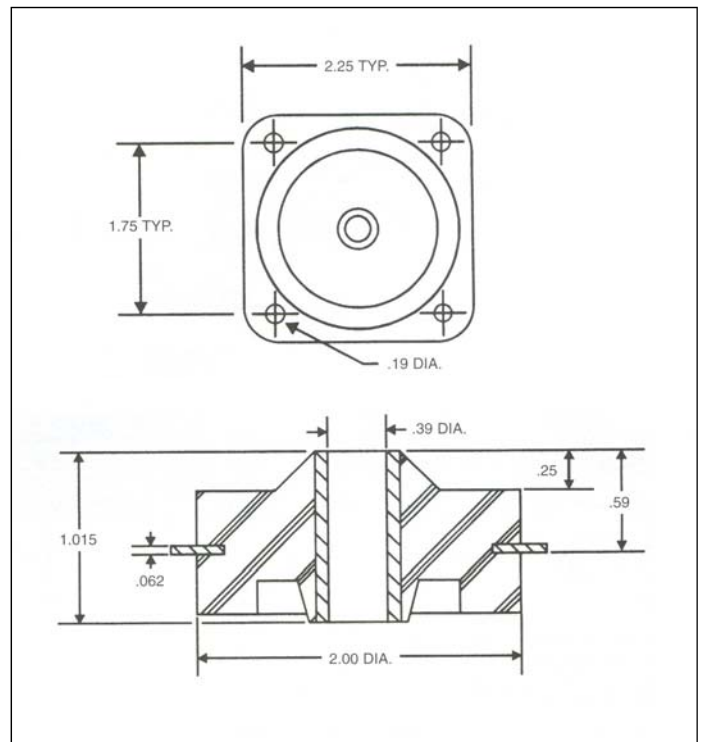
| PART NUMBER | MAXIMUM STATIC (lbs.) | AXIAL SPRING RATE (lbs./in.) |
|-------------|-----------------------|------------------------------|
| EP3004-00 | 20 | 160 |
| EP3004-01 | 30 | 230 |
| EP3004-02 | 40 | 300 |
| EP3004-03 | 50 | 385 |
| EP3004-04 | 70 | 530 |
| EP3004-05 | 90 | 690 |

Diamond Flange



Square Flange

| PART NUMBER | MAXIMUM STATIC (lbs.) | AXIAL SPRING RATE (lbs./in.) |
|-------------|-----------------------|------------------------------|
| EP3004-50 | 20 | 160 |
| EP3004-51 | 30 | 230 |
| EP3004-52 | 40 | 300 |
| EP3004-53 | 50 | 385 |
| EP3004-54 | 70 | 530 |
| EP3004-55 | 90 | 690 |

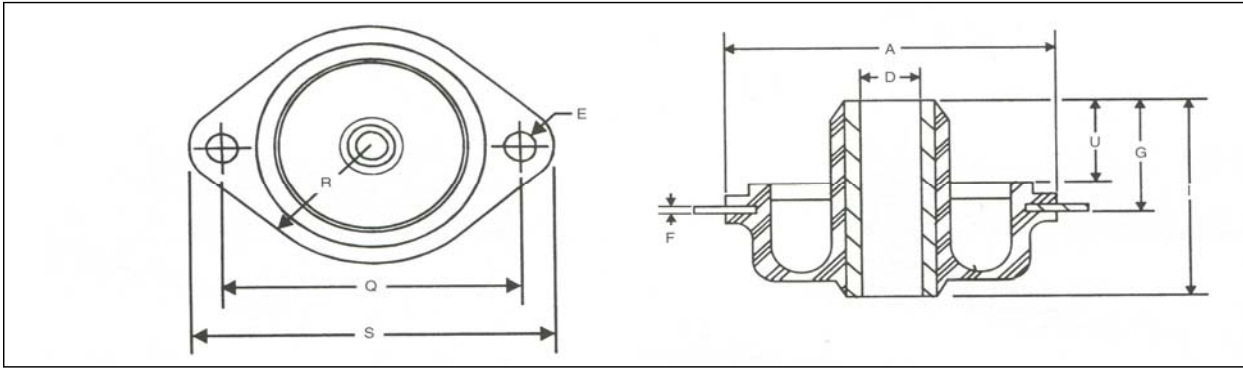


Platform Mount Series: 3106

Dimension and Load Range Specifications

Diamond Flange

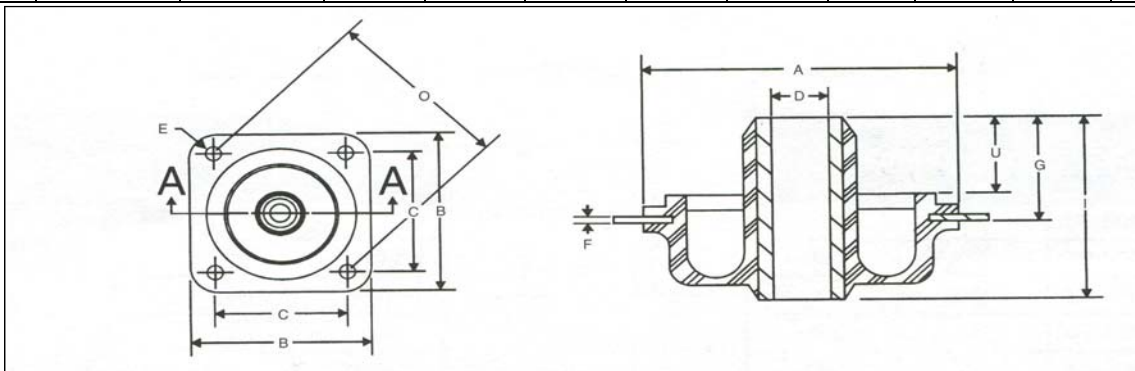
| PART NUMBER | AXIAL SPRING RATE (lbs./in.) | MAX LOAD (lbs.) | A | D +.008 -.005 | E +.003 -.002 | F | G | I (MIN) | Q | R | S | U |
|-------------|------------------------------|-----------------|------|---------------------|---------------------|-------|------|------------|-------|------|------|------|
| EP3106-01 | 5 | 1 | 1.00 | 0.166 | 0.166 | 0.032 | 0.53 | 0.84 | 1.414 | 0.62 | 1.66 | 0.38 |
| EP3106-02 | 11 | 2 | | | | | | | | | | |
| EP3106-03 | 16 | 3 | | | | | | | | | | |
| EP3106-04 | 21 | 4 | | | | | | | | | | |
| EP3106-05 | 32 | 6 | | | | | | | | | | |



Square Flange

M

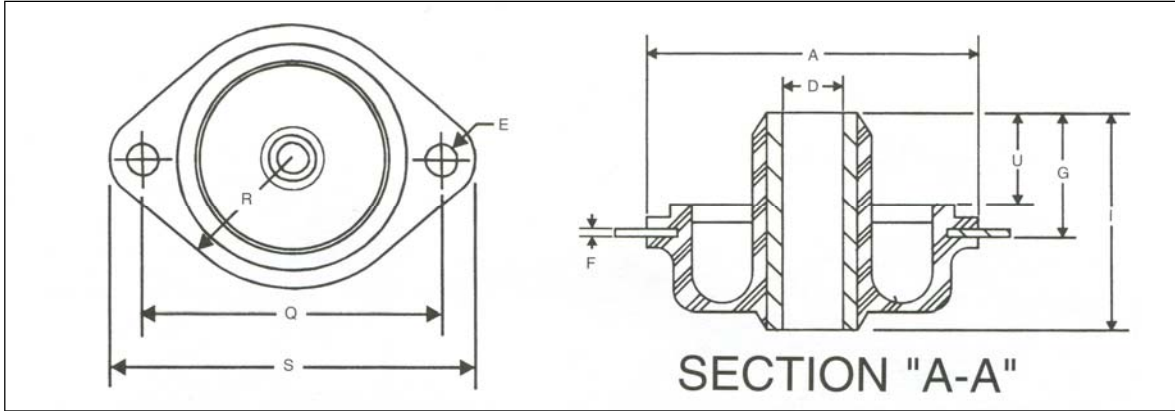
| PART NUMBER | AXIAL SPRING RATE (lbs./in.) | MAX LOAD (lbs.) | A | B | C | D +.008 -.005 | E +.003 -.002 | F | G | I | O | U |
|-------------|------------------------------|-----------------|------|------|-------|---------------------|---------------------|-------|------|------|-------|------|
| EP3106-51 | 5 | 1 | 1.00 | 1.25 | 1.000 | 0.166 | 0.166 | 0.032 | 0.53 | 0.84 | 1.414 | 0.38 |
| EP3106-52 | 11 | 2 | | | | | | | | | | |
| EP3106-53 | 16 | 3 | | | | | | | | | | |
| EP3106-54 | 21 | 4 | | | | | | | | | | |
| EP3106-55 | 32 | 6 | | | | | | | | | | |



Platform Mount Series: 3156

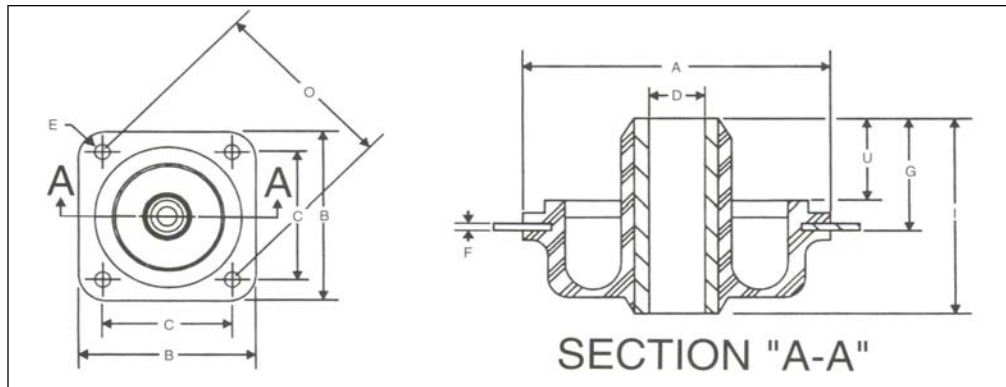
Dimension and Load Range Specifications

Diamond Flange



| PART NUMBER | AXIAL SPRING RATE (lbs./in.) | MAX LOAD (lbs.) | A | D +.008 -.005 | E +.003 -.002 | F | G | I (MIN) | Q | R | S | U |
|-------------|------------------------------|-----------------|------|---------------------|---------------------|-------|------|---------|-------|------|------|------|
| EP3156-01 | 32 | 6 | 1.50 | 0.257 | 0.166 | 0.050 | 0.55 | 0.97 | 1.945 | 0.88 | 2.32 | 0.38 |
| EP3156-02 | 48 | 9 | | | | | | | | | | |
| EP3156-03 | 69 | 13 | | | | | | | | | | |
| EP3156-04 | 85 | 16 | | | | | | | | | | |

Square Flange

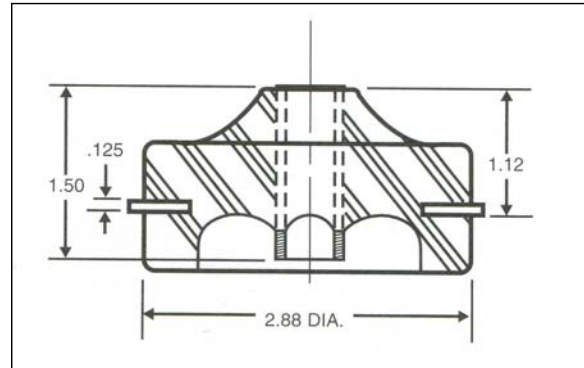
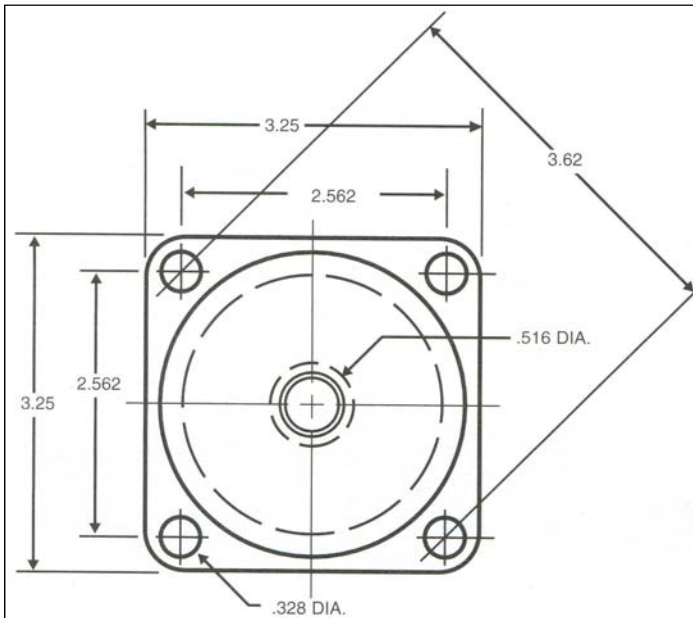


| PART NUMBER | AXIAL SPRING RATE (lbs./in.) | MAX LOAD (lbs.) | A | B | C | D +.008 -.005 | E +.003 -.002 | F | G | I | O | U |
|-------------|------------------------------|-----------------|------|------|-------|---------------------|---------------------|-------|------|------|-------|------|
| EP3156-51 | 32 | 6 | 1.50 | 1.75 | 1.375 | 0.257 | 0.166 | 0.050 | 0.55 | 0.97 | 1.945 | 0.38 |
| EP3156-52 | 48 | 9 | | | | | | | | | | |
| EP3156-53 | 69 | 13 | | | | | | | | | | |
| EP3156-54 | 85 | 16 | | | | | | | | | | |

Platform Mount Series: 3011/3020

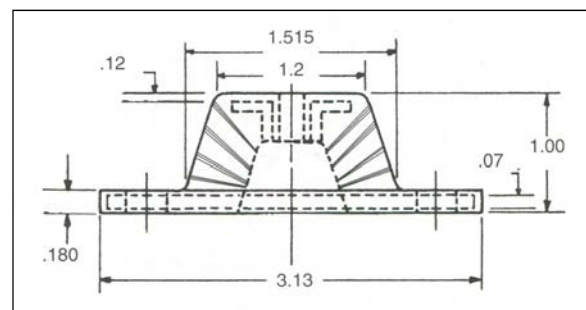
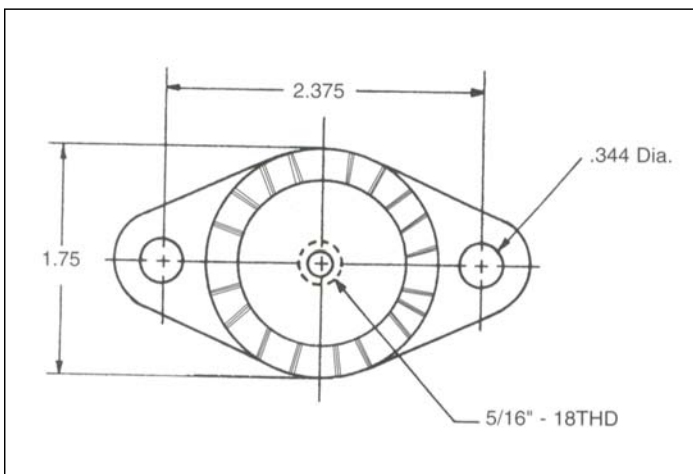
Dimension and Load Range Specifications

Square Flange



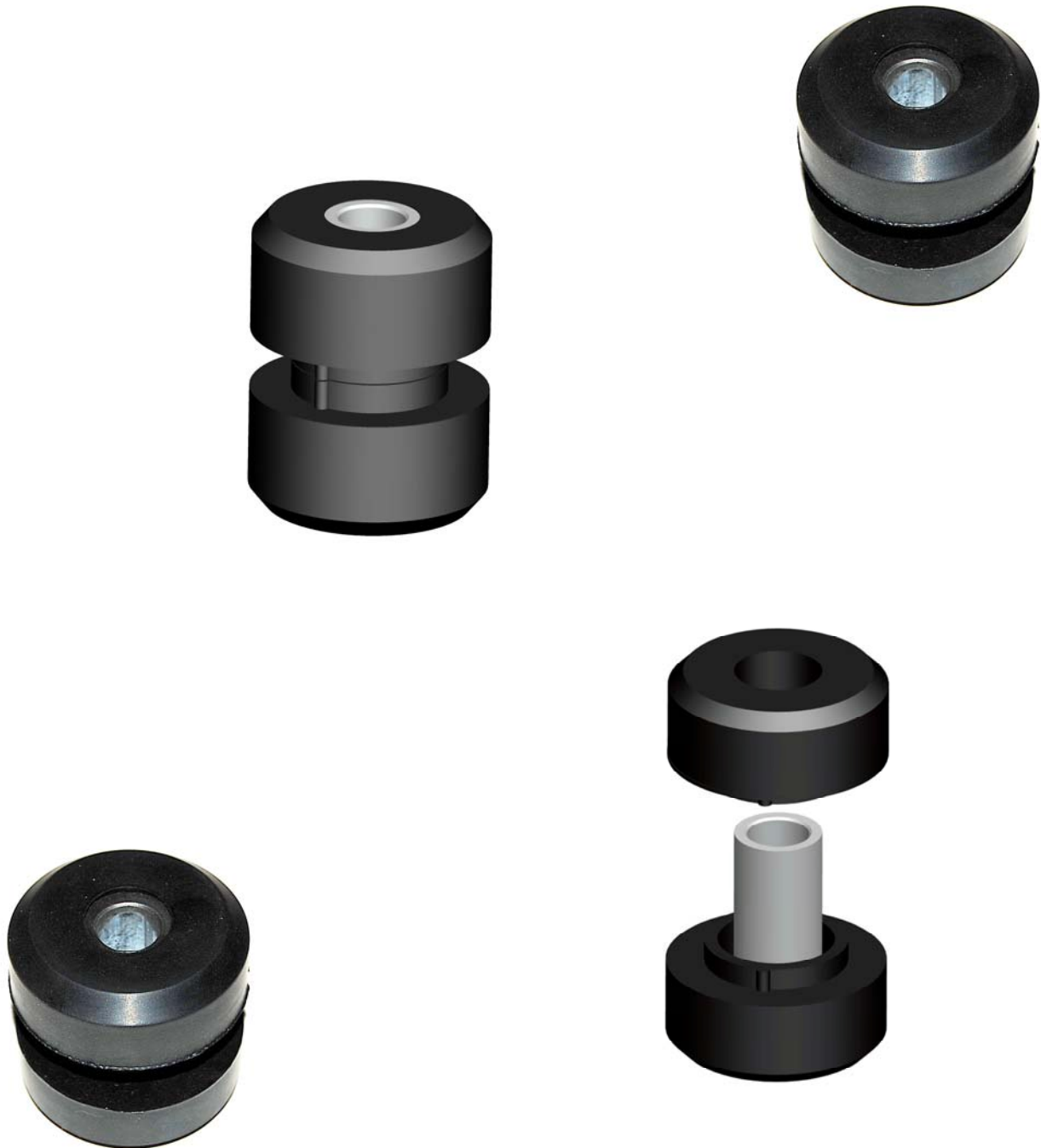
| PART NUMBER | DUROMETER |
|-------------|-----------|
| EP3011-01 | 30 |
| EP3011-02 | 40 |
| EP3011-03 | 50 |
| EP3011-04 | 60 |
| EP3011-05 | 70 |

M



| PART NUMBER | DUROMETER |
|-------------|-----------|
| EP3020-01 | 30 |
| EP3020-02 | 40 |
| EP3020-03 | 50 |
| EP3020-04 | 60 |
| EP3020-05 | 70 |

RING AND BUSHING MOUNT SERIES



Ring and Bushing Mount Series

A compact and low profile high capacity shock and vibration isolation solution where instrumentation subjected to severe environmental conditions



Attributes

- Fail-safe
- Axial to radial stiffness ratio 1:1
- Compact, low profile design
- Easy to install
- Rugged design

Applications

- Truck, bus and marine
- Generators, HVAC
- Electronics
- Pumps, compressors, blowers

Load Range

- 1761 = 5 load ratings to 300 lbs. max.
- 1762 = 5 load ratings to 630 lbs. max.
- 1763 = 5 load ratings to 1330 lbs. max.
- 1764 = 5 load ratings to 2100 lbs. max.
- 1765 = 5 load ratings to 4560 lbs. max.

Weights

- 1761 = .10 lbs.
- 1762 = .31 lbs.
- 1763 = .70 lbs.
- 1764 = 1.5 lbs.
- 1765 = 2.8 lbs.

N

Specifications

- Natural Frequency — 8-18 Hertz
- Transmissibility at resonance — 10:1
- Resilient Element — Neoprene
- Standard materials — Cold-rolled steel

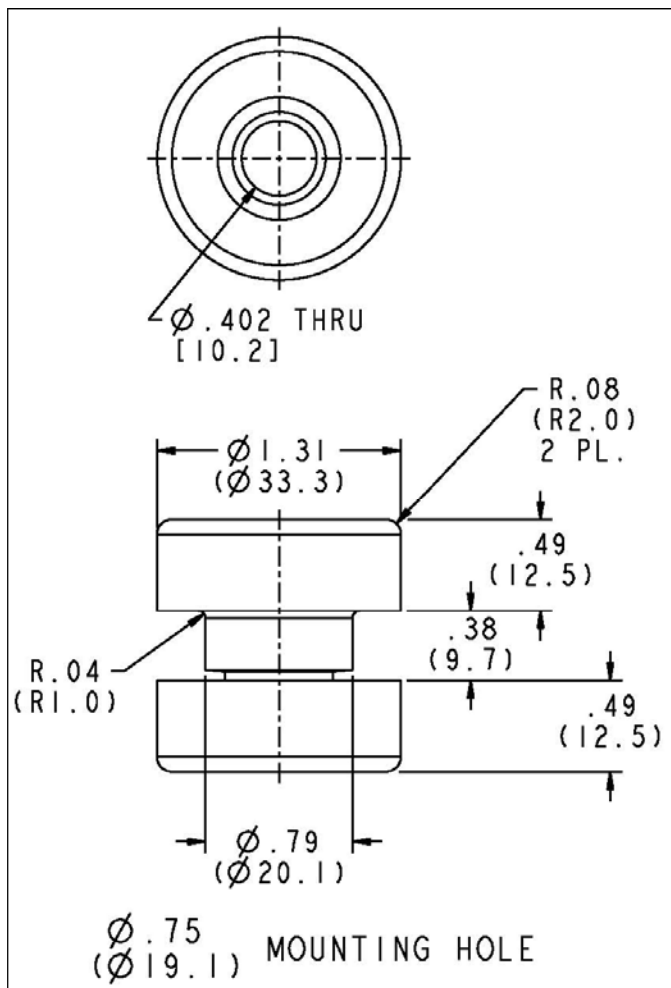
Elastomeric Data

- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to +93°C) and is resistant to oils, most solvents and ozone
- Other elastomeric formulations are available in BUNA-N, Silicone, Butyl and Polybutadiene for improved damping, low and high temperature resistance

Ring and Bushing Mount Series: Size 1

Dimension and Load Range Specifications

| Part # | Thick Plate Thickness (in.) | Axial Load Thick (lbs.) | Radial Load Thick (lbs.) | Axial Natural Frequency (hz) | Bolt Size Grade 5 | Max Torque (ft.-lbs.) Dry | Color |
|---------|-----------------------------|-------------------------|--------------------------|------------------------------|-------------------|---------------------------|--------|
| | | Thick Plate | Thick Plate | Thick Plate | | | |
| 1761-30 | 3/8 | 40 | 20 | 15 | 3/8 | 30 | Red |
| 1761-40 | 3/8 | 90 | 30 | 15 | 3/8 | 30 | Orange |
| 1761-50 | 3/8 | 140 | 40 | 15 | 3/8 | 30 | Yellow |
| 1761-60 | 3/8 | 250 | 50 | 15 | 3/8 | 30 | Green |
| 1761-70 | 3/8 | 300 | 60 | 15 | 3/8 | 30 | Blue |



SNUBBING WASHER

P/N SW-1560-0391-0090-SZ

O.D. = $\phi 1.560$ "

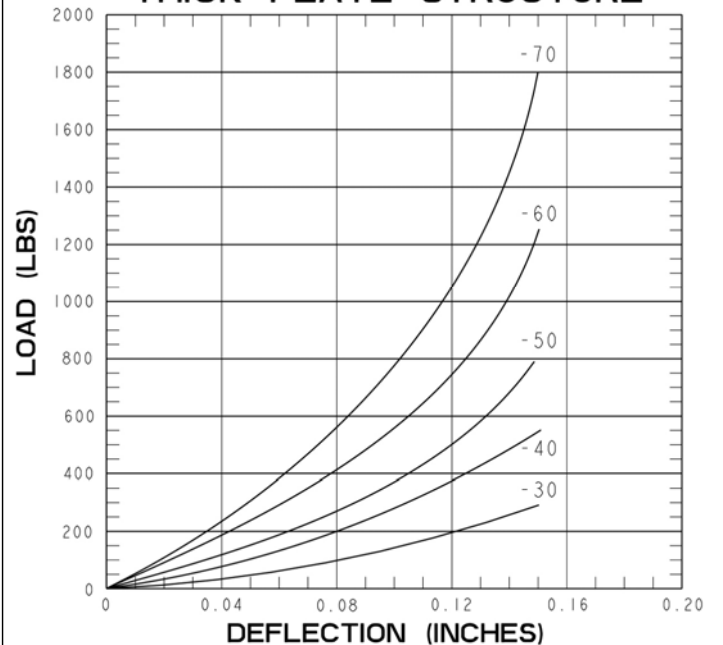
I.D. = $\phi .391$ "

THICKNESS = $.090$ "

MATERIAL—1010-1020 CRS

FINISH—CLEAR ZINC

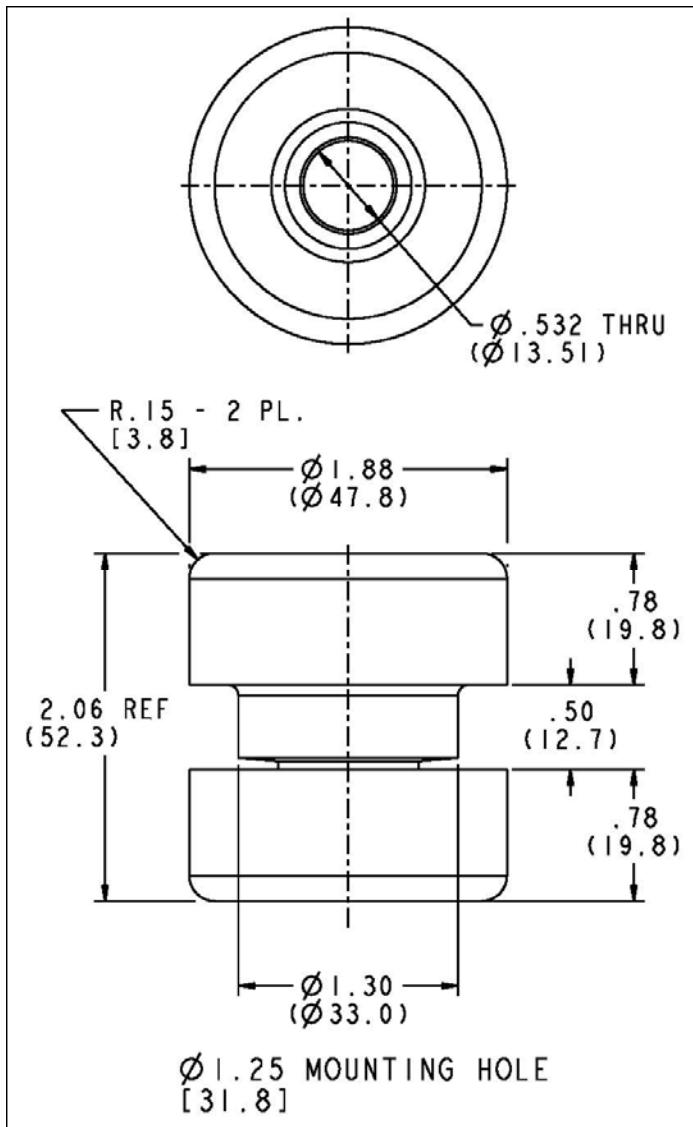
AXIAL LOAD/DEFLECTION GRAPH THICK PLATE STRUCTURE



Ring and Bushing Mount Series: Size 2

Dimension and Load Range Specifications

| Part # | Thick Plate Thickness (in.) | Axial Load Thick (lbs.) | Radial Load Thick (lbs.) | Axial Natural Frequency (hz.) Thick | Thin Plate Thickness (in.) | Axial Load Thin (lbs.) | Radial Load Thin (lbs.) | Axial Natural Frequency (hz.) Thin | Bolt Size Grade 8 | Max Torque (ft.-lbs) Dry | Color |
|---------|-----------------------------|-------------------------|--------------------------|-------------------------------------|----------------------------|------------------------|-------------------------|------------------------------------|-------------------|--------------------------|--------|
| 1762-30 | 18/32 | 130 | 50 | 12 | 1/2 | 60 | 40 | 15 | 1/2 | 120 | Red |
| 1762-40 | 18/32 | 175 | 65 | 12 | 1/2 | 120 | 80 | 15 | 1/2 | 120 | Orange |
| 1762-50 | 18/32 | 240 | 90 | 12 | 1/2 | 160 | 125 | 15 | 1/2 | 120 | Yellow |
| 1762-60 | 18/32 | 380 | 165 | 12 | 1/2 | 210 | 180 | 15 | 1/2 | 120 | Green |
| 1762-70 | 18/32 | 630 | 280 | 12 | 1/2 | 380 | 280 | 15 | 1/2 | 120 | Blue |

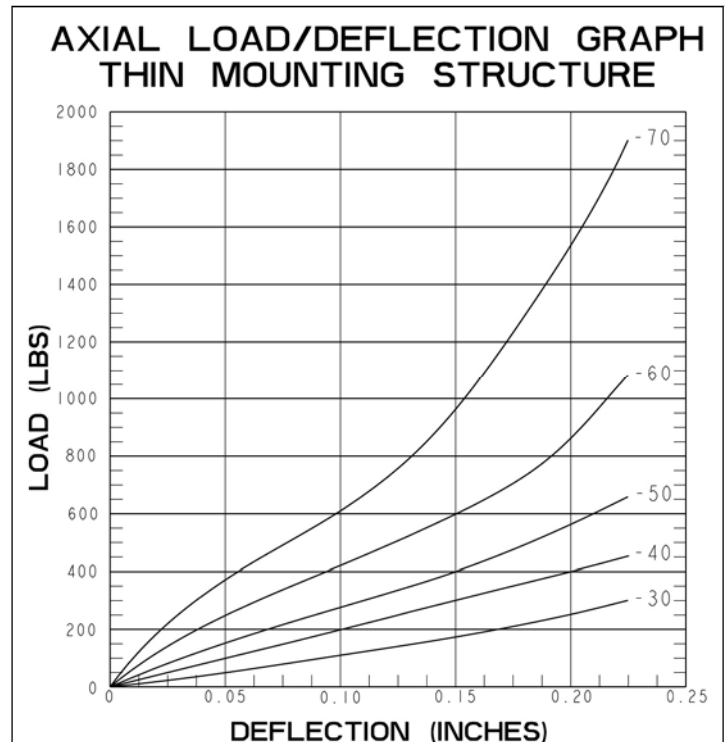
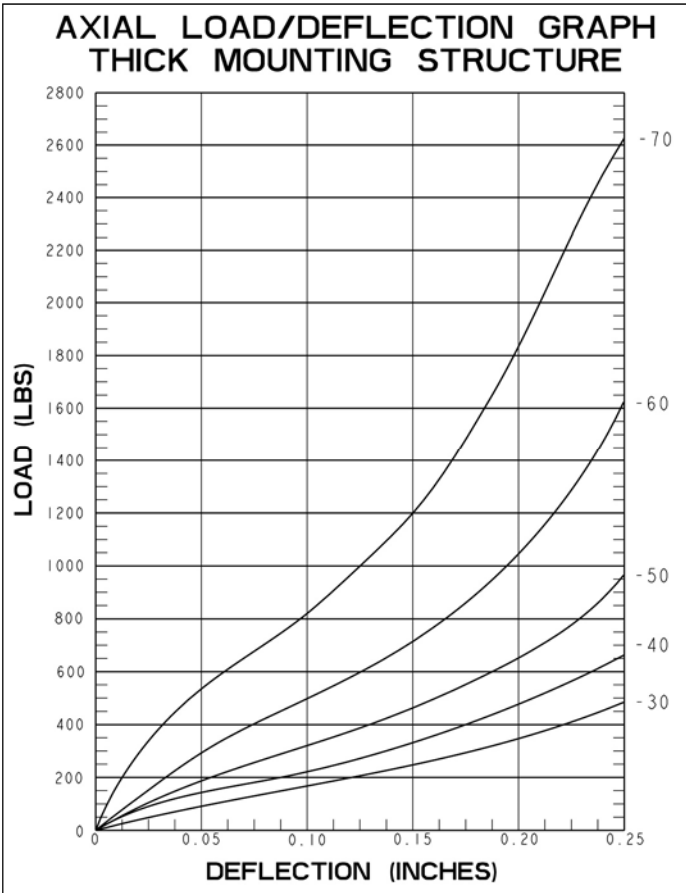


| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-2130-0532-0134-SZ |
| O.D. = $\phi 2.130$ " |
| I.D. = $\phi .532$ " |
| THICKNESS = .134" |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |

N

Ring and Bushing Mount Series: Size 2

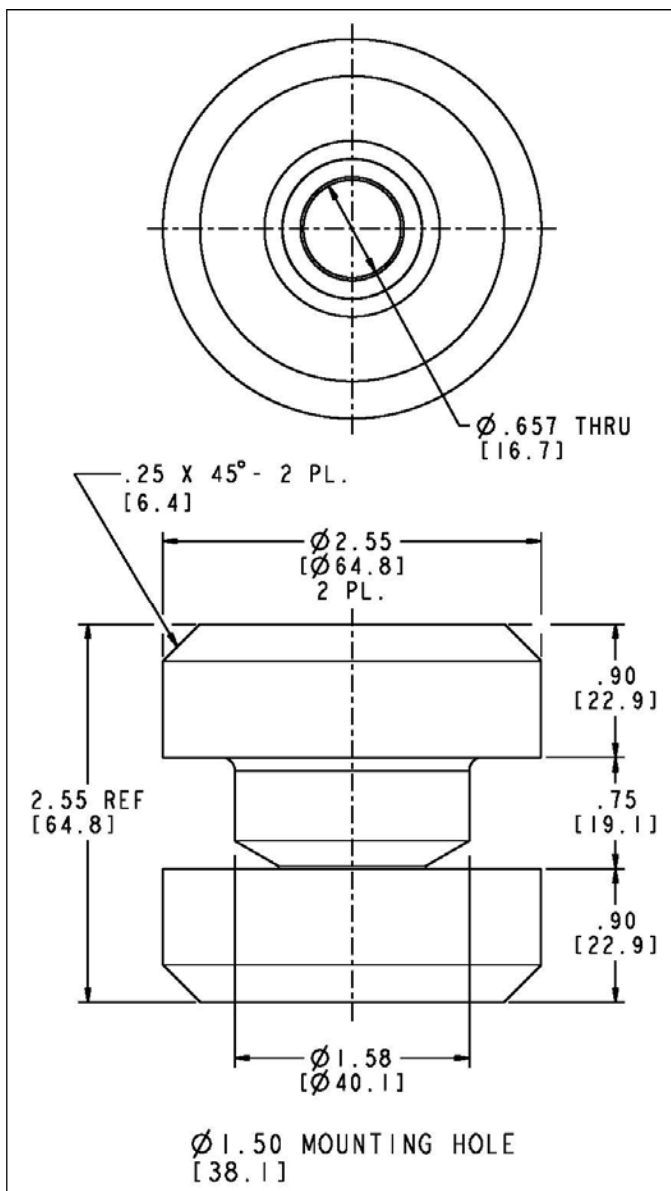
Dimension and Load Range Specifications



Ring and Bushing Mount Series: Size 3

Dimension and Load Range Specifications

| Part # | Thick Plate Thickness (in.) | Axial Load Thick (lbs.) | Radial Load Thick (lbs.) | Axial Natural Frequency (hz.) Thick | Thin Plate Thickness (in.) | Axial Load Thin (lbs.) | Radial Load Thin (lbs.) | Axial Natural Frequency (hz.) Thin | Bolt Size Grade 8 | Max Torque (ft.-lbs) Dry | Color |
|---------|-----------------------------|-------------------------|--------------------------|-------------------------------------|----------------------------|------------------------|-------------------------|------------------------------------|-------------------|--------------------------|--------|
| 1763-30 | 7/8 | 210 | 90 | 11 | 3/4 | 90 | 70 | 15 | 5/8 | 220 | Red |
| 1763-40 | 7/8 | 350 | 140 | 11 | 3/4 | 150 | 105 | 15 | 5/8 | 220 | Orange |
| 1763-50 | 7/8 | 490 | 225 | 11 | 3/4 | 225 | 160 | 15 | 5/8 | 220 | Yellow |
| 1763-60 | 7/8 | 860 | 385 | 11 | 3/4 | 325 | 245 | 15 | 5/8 | 220 | Green |
| 1763-70 | 7/8 | 1330 | 690 | 11 | 3/4 | 500 | 360 | 15 | 5/8 | 220 | Blue |



SNUBBING WASHER

P/N SW-2810-0657-0188-SZ

O.D. = $\phi 2.810$ "

I.D. = $\phi .657$ "

THICKNESS = $.188$ "

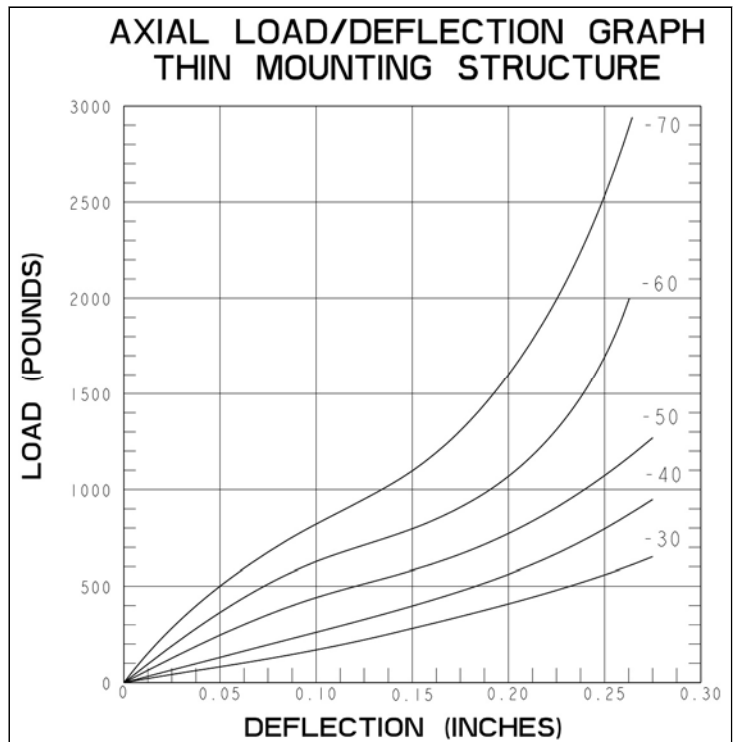
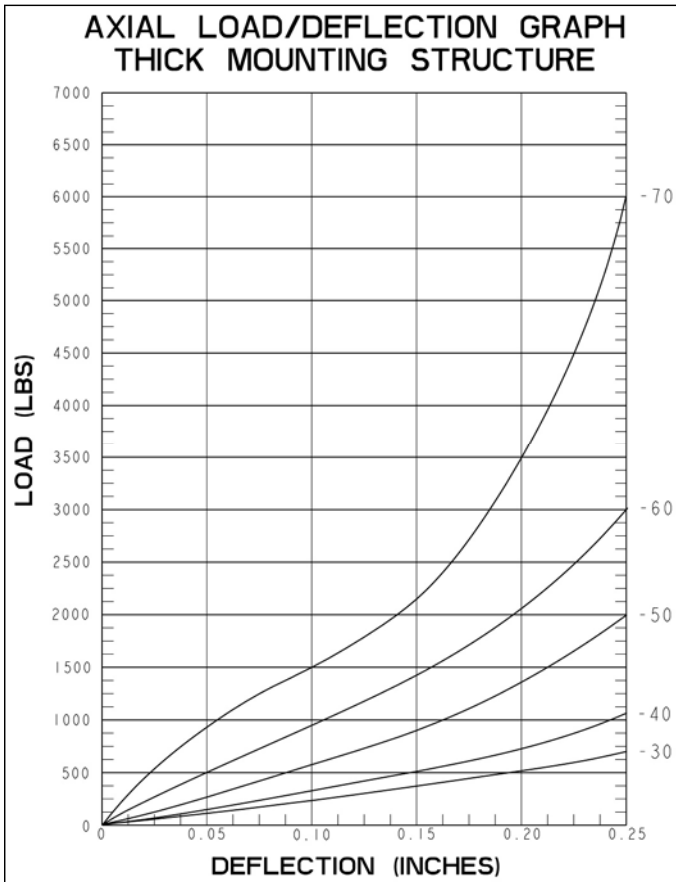
MATERIAL—1010-1020 CRS

FINISH—CLEAR ZINC

N

Ring and Bushing Mount Series: Size 3

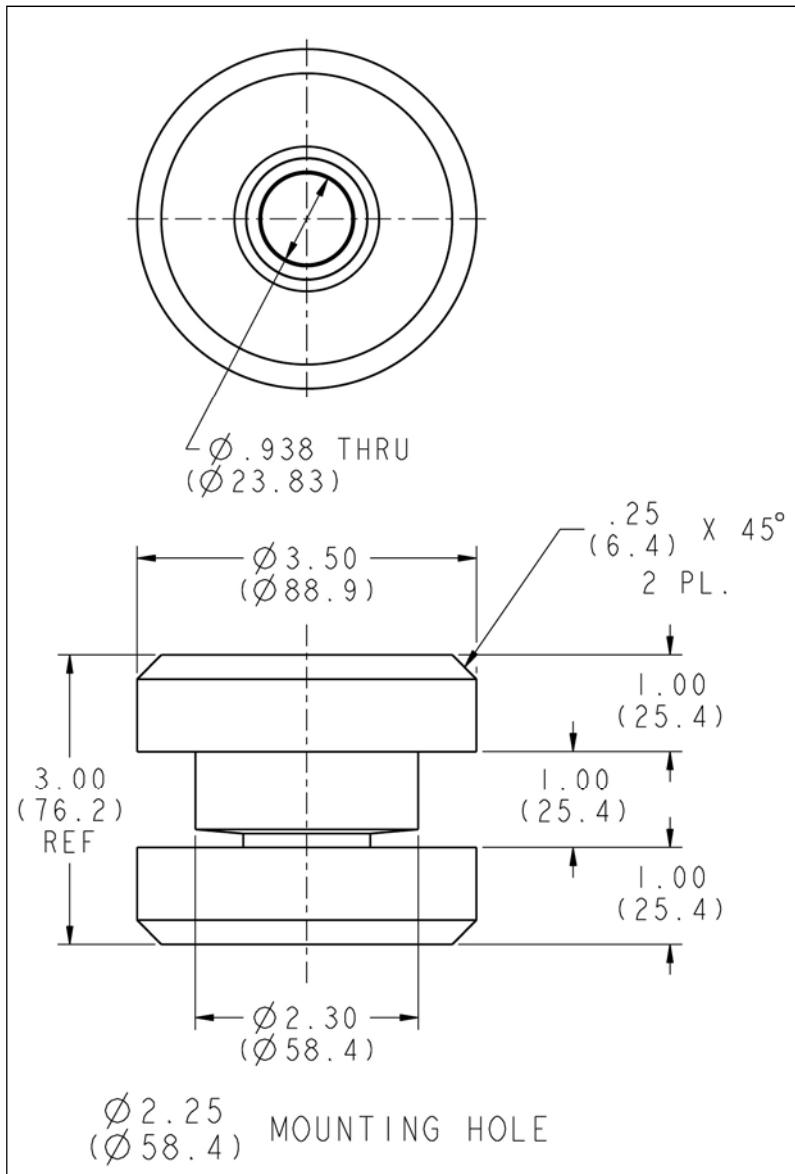
Dimension and Load Range Specifications



Ring and Bushing Mount Series: Size 4

Dimension and Load Range Specifications

| Part # | Thick Plate Thickness (in.) | Axial Load Thick (lbs.) | Radial Load Thick (lbs.) | Axial Natural Frequency (hz.) Thick | Thin Plate Thickness (in.) | Axial Load Thin (lbs.) | Radial Load Thin (lbs.) | Axial Natural Frequency (hz.) Thin | Bolt Size Grade 8 | Max Torque (ft.-lbs) Dry | Color |
|---------|-----------------------------|-------------------------|--------------------------|-------------------------------------|----------------------------|------------------------|-------------------------|------------------------------------|-------------------|--------------------------|--------|
| 1764-30 | 1 1/8 | 270 | 135 | 10 | 1.0 | 150 | 110 | 15 | 7/8 | 600 | Red |
| 1764-40 | 1 1/8 | 510 | 230 | 10 | 1.0 | 300 | 220 | 15 | 7/8 | 600 | Orange |
| 1764-50 | 1 1/8 | 770 | 345 | 10 | 1.0 | 400 | 300 | 15 | 7/8 | 600 | Yellow |
| 1764-60 | 1 1/8 | 1170 | 590 | 10 | 1.0 | 500 | 400 | 15 | 7/8 | 600 | Green |
| 1764-70 | 1 1/8 | 2100 | 975 | 10 | 1.0 | 600 | 580 | 15 | 7/8 | 600 | Blue |

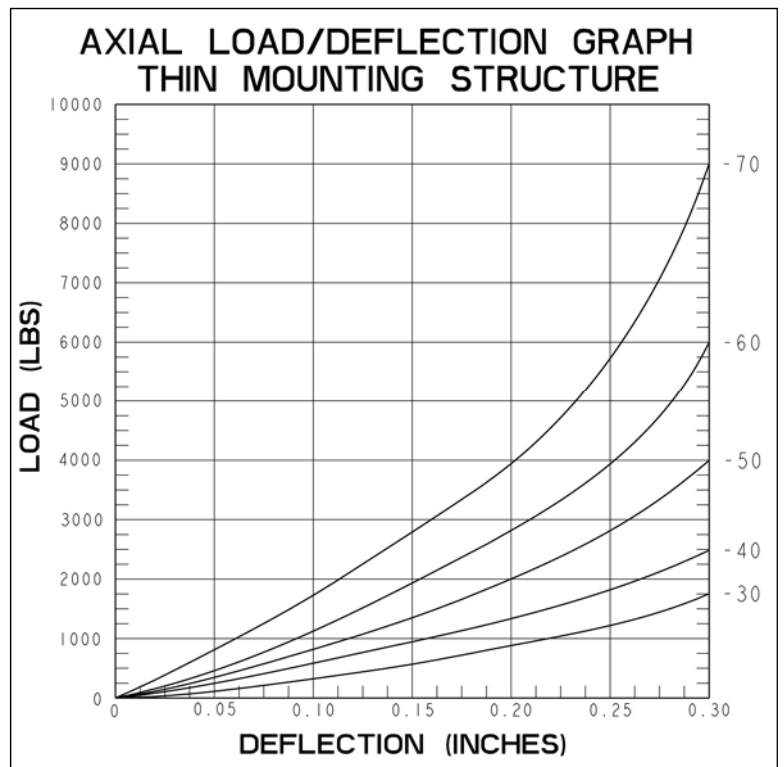
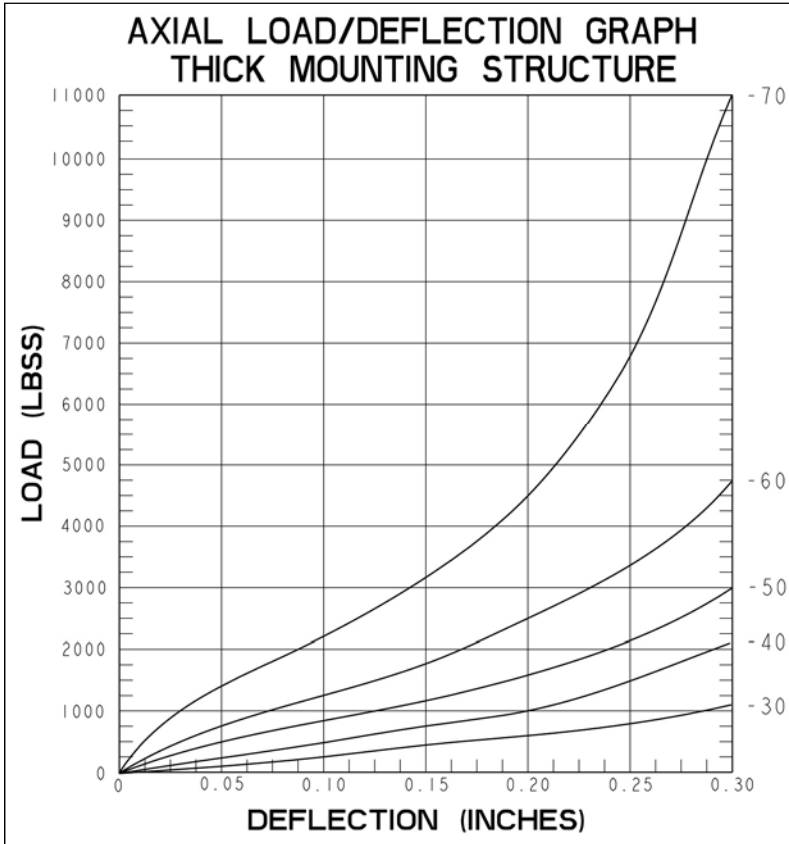


| |
|--------------------------|
| SNUBBING WASHER |
| P/N SW-3880-0938-0250-SZ |
| O.D. = $\phi 3.880$ " |
| I.D. = $\phi .938$ " |
| THICKNESS = $.250$ " |
| MATERIAL—1010-1020 CRS |
| FINISH—CLEAR ZINC |

N

Ring and Bushing Mount Series: Size 4

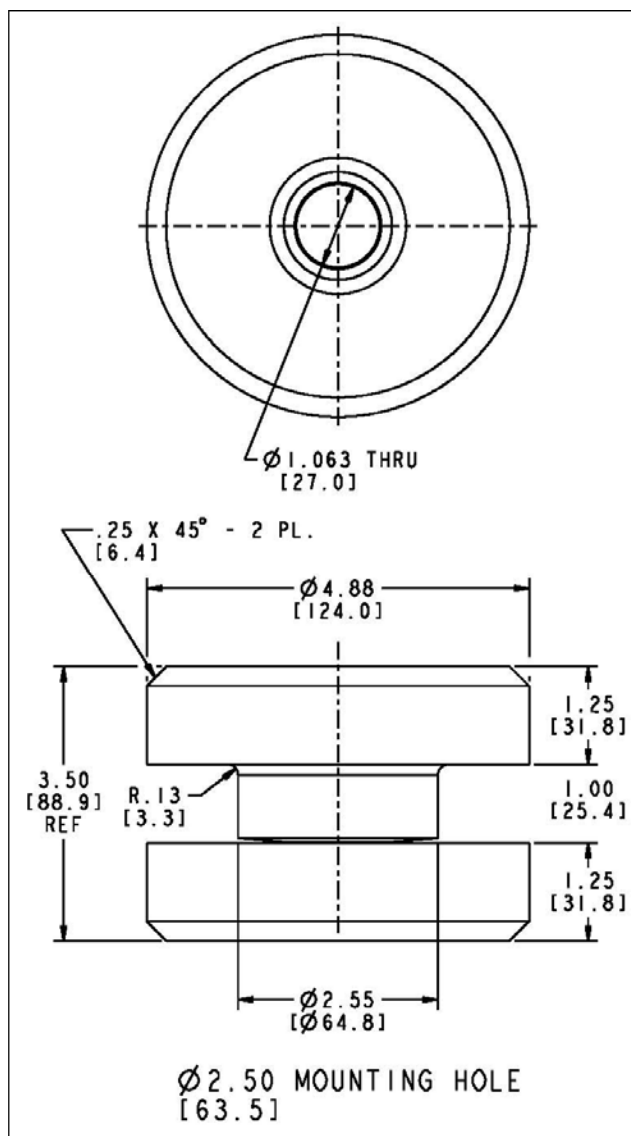
Dimension and Load Range Specifications



Ring and Bushing Mount Series: Size 5

Dimension and Load Range Specifications

| Part # | Thick Plate Thickness (in.) | Axial Load Thick (lbs.) | Radial Load Thick (lbs.) | Axial Natural Frequency (hz.) Thick | Thin Plate Thickness (in.) | Axial Load Thin (lbs.) | Radial Load Thin (lbs.) | Axial Natural Frequency (hz.) Thin | Bolt Size Grade 8 | Max Torque (ft.-lbs) Dry | Color |
|---------|-----------------------------|-------------------------|--------------------------|-------------------------------------|----------------------------|------------------------|-------------------------|------------------------------------|-------------------|--------------------------|--------|
| 1765-30 | 1 1/4 | 1140 | 240 | 10 | 1.0 | 300 | 150 | 15 | 1.0 | 900 | Red |
| 1765-40 | 1 1/4 | 1930 | 340 | 10 | 1.0 | 500 | 220 | 15 | 1.0 | 900 | Orange |
| 1765-50 | 1 1/4 | 2580 | 610 | 10 | 1.0 | 700 | 300 | 15 | 1.0 | 900 | Yellow |
| 1765-60 | 1 1/4 | 3540 | 890 | 10 | 1.0 | 900 | 470 | 15 | 1.0 | 900 | Green |
| 1765-70 | 1 1/4 | 4560 | 1410 | 10 | 1.0 | 1200 | 660 | 15 | 1.0 | 900 | Blue |



SNUBBING WASHER

P/N SW-5250-1063-0375-SZ

O.D. = $\phi 5.250$ "

I.D. = $\phi 1.063$ "

THICKNESS = .375"

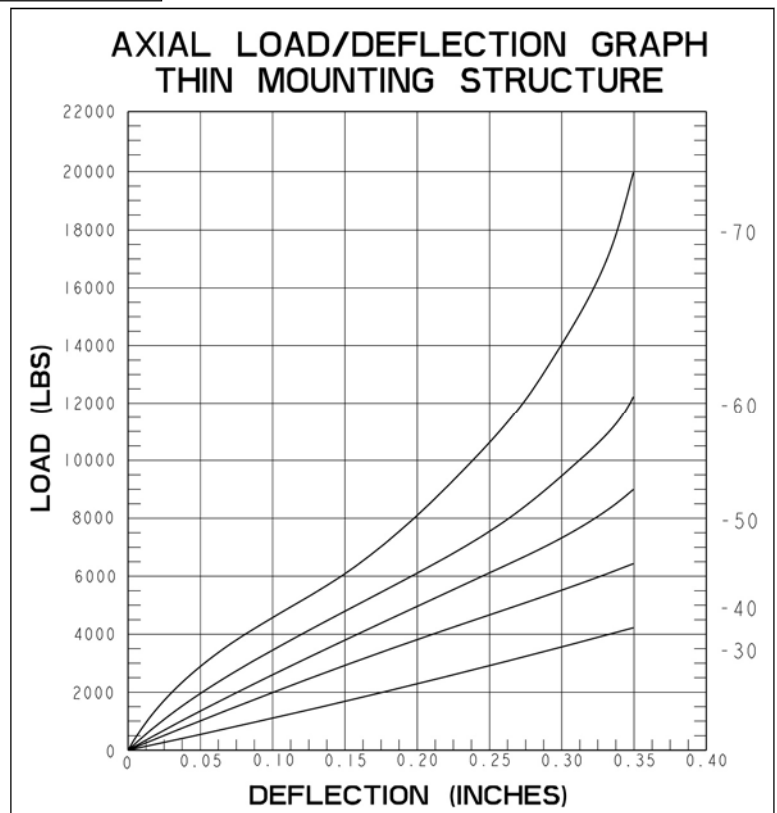
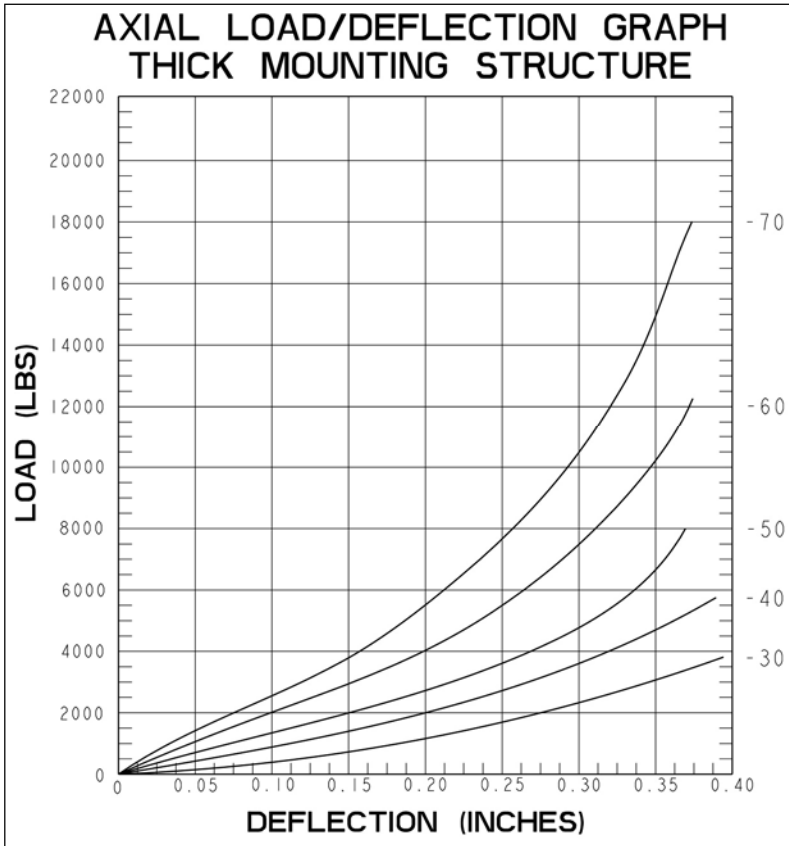
MATERIAL—1010-1020 CRS

FINISH—CLEAR ZINC

N

Ring and Bushing Mount Series: Size 5

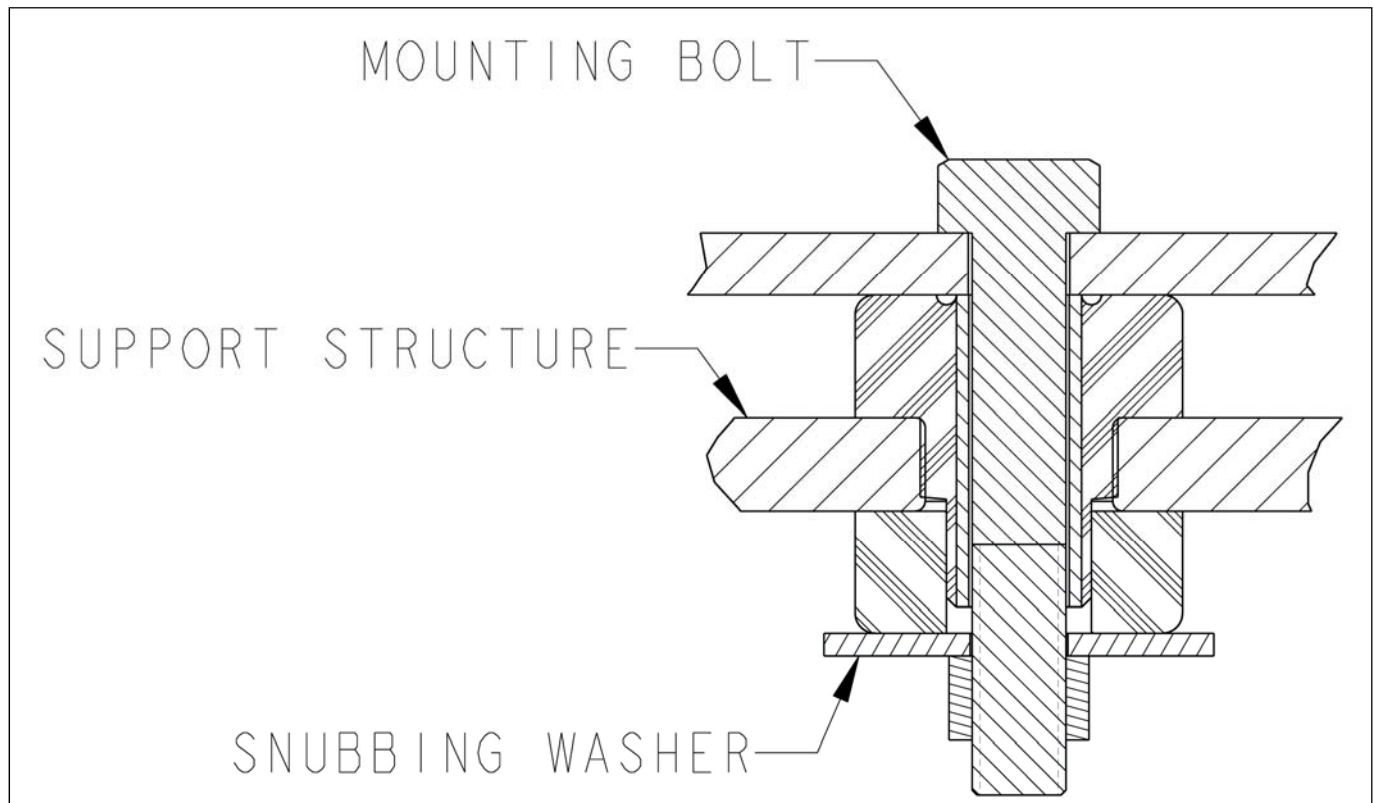
Dimension and Load Range Specifications



Ring and Bushing Mount Series

Dimension and Load Range Specifications

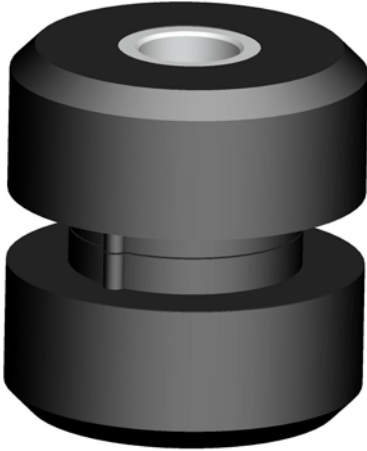
| Part # | Mounting Hole Diameter | Mounting Hole Radius | Snubbing Washer Part Number | Snubbing Washer OD | Snubbing Washer ID | Snubbing Washer Thickness |
|--------|------------------------|----------------------|-----------------------------|--------------------|--------------------|---------------------------|
| 1761 | .75 | .04 | SW 1560-0391-0090-SZ | 1.560 | .391 | .090 |
| 1762 | 1.25 | .06 | SW-2130-0532-0134-SZ | 2.130 | .532 | .134 |
| 1763 | 1.50 | .09 | SW-2810-0657-0188-SZ | 2.810 | .657 | .188 |
| 1764 | 2.25 | .12 | SW-3880-0938-0250-SZ | 3.880 | .938 | .250 |
| 1765 | 2.50 | .13 | SW-5250-1063-0375-SZ | 5.250 | 1.063 | .375 |



Bushing Series

Armor Plated Corners

A low profile, easily installed, rugged mount rated for the high vibration and shock inputs of industrial and military applications



Attributes

- Chamfering of mounting plate is not required
- Bonded metal inserts allow the mount to be used on cut holes in the mounting surface
- Dimensions and load ratings are the same as Ring and Bushing Series 1761-1765
- Ribs hold part in place during installation
- Identical top and bottom halves—no orientation mistakes, less part numbers
- Axial to radial stiffness 4:1
- Fail-safe design with snubbing washer

Applications

- Construction equipment
- Agricultural equipment
- Engine mounting
- Commercial lawn care equipment
- Power generators

Load Range

- 2061 = load ratings to 300 lbs.
- 2062 = load ratings to 630 lbs.
- 2063 = load ratings to 1330 lbs.
- 2064 = load ratings to 2100 lbs.
- 2065 = load ratings to 4560 lbs.

Specifications

- Natural Frequency — 10-20 Hertz
- Transmissibility at resonance — 10:1
- Resilient Element — Neoprene or Natural Rubber
- Standard materials — Cold-rolled steel
- Weight — See dimensional drawings

Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to most oils and ozone.
- Natural Rubber has an operating temperature range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$)
- Additional elastomers are available upon request.

Bushing Series: 2061—2065

Dimension and Load Range Specifications

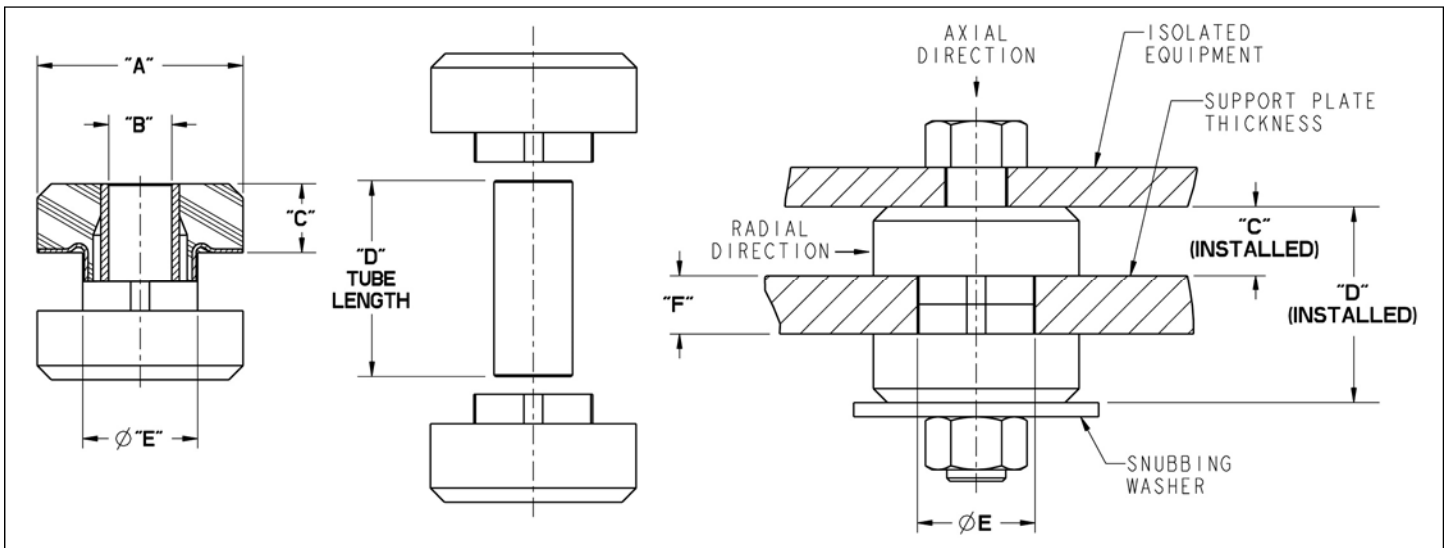
| Part # | Ø A Inch (metric) | Ø B Inch (metric) | C Inch (metric) | C Installed Inch (metric) | D Inch (metric) | Ø E Inch (metric) | Weight lbs./oz. (grams) | Axial Load Ratings (max. lbs.) /kg. | Plate Thickness (in.) “F” (metric) | Bolt Size | Grade | Max Torque (ft.-lbs.) | Elastomer Material | | | | | | | | | | | |
|---------|-------------------------|-------------------------|-----------------------|------------------------------------|-----------------------|-------------------------|-------------------------------|--|--|-----------------|-------|-----------------------------|-----------------------|----------------|----------------|----------------|----------------|-----------------|---------|-----------------|------|---|-----|----------------|
| 2061-1 | 1.31 (33.3) | .397 (10.1) | 0.50 (12.7) | 0.44 (11.2) | 1.25 (31.8) | .730 (18.5) | 1.5 oz (43) | 40/18 | .375” (9.52) | 3/8” | 5 | 30 | Natural Rubber | | | | | | | | | | | |
| 2061-2 | | | | | | | | 90/41 | | | | | Natural Rubber | | | | | | | | | | | |
| 2061-3 | | | | | | | | 140/64 | | | | | Natural Rubber | | | | | | | | | | | |
| 2061-4 | | | | | | | | 250/113 | | | | | Natural Rubber | | | | | | | | | | | |
| 2061-5 | | | | | | | | 300/136 | | | | | Natural Rubber | | | | | | | | | | | |
| 2061-11 | | | | | | | | 40/18 | | | | | Neoprene | | | | | | | | | | | |
| 2061-12 | | | | | | | | 90/41 | | | | | Neoprene | | | | | | | | | | | |
| 2061-13 | | | | | | | | 140/64 | | | | | Neoprene | | | | | | | | | | | |
| 2061-14 | | | | | | | | 250/113 | | | | | Neoprene | | | | | | | | | | | |
| 2061-15 | | | | | | | | 300/136 | | | | | Neoprene | | | | | | | | | | | |
| 2062-1 | | | | | | | | 1.88 (47.8) | | | | | .532 (13.5) | 0.78 (19.8) | 0.69 (17.5) | 1.94 (49.3) | 1.23 (31.2) | 5.0 oz (142) | 130/59 | .563” (14.3) | 1/2” | 8 | 120 | Natural Rubber |
| 2062-2 | | | | | | | | | | | | | | | | | | | 175/79 | | | | | Natural Rubber |
| 2062-3 | | | | | | | | | | | | | | | | | | | 240/109 | | | | | Natural Rubber |
| 2062-4 | | | | | | | | | | | | | | | | | | | 380/172 | | | | | Natural Rubber |
| 2062-5 | | | | | | | | | | | | | | | | | | | 630/286 | | | | | Natural Rubber |
| 2062-11 | 130/59 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2062-12 | 175/79 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2062-13 | 240/109 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2062-14 | 380/172 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2062-15 | 630/286 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2063-1 | 2.55 (64.8) | .657 (16.7) | 0.90 (22.9) | 0.78 (19.8) | 2.43 (61.7) | 1.48 (37.6) | 11.0 oz (312) | | 210/95 | .875” (22.2) | 5/8” | 8 | | | | | | | 220 | | | | | Natural Rubber |
| 2063-2 | | | | | | | | | 350/159 | | | | | | | | | | | | | | | Natural Rubber |
| 2063-3 | | | | | | | | | 490/222 | | | | | | | | | | | | | | | Natural Rubber |
| 2063-4 | | | | | | | | | 775/350 | | | | | | | | | | | | | | | Natural Rubber |
| 2063-5 | | | | | | | | | 1100/500 | | | | | | | | | | | | | | | Natural Rubber |
| 2063-11 | | | | | | | | 210/95 | Neoprene | | | | | | | | | | | | | | | |
| 2063-12 | | | | | | | | 350/159 | Neoprene | | | | | | | | | | | | | | | |
| 2063-13 | | | | | | | | 490/222 | Neoprene | | | | | | | | | | | | | | | |
| 2063-14 | | | | | | | | 775/350 | Neoprene | | | | | | | | | | | | | | | |
| 2063-15 | | | | | | | | 1100/500 | Neoprene | | | | | | | | | | | | | | | |

Chart continued on next page....

Bushing Series: 2061—2065

Dimension and Load Range Specifications

| Part # | Ø A Inch (metric) | Ø B Inch (metric) | C Inch (metric) | C Installed Inch (metric) | D Inch (metric) | Ø E Inch (metric) | Weight lbs./oz. (grams) | Axial Load Ratings (max. lbs.) /kg. | Plate Thickness (in.) "F" (metric) | Bolt Size | Grade | Max Torque (ft.-lbs.) | Elastomer Material | | | | | | | | | | | |
|---------|-------------------------|-------------------------|-----------------------|------------------------------------|-----------------------|-------------------------|-------------------------------|--|--|--------------|-------|-----------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------------|-----------|--------|--------|---|-----|----------------|
| 2064-1 | 3.50 (89.0) | .938 (23.8) | 1.00 (25.4) | 0.88 (22.4) | 2.88 (73.2) | 2.23 (56.0) | 1 lb 7.5 oz (667) | 270/122 | 1 1/8" | 7/8" | 8 | 600 | Natural Rubber | | | | | | | | | | | |
| 2064-2 | | | | | | | | 510/231 | | | | | Natural Rubber | | | | | | | | | | | |
| 2064-3 | | | | | | | | 770/349 | | | | | Natural Rubber | | | | | | | | | | | |
| 2064-4 | | | | | | | | 1170/530 | | | | | Natural Rubber | | | | | | | | | | | |
| 2064-5 | | | | | | | | 2100/952 | | | | | Natural Rubber | | | | | | | | | | | |
| 2064-11 | | | | | | | | 270/122 | | | | | Neoprene | | | | | | | | | | | |
| 2064-12 | | | | | | | | 510/231 | | | | | Neoprene | | | | | | | | | | | |
| 2064-13 | | | | | | | | 770/349 | | | | | Neoprene | | | | | | | | | | | |
| 2064-14 | | | | | | | | 1170/530 | | | | | Neoprene | | | | | | | | | | | |
| 2064-15 | | | | | | | | 2100/952 | | | | | Neoprene | | | | | | | | | | | |
| 2065-1 | | | | | | | | 4.88 (124) | | | | | 1.063 (27) | 1.25 (31.8) | 1.07 (27.2) | 3.38 (85.0) | 2.47 (62.7) | 2 lb 14 oz (1305) | 1140/517 | 1 1/4" | 1.000" | 8 | 900 | Natural Rubber |
| 2065-2 | | | | | | | | | | | | | | | | | | | 1930/875 | | | | | Natural Rubber |
| 2065-3 | | | | | | | | | | | | | | | | | | | 2580/1170 | | | | | Natural Rubber |
| 2065-4 | | | | | | | | | | | | | | | | | | | 3540/1605 | | | | | Natural Rubber |
| 2065-5 | | | | | | | | | | | | | | | | | | | 4560/2068 | | | | | Natural Rubber |
| 2065-11 | 1140/517 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2065-12 | 1930/875 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2065-13 | 2580/1170 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2065-14 | 3540/1605 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |
| 2065-15 | 4560/2068 | Neoprene | | | | | | | | | | | | | | | | | | | | | | |



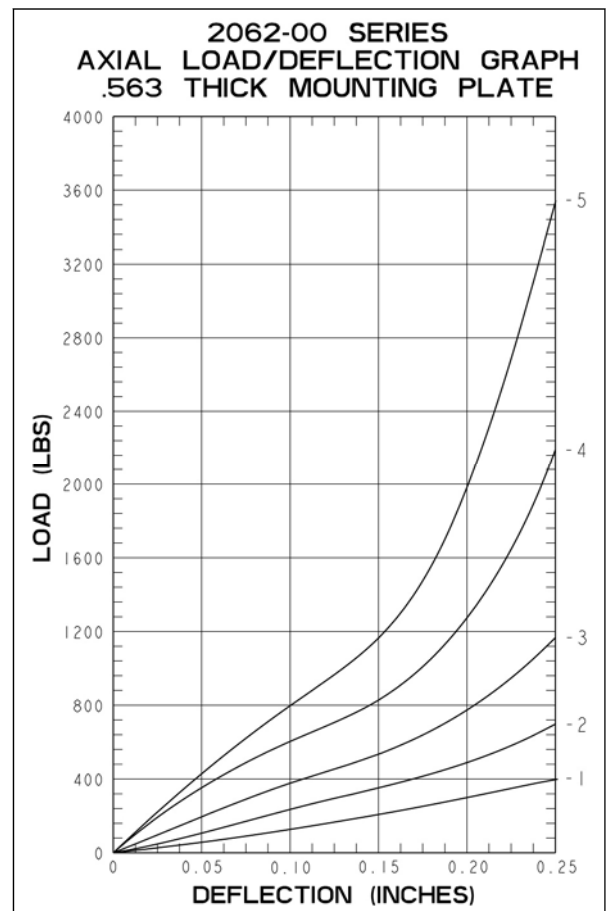
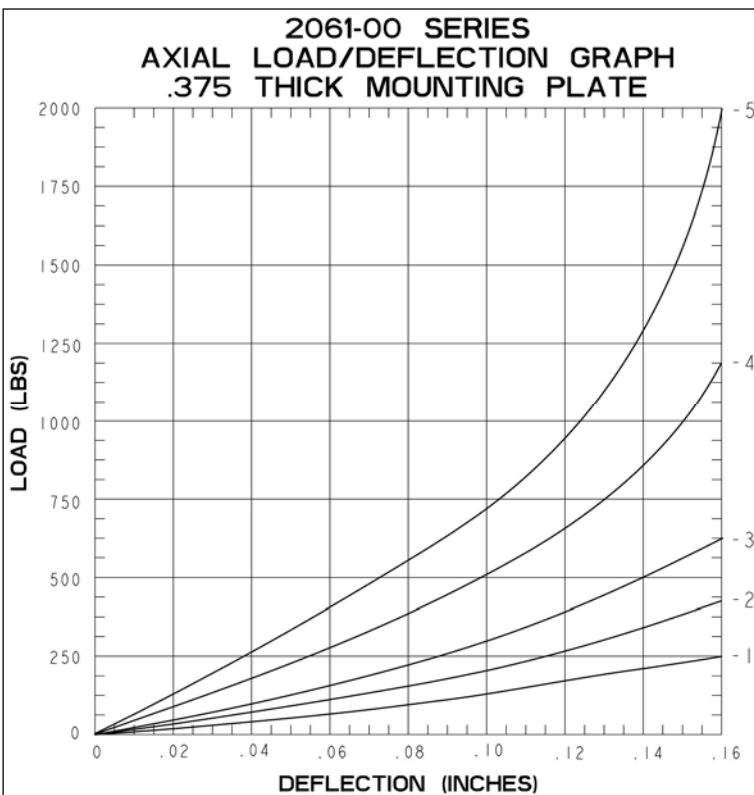
Bushing Series: 2061—2065

Dimension and Load Range Specifications

***The use of a snubbing washer is required to ensure proper static and dynamic loading of the isolator and retention of suspended equipment under severe shock environments.**

Snubbing washers are ordered by separate part numbers as shown in the table below.

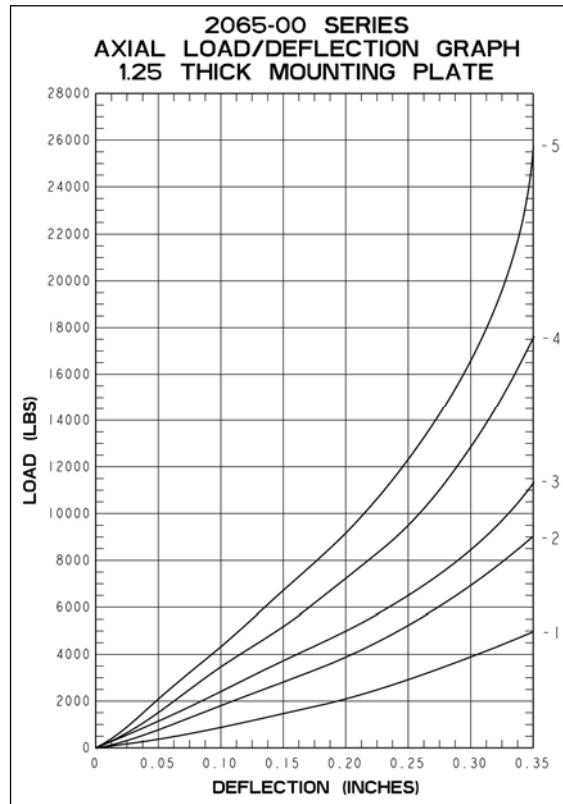
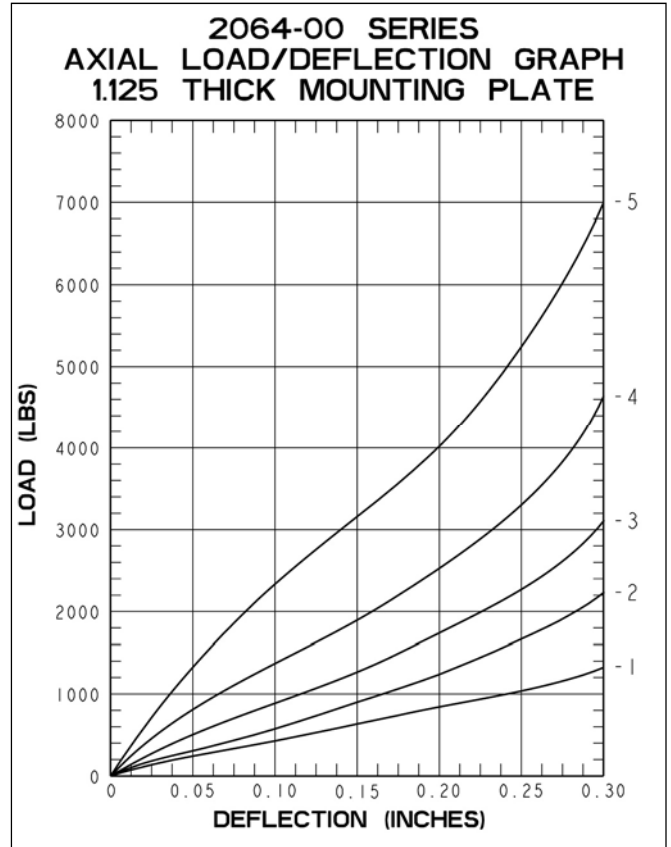
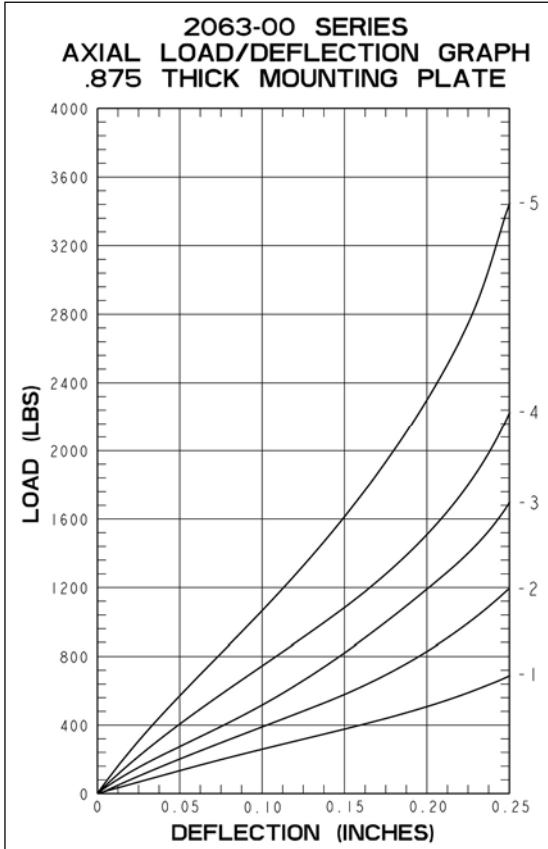
| Part # | O.D | I.D | Thickness | Snubbing Washer Part # |
|--------|------|-------|-----------|------------------------|
| 2061 | 1.56 | .391 | .090 | SW-1560-0391-0090-SZ |
| 2062 | 2.13 | .532 | .134 | SW-2130-0532-0134-SZ |
| 2063 | 2.81 | .657 | .188 | SW-2810-0657-0188-SZ |
| 2064 | 3.88 | .938 | .250 | SW-3880-0938-0250-SZ |
| 2065 | 5.25 | 1.063 | .375 | SW-5250-1063-0375-SZ |



N

Bushing Series: 2061—2065

Dimension and Load Range Specifications



CAN-STYLE MOUNT SERIES



Can-Style Mount Series

A compact, all-attitude isolator for mounting equipment for aircraft, shipboard and vehicular applications



Applications

- Military electronics (shipboard, vehicle)
- Electronics for rotary wing and propeller driven aircraft
- Avionics & electronics
- Racking and tray systems

Shock and Vibe

- Provides excellent vibration attenuation at frequencies above 40 hertz
- Survives a 30g, 11 millisecond half-sine shock pulse

Attributes

- Fail-safe design, all attitude isolator
- Axial to radial stiffness ratio 1:1
- Compact, low profile design
- Easy to install
- High damped silicone
- Isolates equipment under 5g's sustained

Load Range

- 1766 = 4 load ratings available up to 5 lbs.
- 1767 = 3 load ratings available up to 20 lbs.
- 1769 = 3 load ratings available up to 80 lbs.

Specifications

- Natural Frequency — 15-40 Hertz
- Transmissibility at resonance — 4.0 max.
- Resilient Element — Hi-damped silicone
- Standard materials — varies with model
- Weight—1766 = 1.07 oz. 1767 = 1.21 oz. 1769 = 1.33 oz.

Elastomeric Data

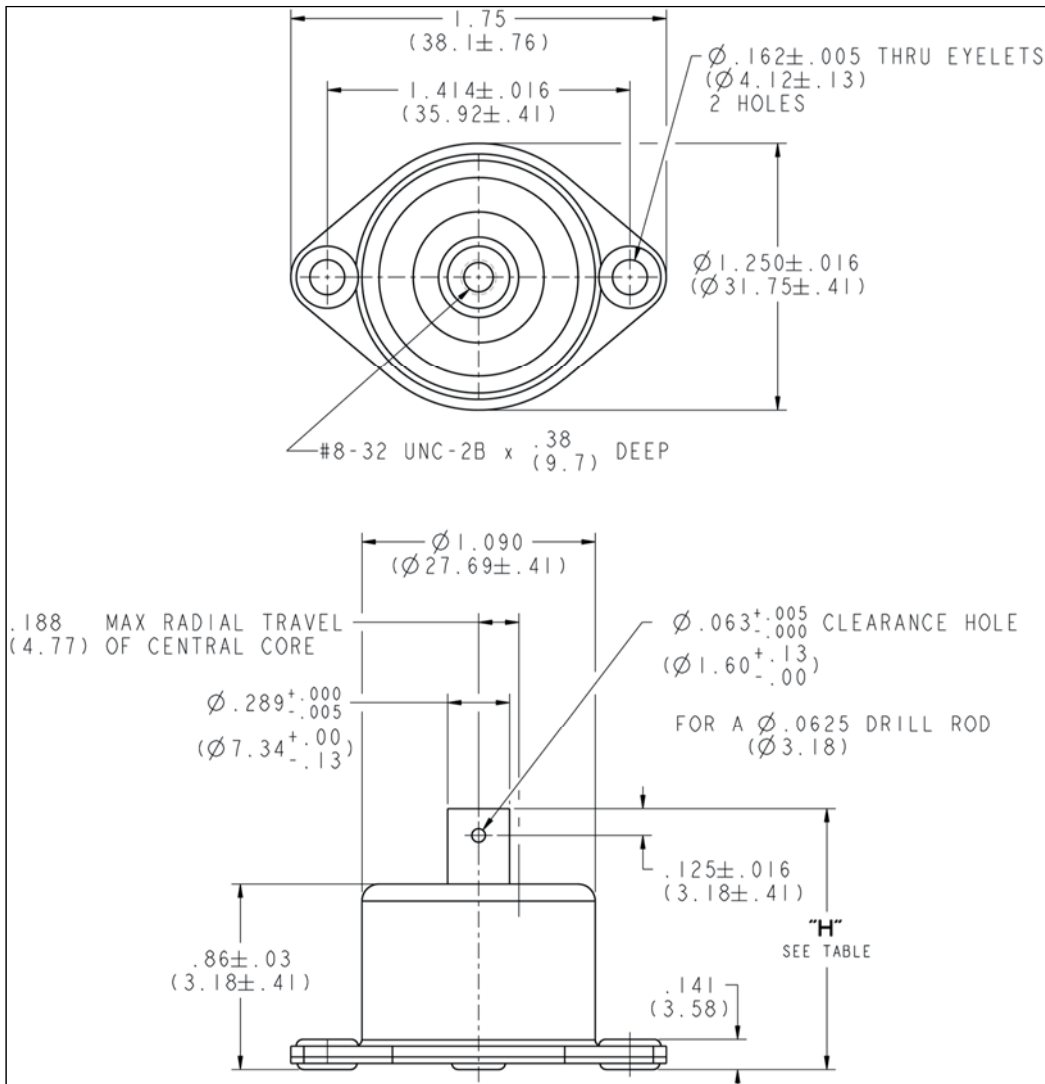
- Hi-Damp Silicone operating temperature range is -67F to +300°F (-55°C to +150°C)
- Passes MIL-E-5400 requirements for resistance to ozone, humidity, salt spray and fungus
- Passes MIL-S-901 lightweight Grade B high impact shock test requirements

Can-Style Mount Series: 1766

Dimension and Performance Characteristics

| Part # | Maximum Axial Compression | Load (lbs.) Radial | Axial Natural Frequency (hz) | Transmissibility at Resonance | Standard Material | Standard Elastomer | Mounting Hole Diameter "A" |
|--------|---------------------------|--------------------|------------------------------|-------------------------------|-------------------|--------------------|----------------------------|
| 1766-1 | 1 | 1 | 24 | 4:1 | Steel & Aluminum | Hi-Damp Silicone | Ø .162 |
| 1766-2 | 2 | 2 | 22 | 4:1 | Steel & Aluminum | Hi-Damp Silicone | Ø .162 |
| 1766-3 | 3 | 3 | 23 | 4:1 | Steel & Aluminum | Hi-Damp Silicone | Ø .162 |
| 1766-5 | 5 | 5 | 22 | 4:1 | Steel & Aluminum | Hi-Damp Silicone | Ø .162 |

Optional Black Anodize Finish Available

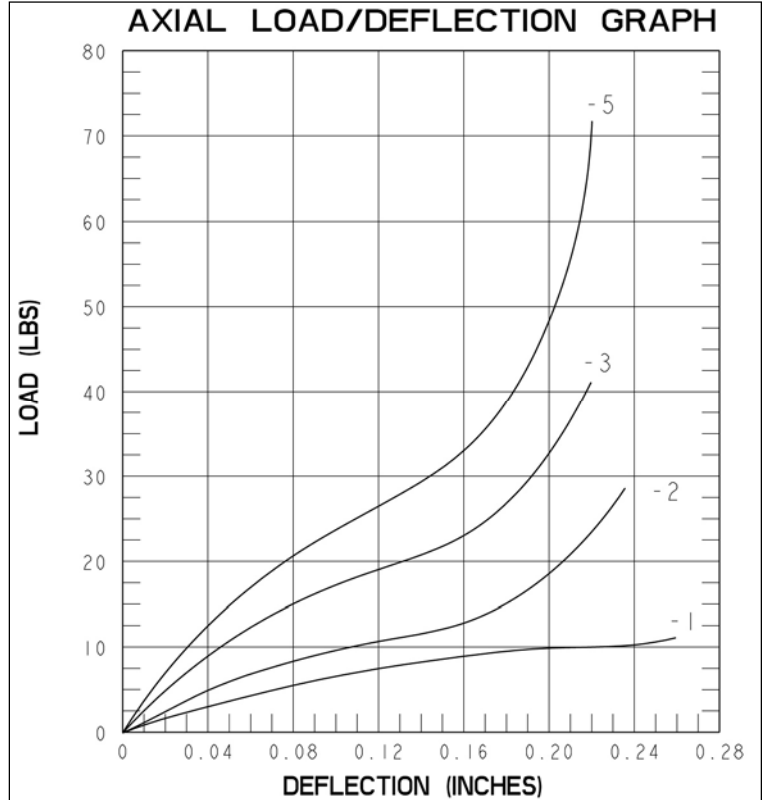
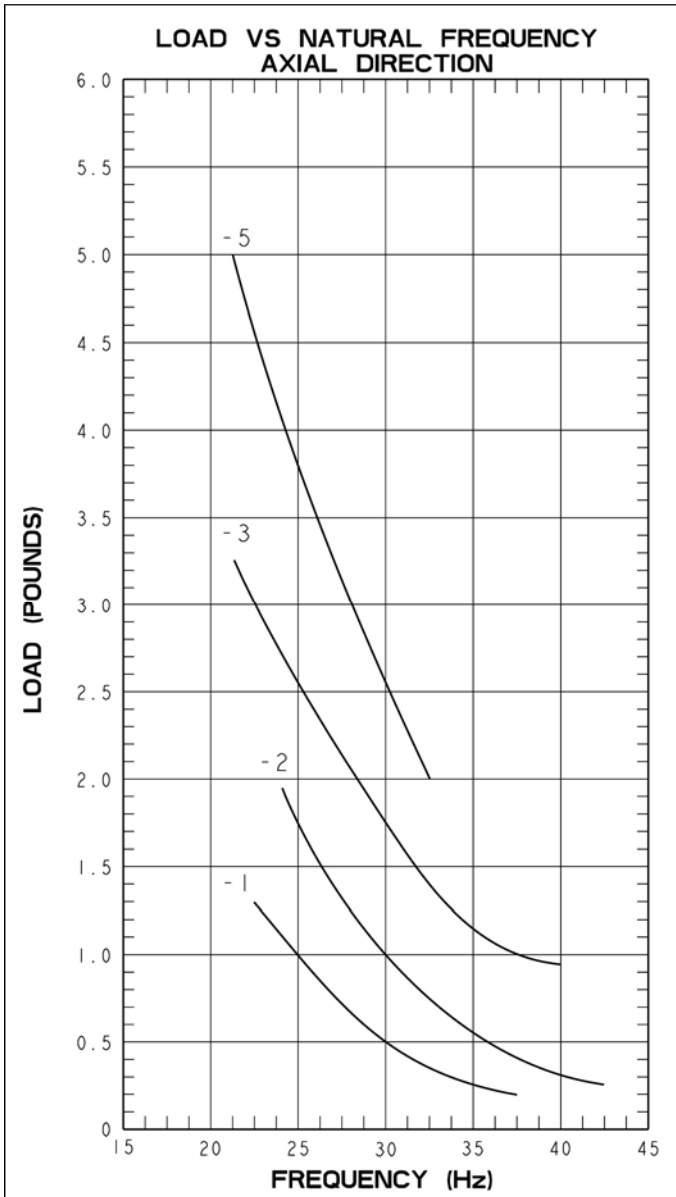


| 1766 "H" Dimension | |
|--------------------|------|
| Compressed | .91 |
| Free Height | 1.22 |
| Max. Extended | 1.56 |



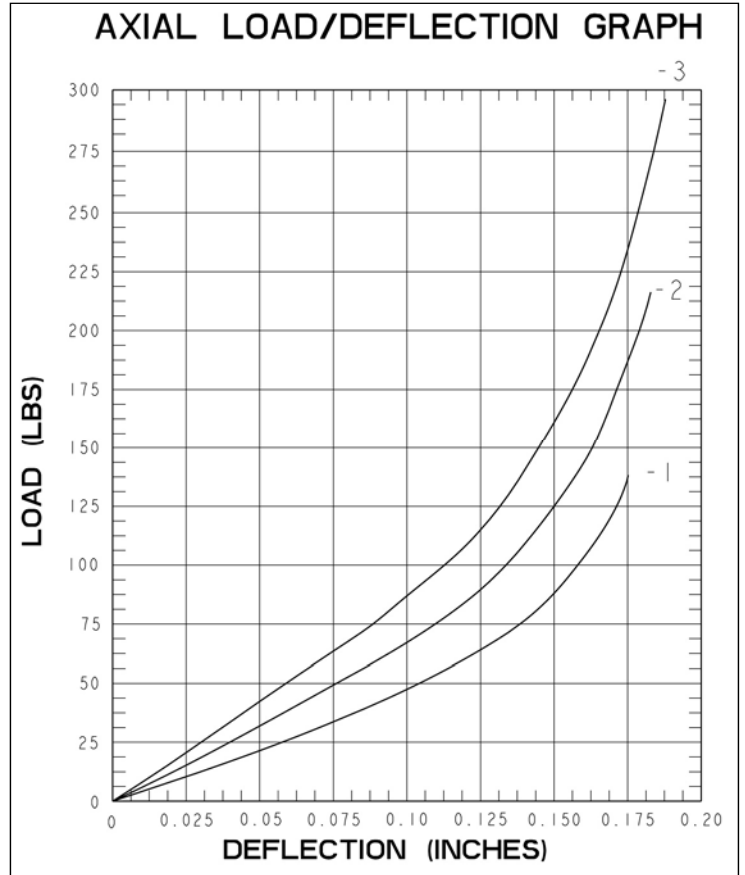
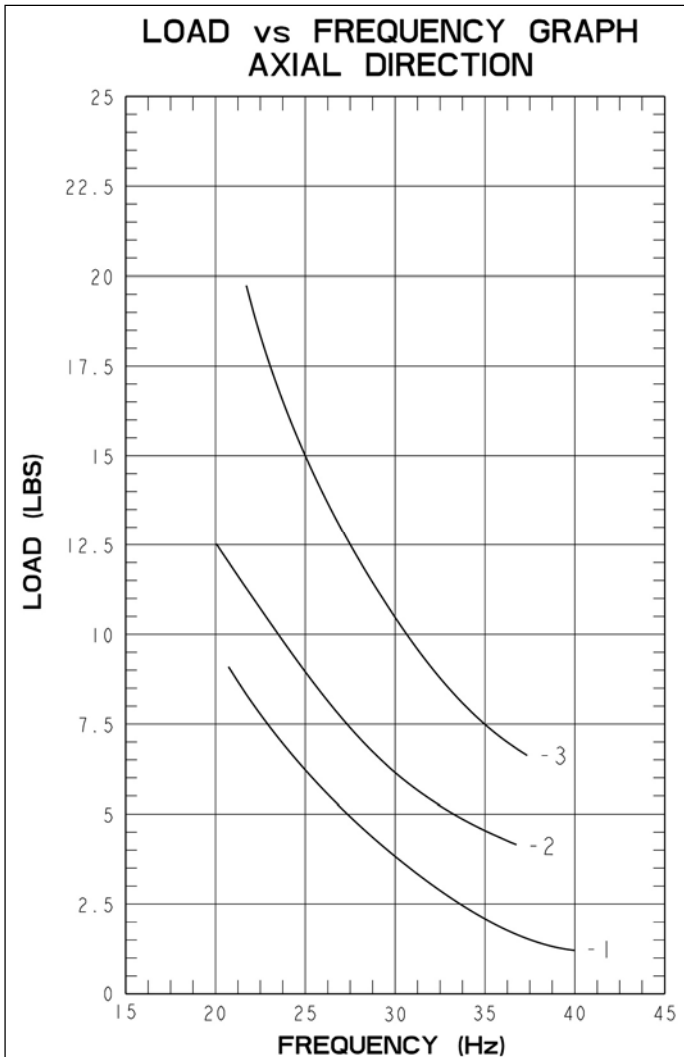
Can-Style Mount Series: 1766

Dimension and Performance Characteristics



Can-Style Mount Series: 1767

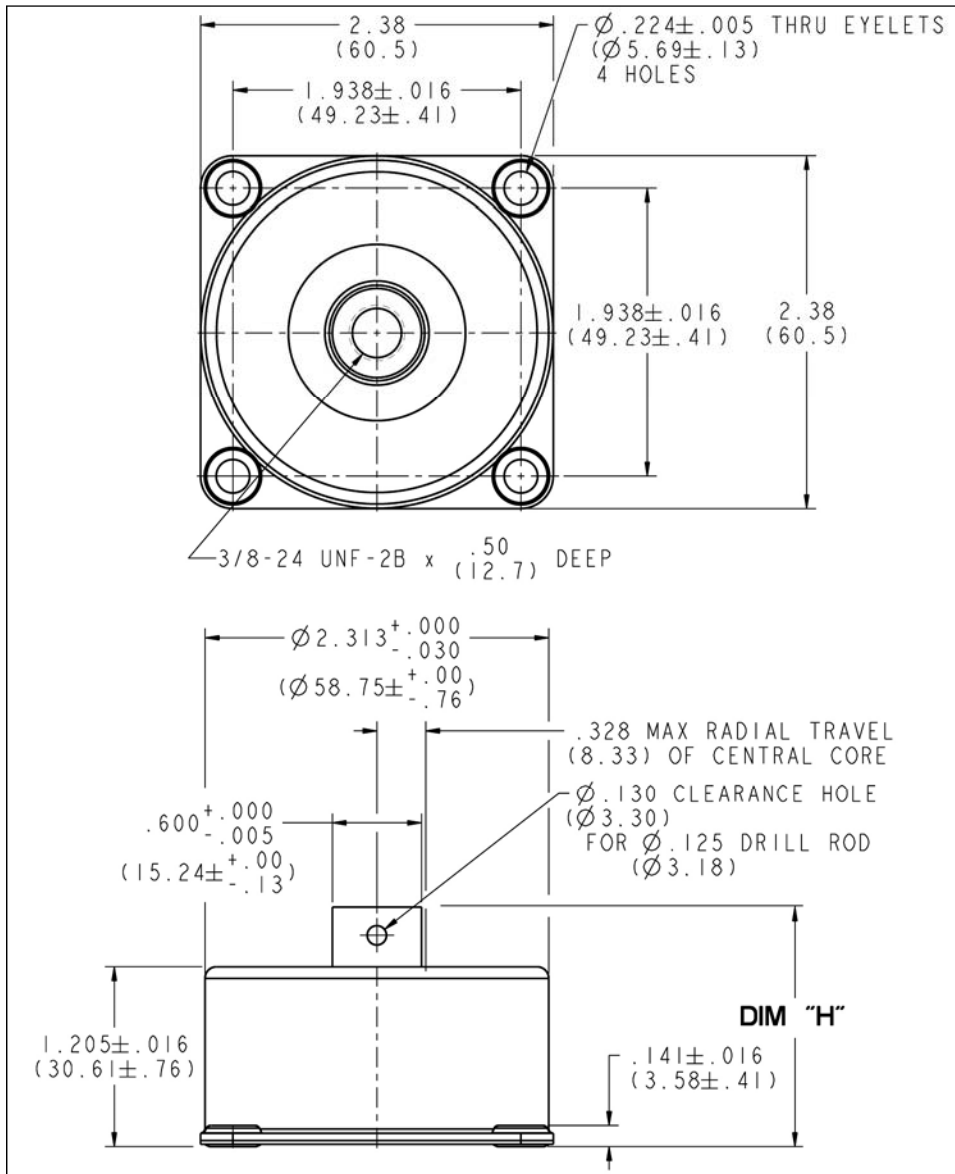
Dimension and Performance Characteristics



Can-Style Mount Series: 1769

Dimension and Performance Characteristics

| Part # | Maximum Axial Compression | Load (lbs.) Radial | Axial Natural Frequency (hz) | Transmissibility at Resonance | Standard Material | Standard Elastomer | Mounting Hole Diameter "A" |
|--------|---------------------------|--------------------|------------------------------|-------------------------------|-------------------|--------------------|----------------------------|
| 1769-1 | 35 | 35 | 18 | 4:1 | Steel & Aluminum | Hi-Damp Silicone | Ø .224 |
| 1769-2 | 50 | 50 | 17 | 4:1 | Steel & Aluminum | Hi-Damp Silicone | Ø .224 |
| 1769-3 | 80 | 80 | 18 | 4:1 | Steel & Aluminum | Hi-Damp Silicone | Ø .224 |

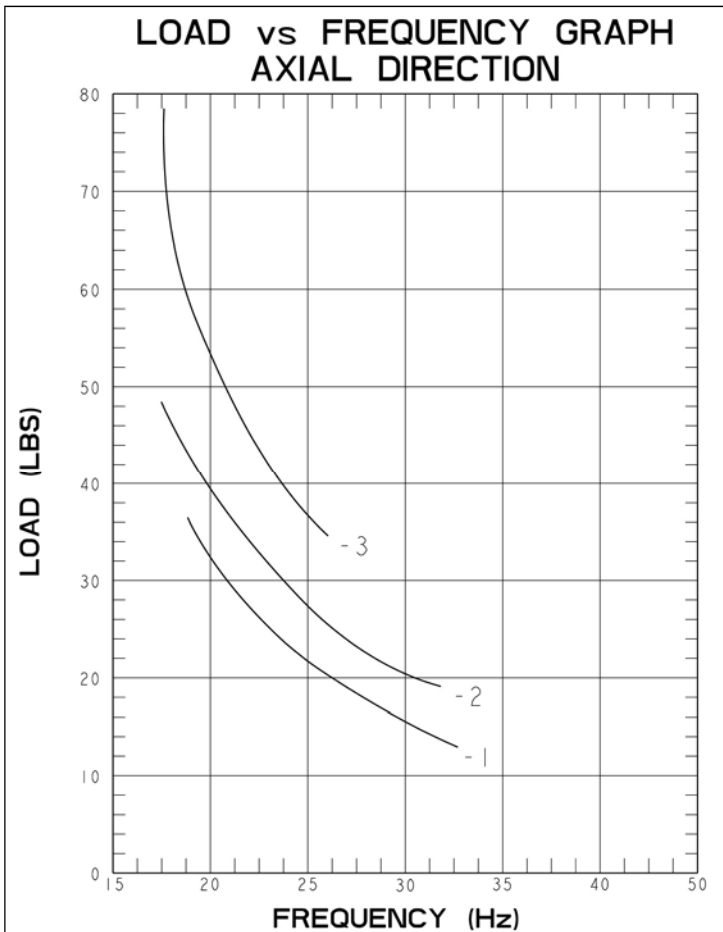
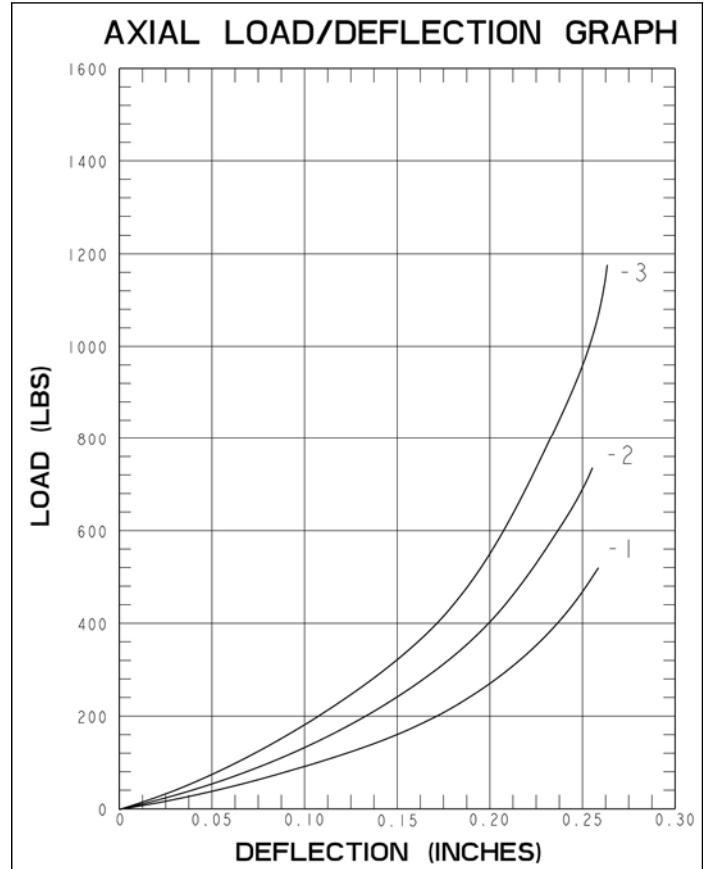


| 1769 "H" Dimension | |
|--------------------|------|
| Compressed | 1.25 |
| Free Height | 1.62 |
| Max. Extended | 1.94 |



Can-Style Mount Series: 1769

Dimension and Performance Characteristics



AIR MOUNT SERIES



English Air Isolator Series

Low frequency, high load capacity air mounts designed for high shock and vibration application



Attributes

- Air-cushioned isolators
- High deflection
- Reinforced wall construction
- Supports load with no air pressure
- Low profile

Applications

- CMM Machinery
- Large industrial machinery
- Laboratory equipment
- Presses
- Compressors

Benefits

- Low maintenance
- Extends machinery life
- Combined resiliency and air prevents high static deflection, drift and permanent set
- High load capacity

Specifications

- Natural Frequency — 3-5 Hertz
- Transmissibility at Resonance — 8:1
- Resilient Element — Neoprene
- Metal Structure — Steel Aluminum

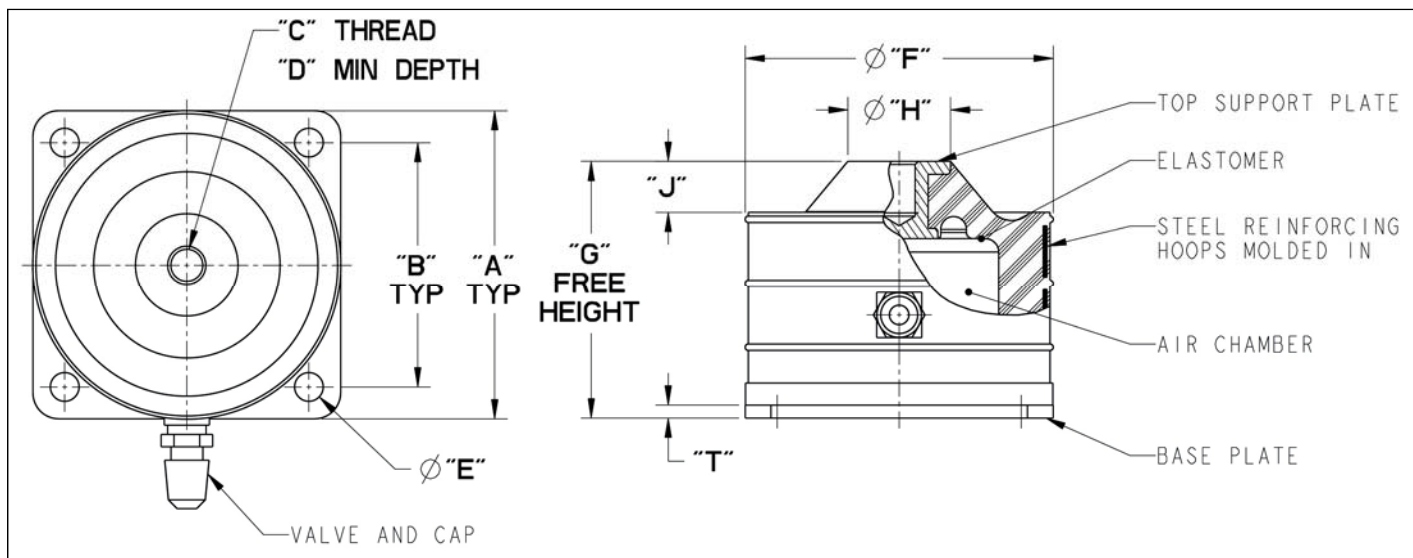
Elastomeric Data

- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to $+93^{\circ}\text{C}$) and is resistant to oil and ozone

Air Isolator Series: 3001-3008

Dimension and Performance Characteristics

| Part Number | Max Load (lbs.) | Part Dimensions (in.) | | | | | | | | | | Weight (lbs.) |
|-------------|-----------------|-----------------------|-------------|--------------------|------|-------------|-------------|-------------|-------------|-------------|--------------|---------------|
| | | A ± 0.02 | B ± 0.01 | C | D | E ± 0.02 | F ± 0.02 | G ± 0.05 | H ± 0.01 | J ± 0.01 | T ± 0.010 | |
| 3001-00 | 100 | 3.00 | 2.38 | .375-16 UNC-2B | 0.47 | 0.28 | 2.88 | 2.50 | 1.00 | 0.50 | 0.125 | 1 |
| 3002-00 | 300 | 4.19 | 3.50 | .500-13 UNC-2B | 0.53 | 0.28 | 4.14 | 2.45 | 2.06 | 0.54 | 0.125 | 1.5 |
| 3003-00 | 600 | 5.12 | 4.25 | .500-13 UNC-2B | 0.53 | 0.29 | 4.99 | 3.50 | 2.38 | 0.56 | 0.125 | 3.25 |
| 3004-00 | 1200 | 6.88 | 6.00 | .500-13 UNC-2B | 0.53 | 0.29 | 6.74 | 3.50 | 3.75 | 0.56 | 0.125 | 5.5 |
| 3005-00 | 2400 | 10.00 | 8.50 | .625-11 UNC-2B | 0.75 | 0.56 | 9.66 | 3.50 | 4.75 | 0.56 | 0.188 | 13 |
| 3006-00 | 4800 | 13.50 | 12.00 | .625-11 UNC-2B | 0.75 | 0.56 | 13.31 | 3.50 | 7.50 | 0.56 | 0.188 | 26 |
| 3007-00 | 9600 | 18.50 | 16.00 | 1.000-14 UNS-2B | 0.88 | 0.81 | 18.44 | 3.50 | 11.60 | 0.56 | 0.250 | 57 |
| 3008-00 | 19200 | 24.00 | 20.00 | 1.000-14 UNS-2B | 0.88 | 0.81 | 24 | 3.50 | 15.75 | 0.56 | 0.250 | 100 |



P

Metric Air Isolator Series

Low frequency, high load capacity air mounts designed for high shock and vibration application



Applications

- Air compressors
- CMM machinery
- Forging hammers
- Industrial equipment, tools and machinery

Benefits

- Low maintenance
- Extends machinery life
- Combined resiliency and air prevents high static deflection, drift or permanent set
- Wide load range available

Attributes

- Air-cushioned isolation
- High deflection
- Neoprene padded top and bottom base
- Heavy wall construction

Specifications

- Natural Frequency — 3-5 Hertz
- Transmissibility at Resonance — 8:1
- Resilient Element — Neoprene
- Metal Structure — Carbon Steel

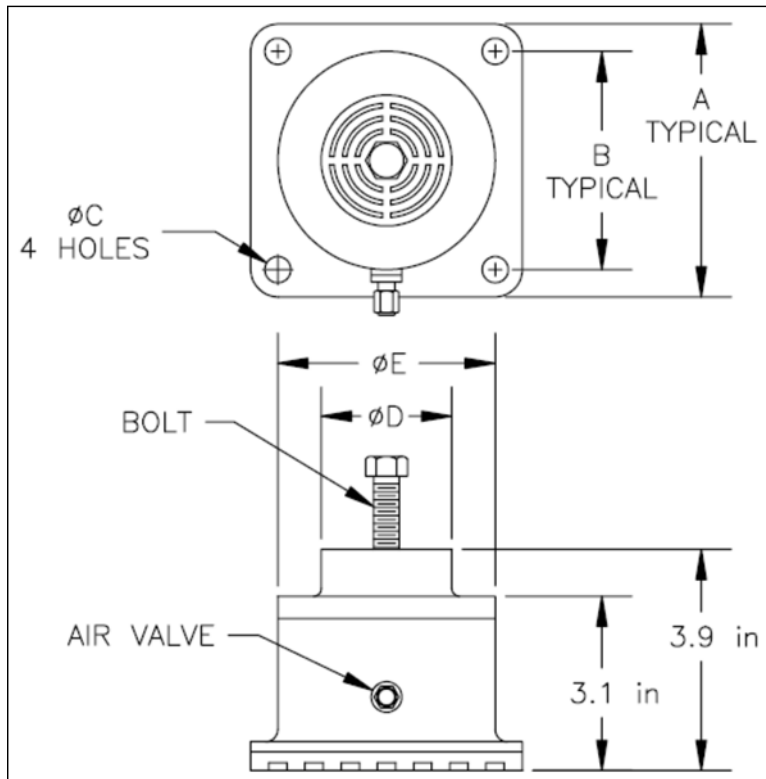
Elastomeric Data

- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to +93°C) and is resistant to oil and ozone

Metric Air Isolator Series: 3009-3015

Dimension and Performance Characteristics

| Part Number | Load Range (lbs.) | Part Dimensions (in.) | | | | | | | Thread |
|-------------|-------------------|-----------------------|-----|----|-----|-----|-----|----|--------|
| | | A | B | C | D | E | F | G | |
| 3009-00 | 100-200 | 125 | 100 | 12 | 50 | 100 | 100 | 80 | M10 |
| 3010-00 | 200-400 | 125 | 100 | 12 | 60 | 100 | 100 | 80 | M12 |
| 3011-00 | 400-800 | 160 | 125 | 12 | 90 | 138 | 100 | 80 | M12 |
| 3012-00 | 800-1500 | 200 | 160 | 12 | 110 | 164 | 100 | 80 | M12 |
| 3013-00 | 1400-2500 | 250 | 200 | 14 | 150 | 212 | 100 | 80 | M16 |
| 3014-00 | 2400-4500 | 350 | 300 | 14 | 240 | 314 | 100 | 80 | M16 |
| 3015-00 | 4000-7500 | 450 | 400 | 14 | 330 | 412 | 100 | 80 | M16 |



P

SQUISHYFLEX™ MOUNT SERIES



SquishyFlex™ Mount Series

2182, 2183 & 2184



Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment
- Large motors, pumps, compressors

Benefits

- Rugged construction
- All steel construction

Attributes

- Fail-safe
- Compact, low profile design
- Zinc plated construction
- Easy to install

Load Range

- 2182 = 4 load ratings to 270 lbs.
- 2183 = 4 load ratings to 990 lbs.
- 2184 = 4 load ratings to 2200 lbs.

Specifications

- Natural frequency—8-10 Hertz at rated load
- Transmissibility at resonance — 10 max (Neoprene)
- Standard material — zinc plated steel

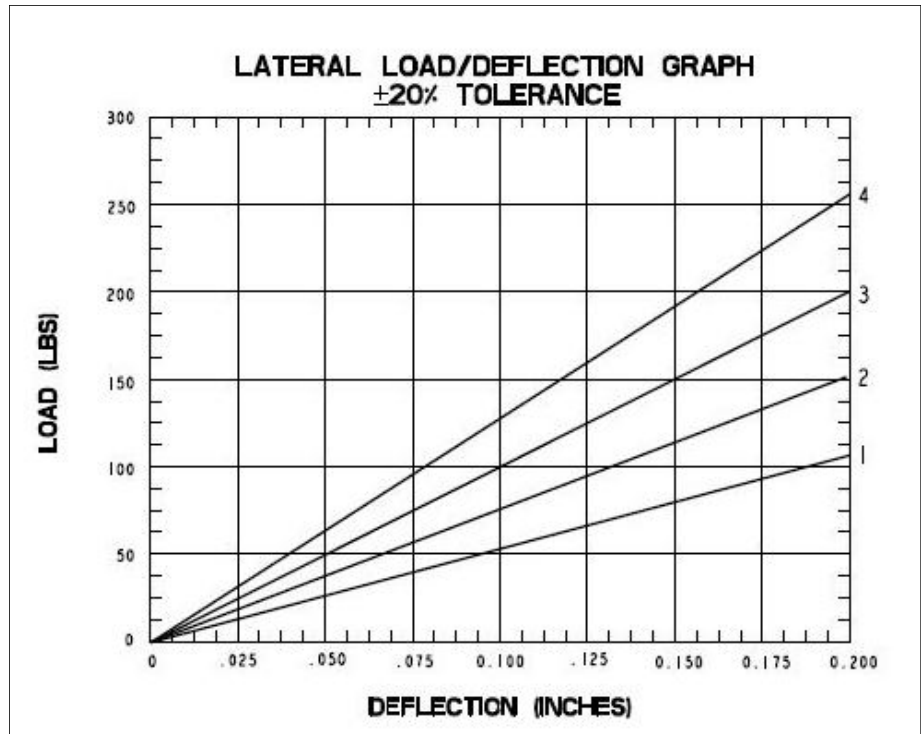
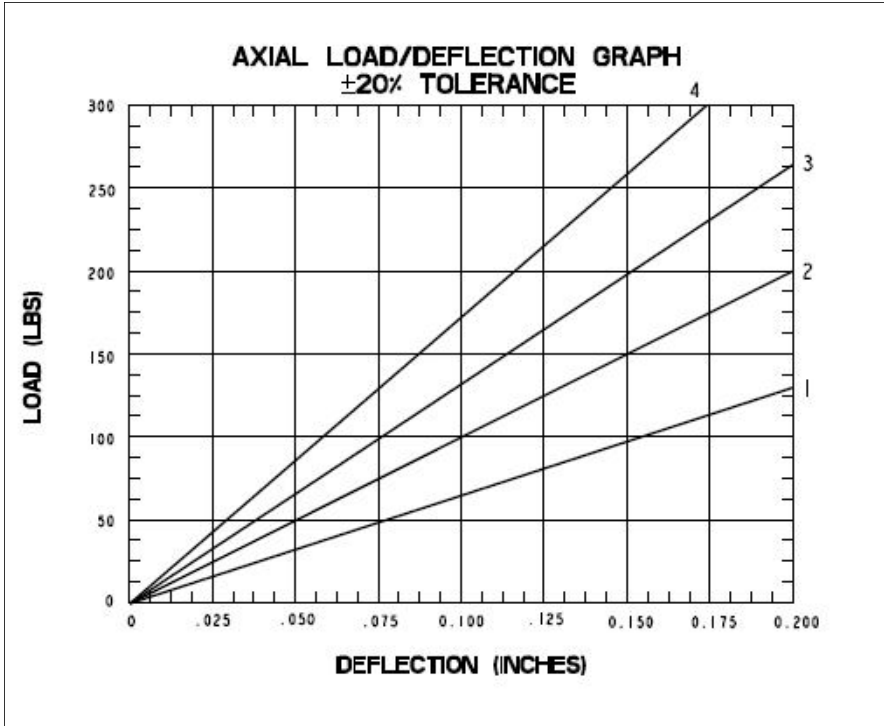
Elastomeric Data

- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to +93°C), and is used where oil immersion is present



SquishyFlex™ Mount Series: 2182

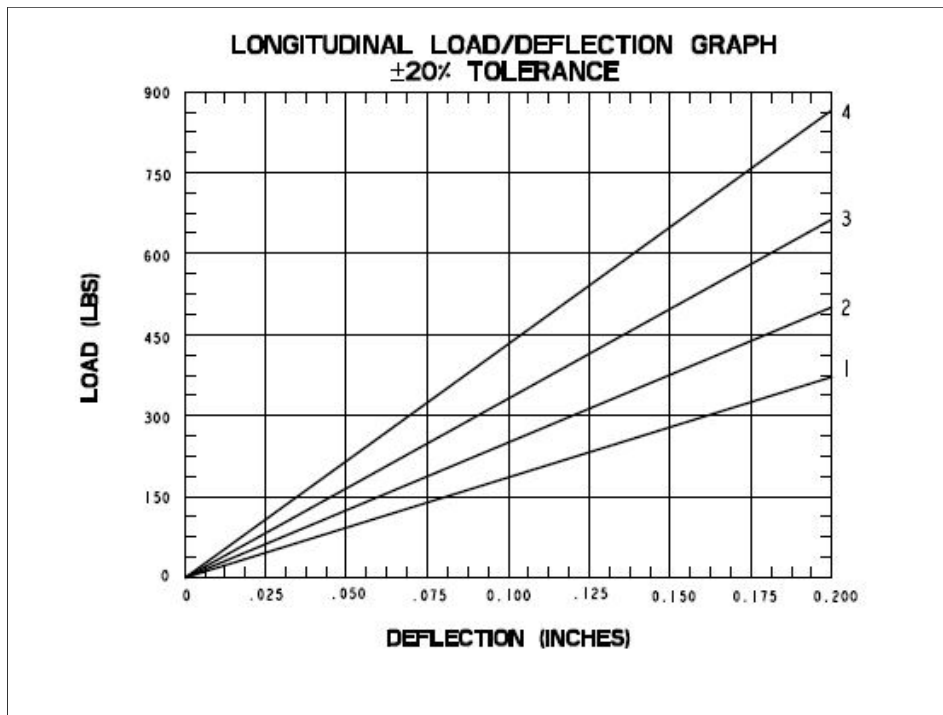
Dimension and Performance Characteristics



Q

SquishyFlex™ Mount Series: 2182

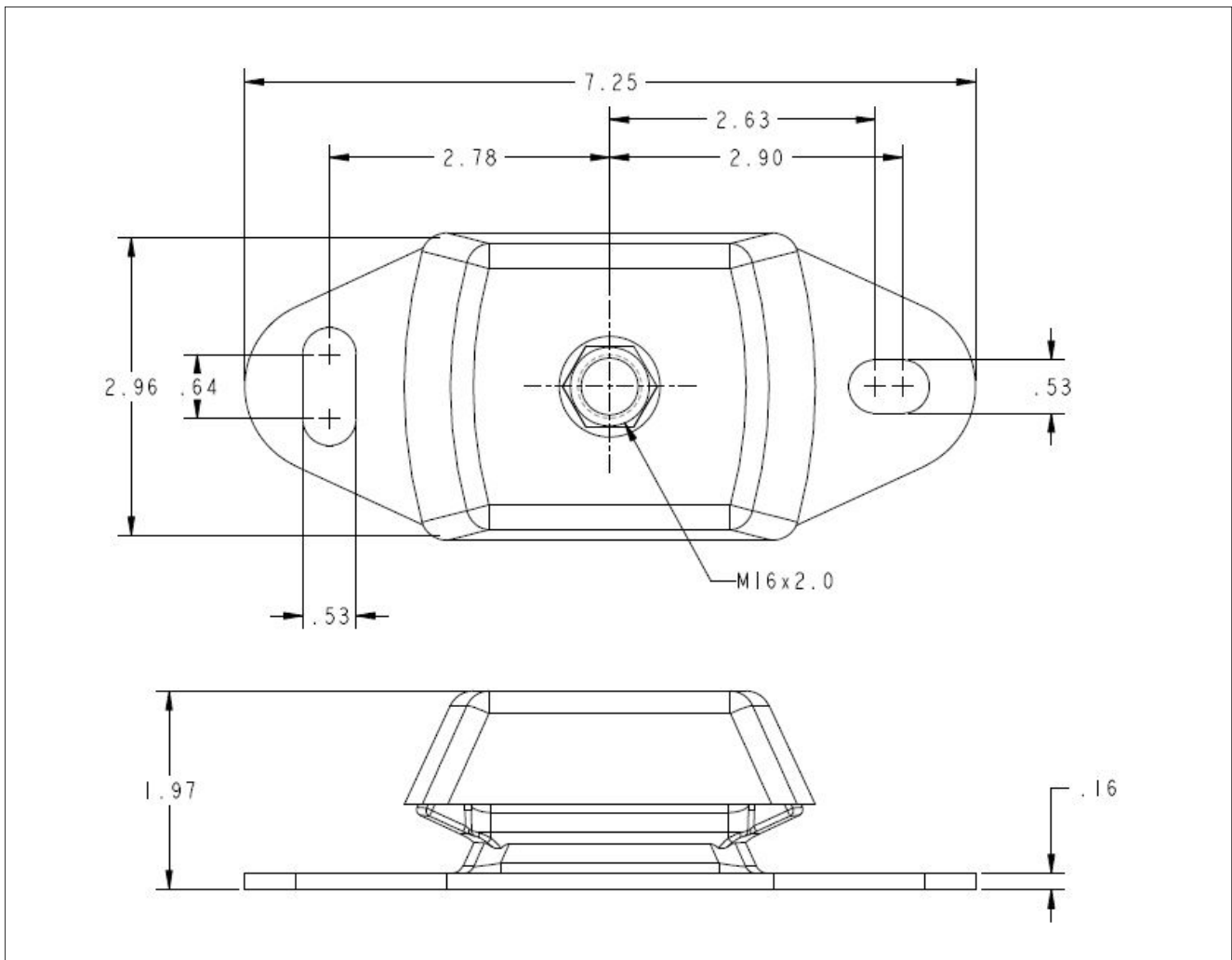
Dimension and Performance Characteristics



SquishyFlex™ Mount Series: 2183

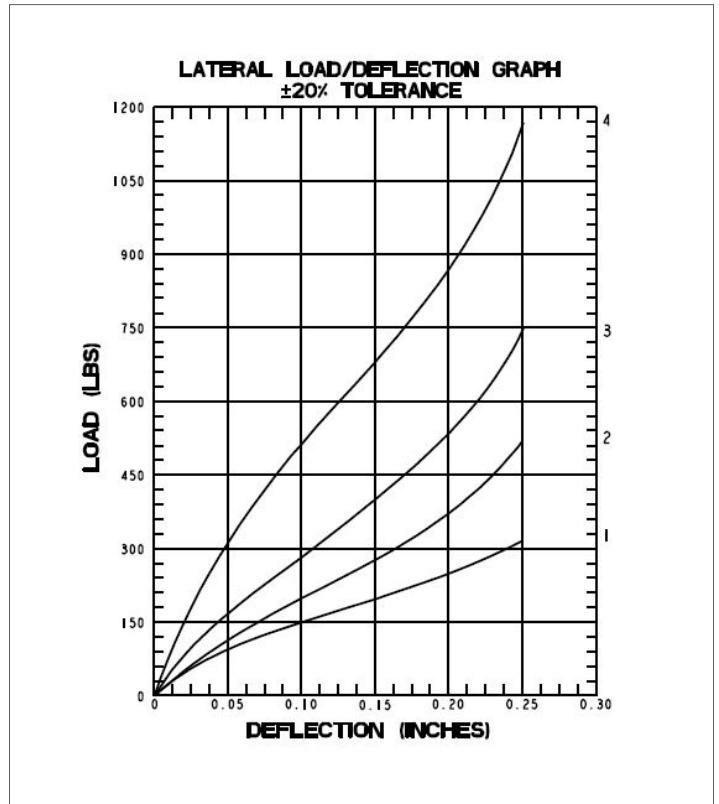
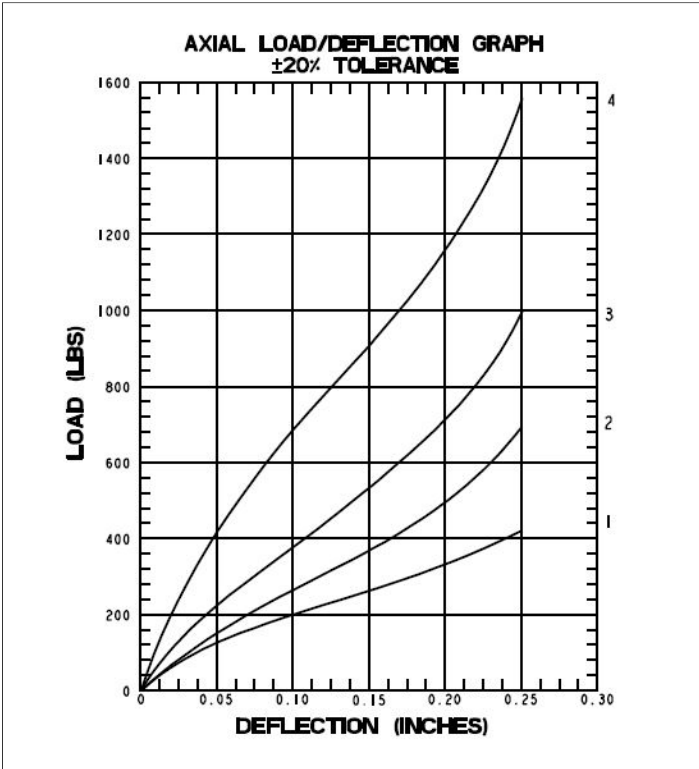
Dimension and Performance Characteristics

| Part Number | Maximum Load (lbs.) | Durometer | Color Code |
|-------------|---------------------|-------------|------------|
| 2183-1 | 330 | Neoprene—45 | Red |
| 2183-2 | 465 | Neoprene—55 | Orange |
| 2183-3 | 660 | Neoprene—65 | Yellow |
| 2183-4 | 990 | Neoprene—75 | White |



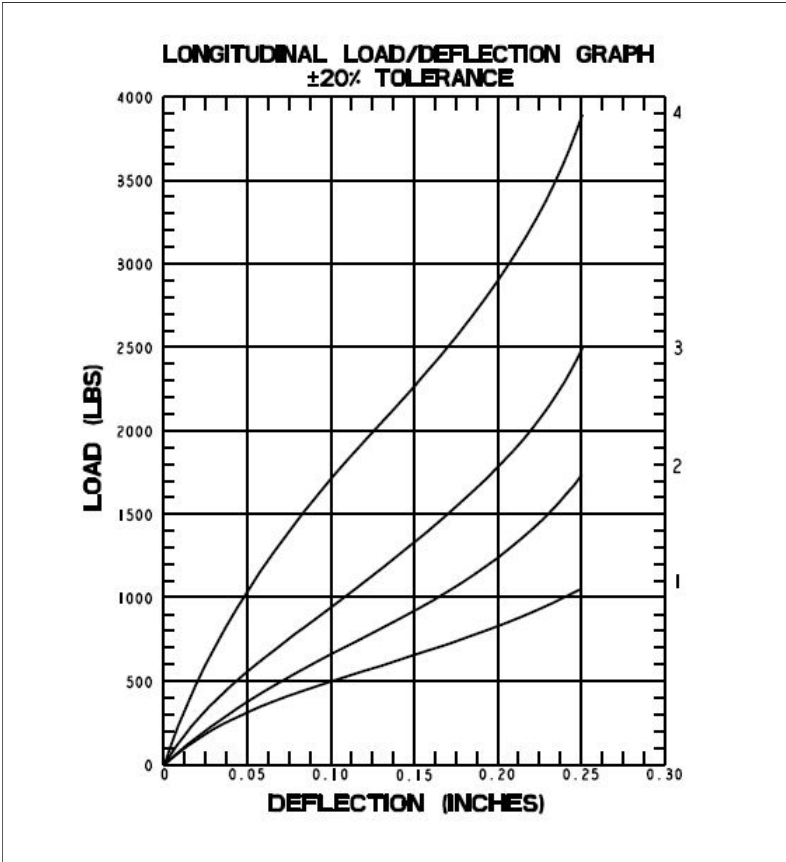
SquishyFlex™ Mount Series: 2183

Dimension and Performance Characteristics



SquishyFlex™ Mount Series: 2183

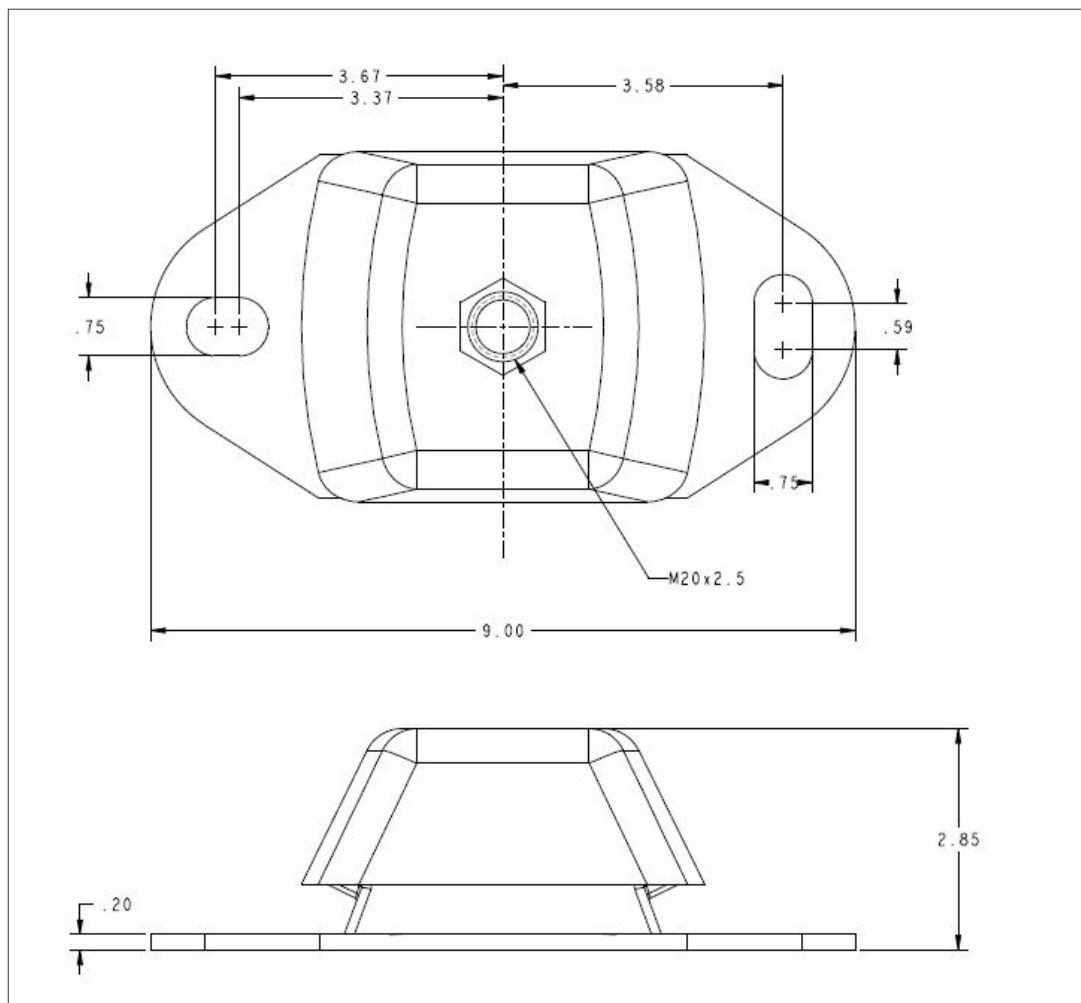
Dimension and Performance Characteristics



SquishyFlex™ Mount Series: 2184

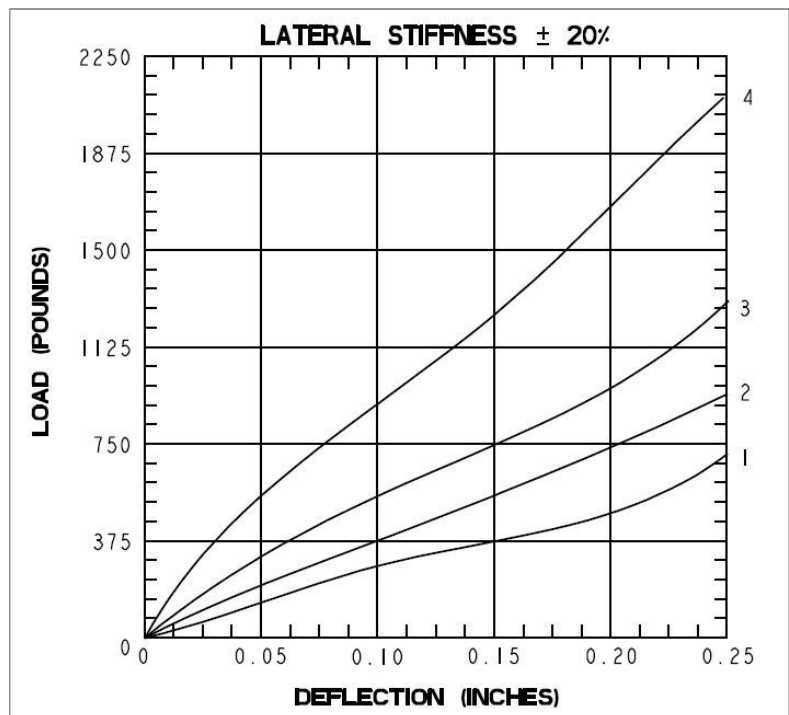
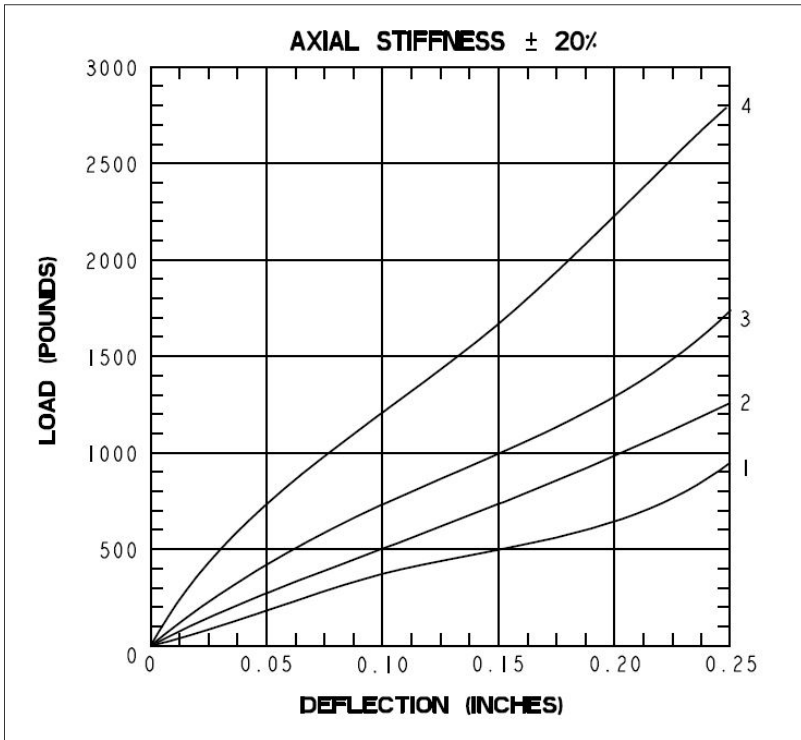
Dimension and Performance Characteristics

| Part Number | Maximum Load (lbs.) | Durometer | Color Code |
|-------------|---------------------|-------------|------------|
| 2184-1 | 770 | Neoprene 45 | Red |
| 2184-2 | 1145 | Neoprene 55 | Orange |
| 2184-3 | 1550 | Neoprene 65 | Yellow |
| 2184-4 | 2200 | Neoprene 75 | White |



SquishyFlex™ Mount Series: 2184

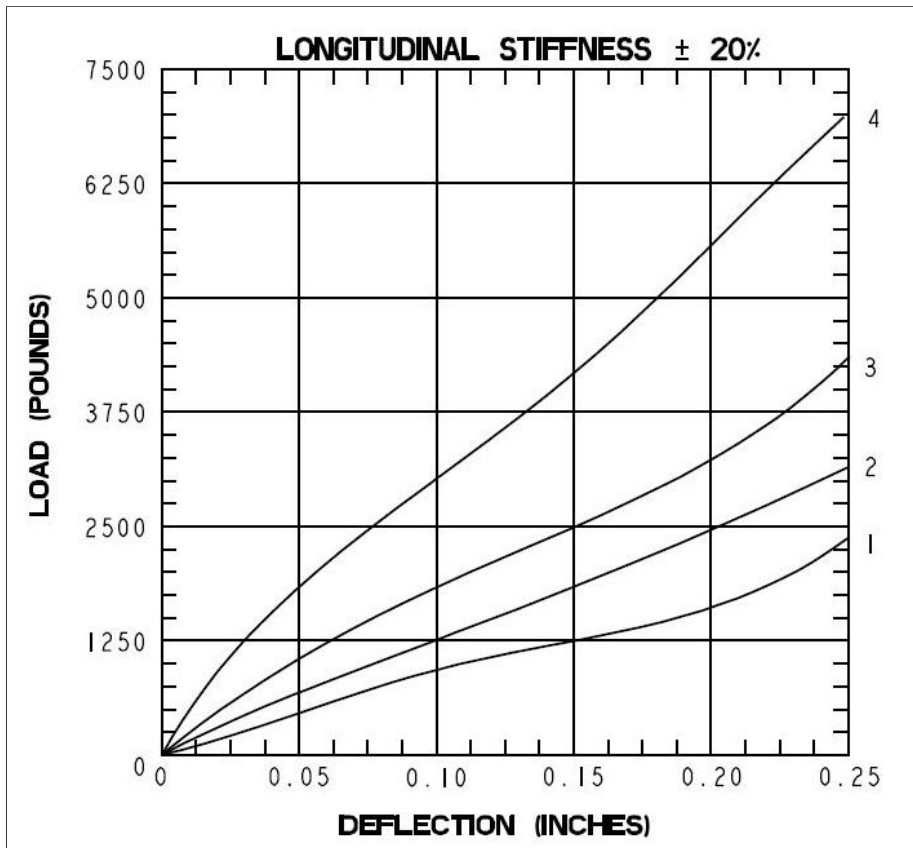
Dimension and Performance Characteristics



Q

SquishyFlex™ Mount Series: 2184

Dimension and Performance Characteristics



SANDWICH MOUNT SERIES



Sandwich Mount Series

2205, 2206, 2207



Applications

- Truck, bus, marine engines
- Generators, HVAC equipment
- Pumps and Compressors

Benefits

- Easy to install
- Low cost construction
- Mounted both in compression or shear

Attributes

- Rugged construction
- Compact design
- Linear load vs. deflection

Specifications

- Natural frequency -10-20 Hz
- Transmissibility at resonance - 10:1
- Resilient element - neoprene
- Standard materials - cold rolled steel
- Standard finish - zinc plated steel

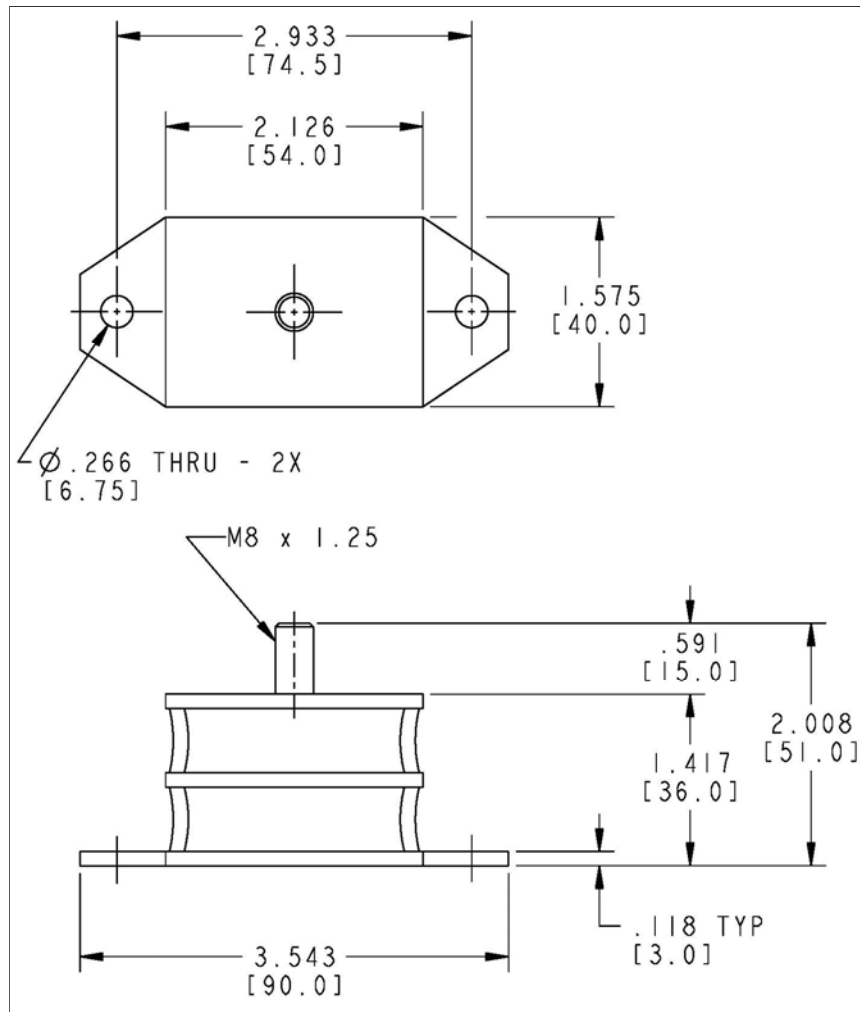
Elastomeric Data

- Neoprene elastomer has an operating temperature range of -40F to +200°F (-40°C to +93°C) and is resistant to oil, most solvents and ozone
-

Sandwich Mount Series: 2205

Dimension and Performance Characteristics

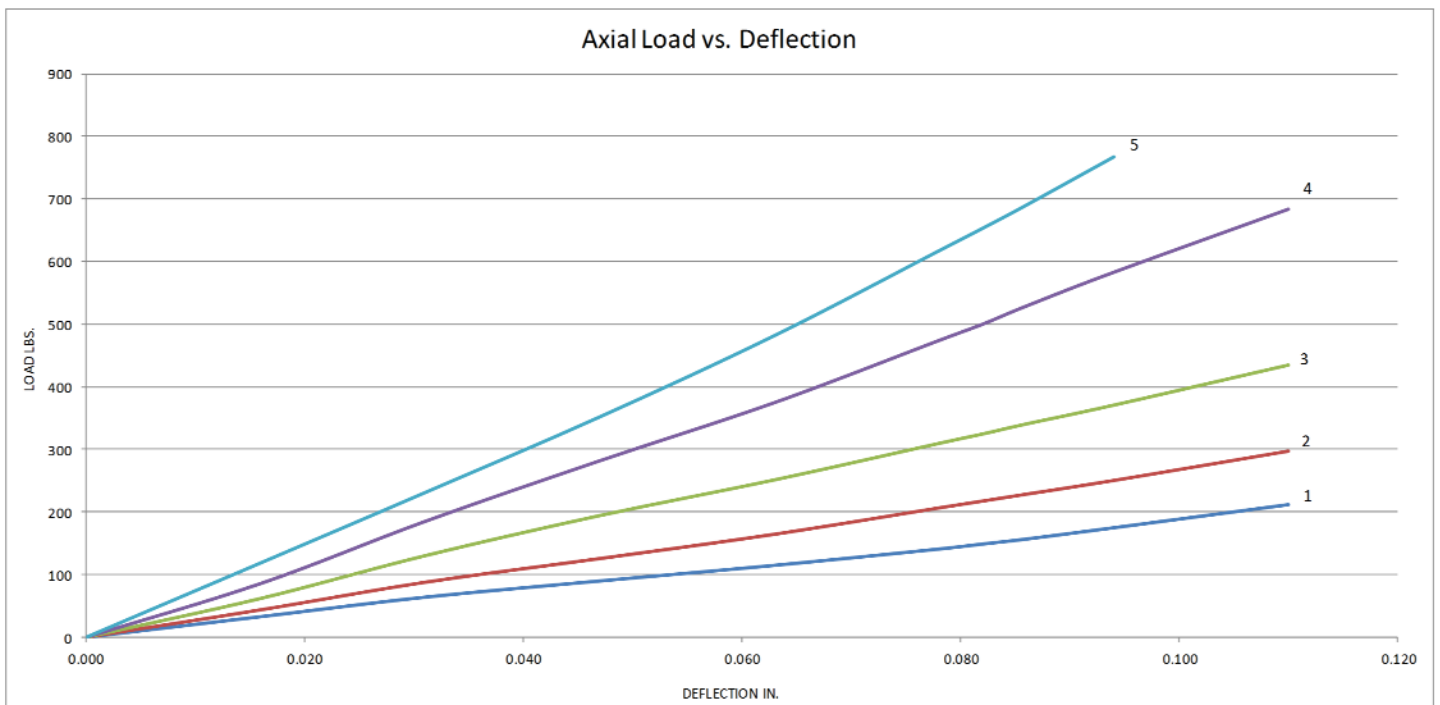
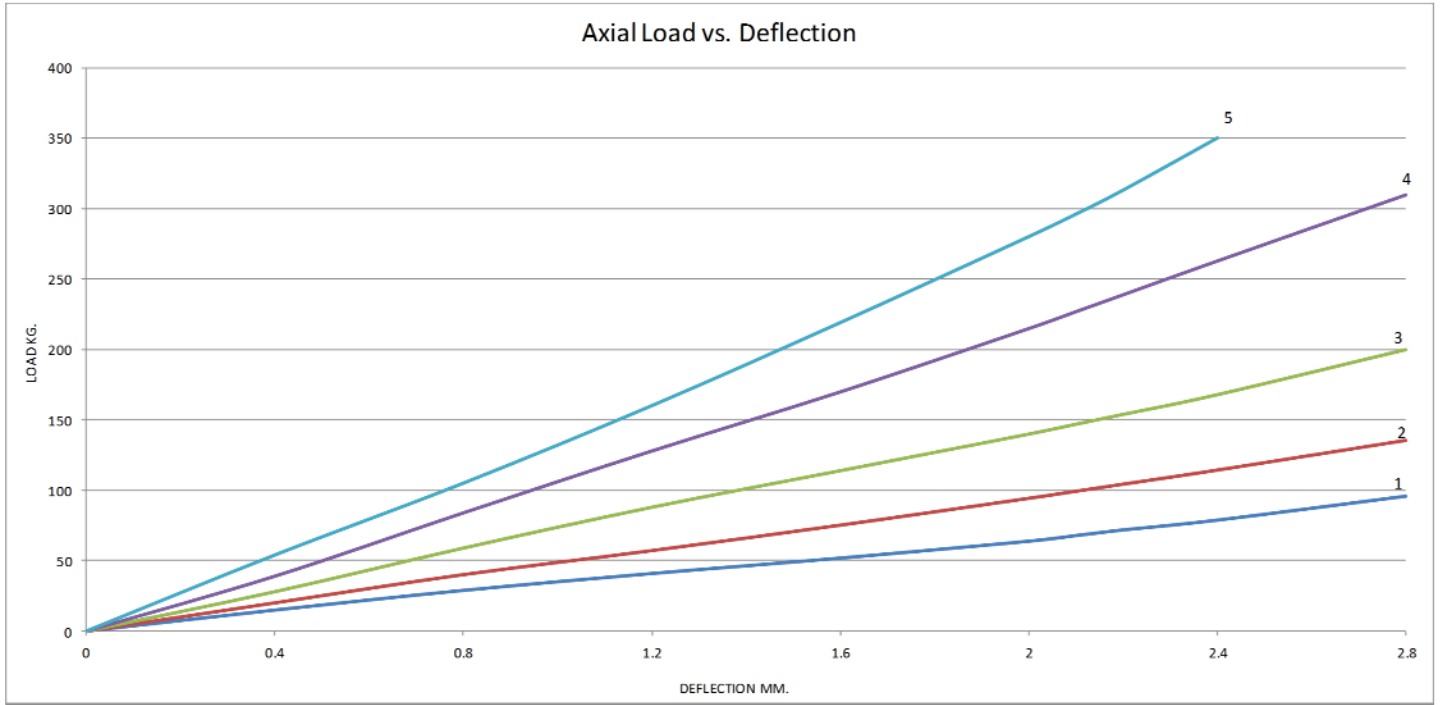
| Part Number | Load | | Deflection | |
|-------------|--------|--------|------------|------|
| | (lbs.) | (kgs.) | (inch) | (mm) |
| 2205-1 | 210 | 95 | .110 | 2.8 |
| 2205-2 | 298 | 135 | .110 | 2.8 |
| 2205-3 | 441 | 200 | .110 | 2.8 |
| 2205-4 | 684 | 310 | .110 | 2.8 |
| 2205-5 | 772 | 350 | .094 | 2.4 |



R

Sandwich Mount Series: 2205

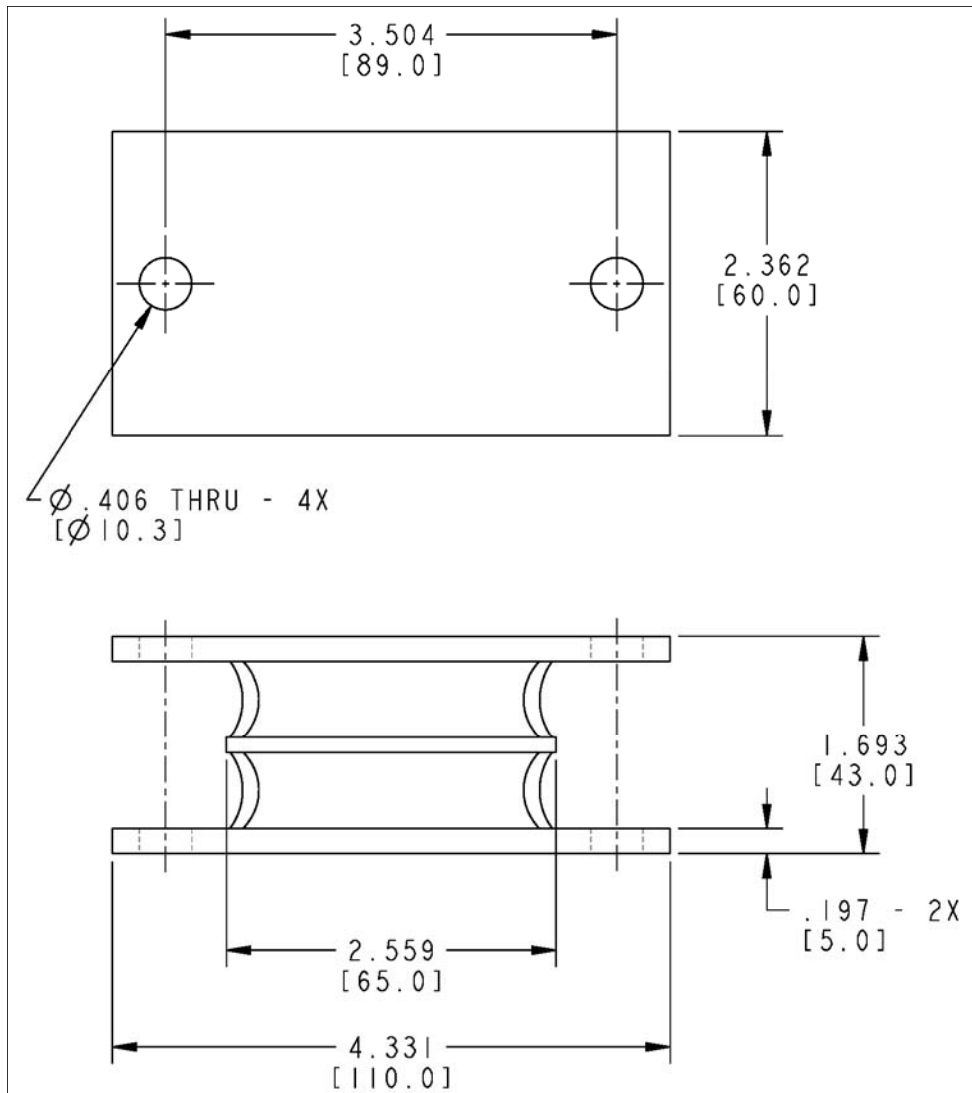
Dimension and Performance Characteristics



Sandwich Mount Series: 2206

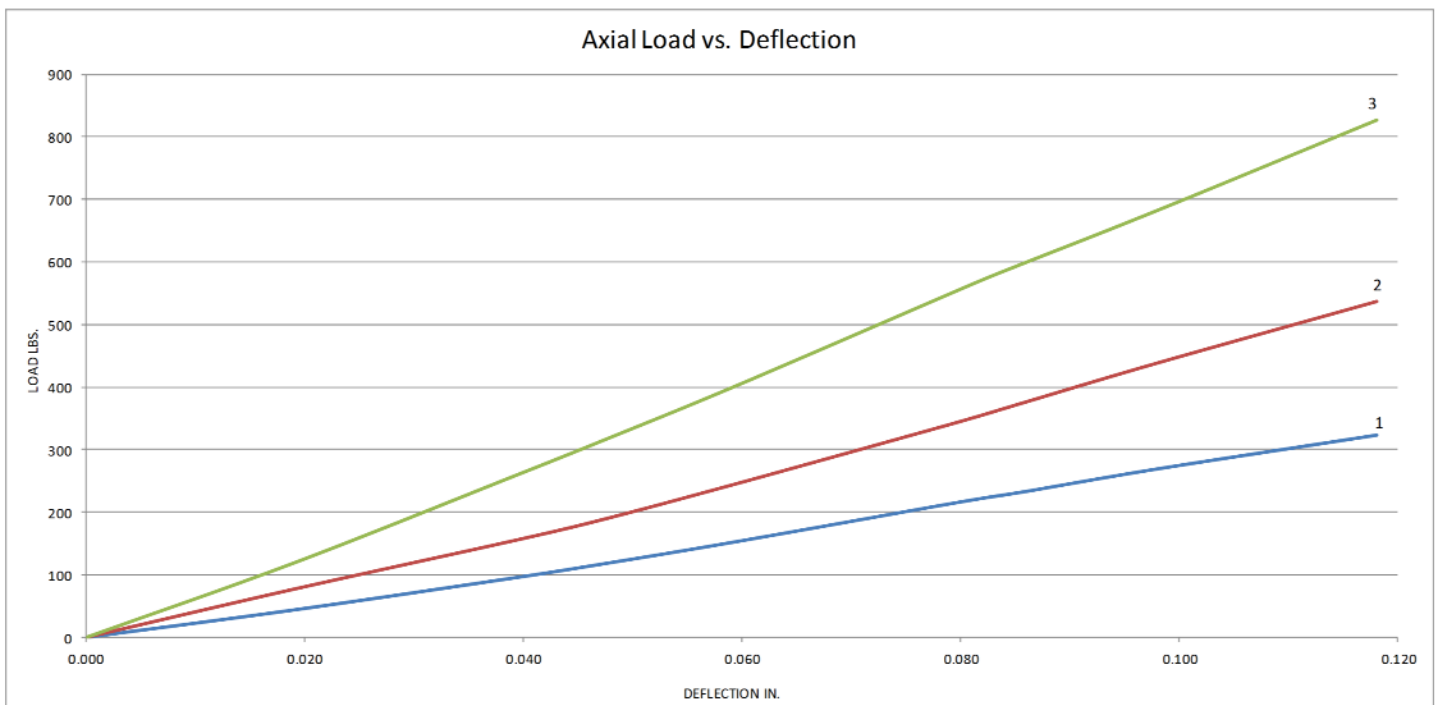
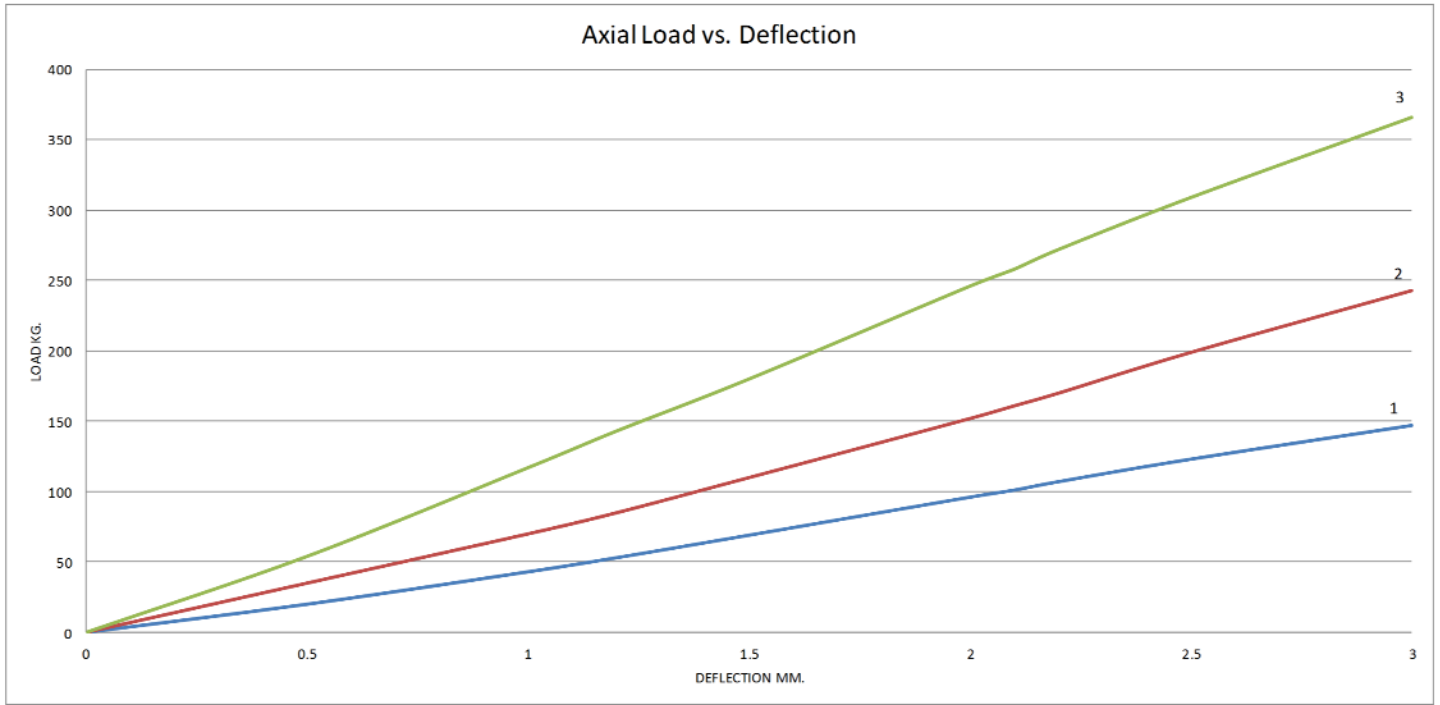
Dimension and Performance Characteristics

| Part Number | Load | | Deflection | |
|-------------|--------|-------|------------|------|
| | (lbs.) | (kgs) | (inch) | (mm) |
| 2206-1 | 309 | 140 | .118 | 3.0 |
| 2206-2 | 529 | 240 | .118 | 3.0 |
| 2206-3 | 827 | 375 | .118 | 3.0 |



Sandwich Mount Series: 2206

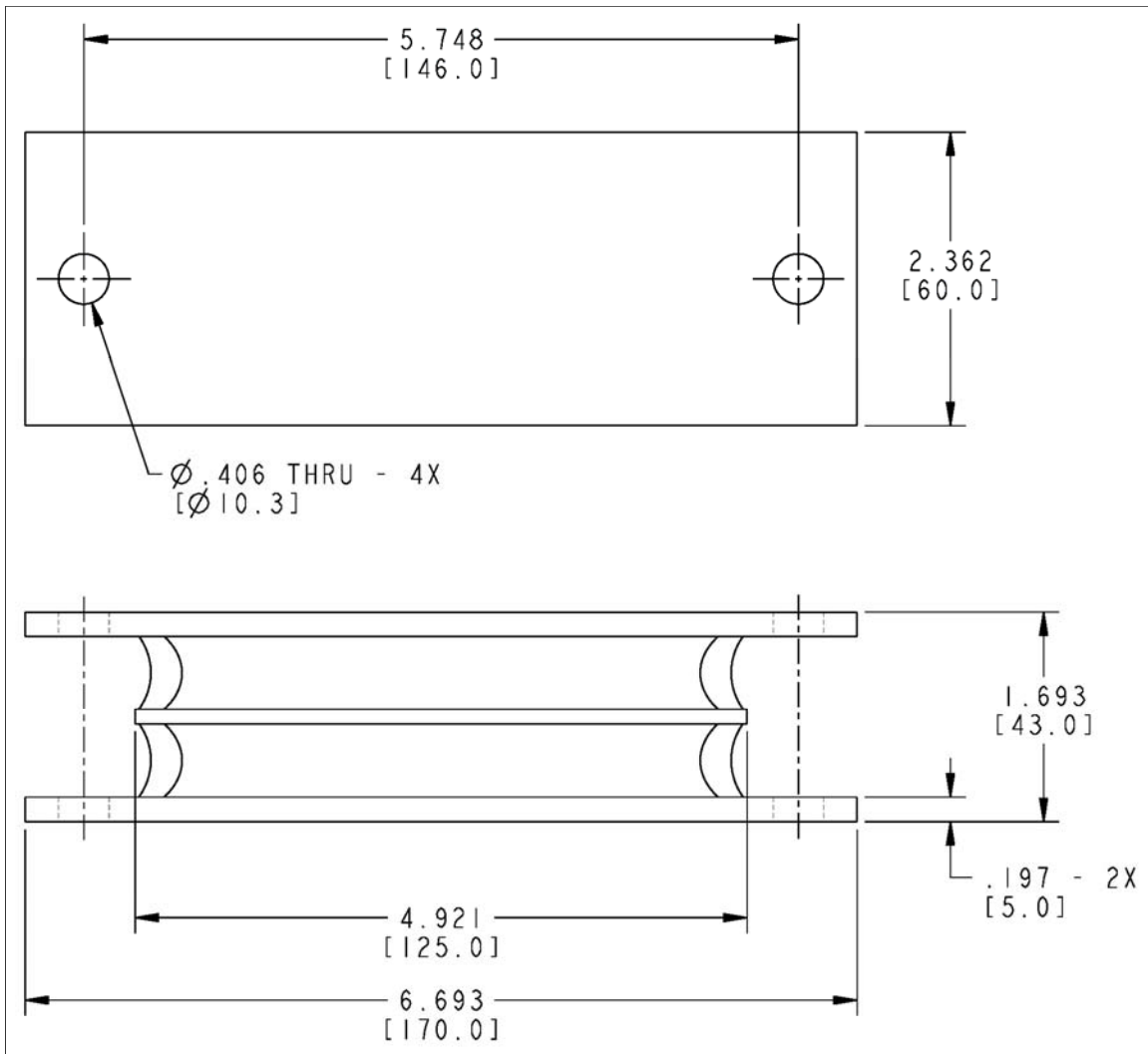
Dimension and Performance Characteristics



Sandwich Mount Series: 2207

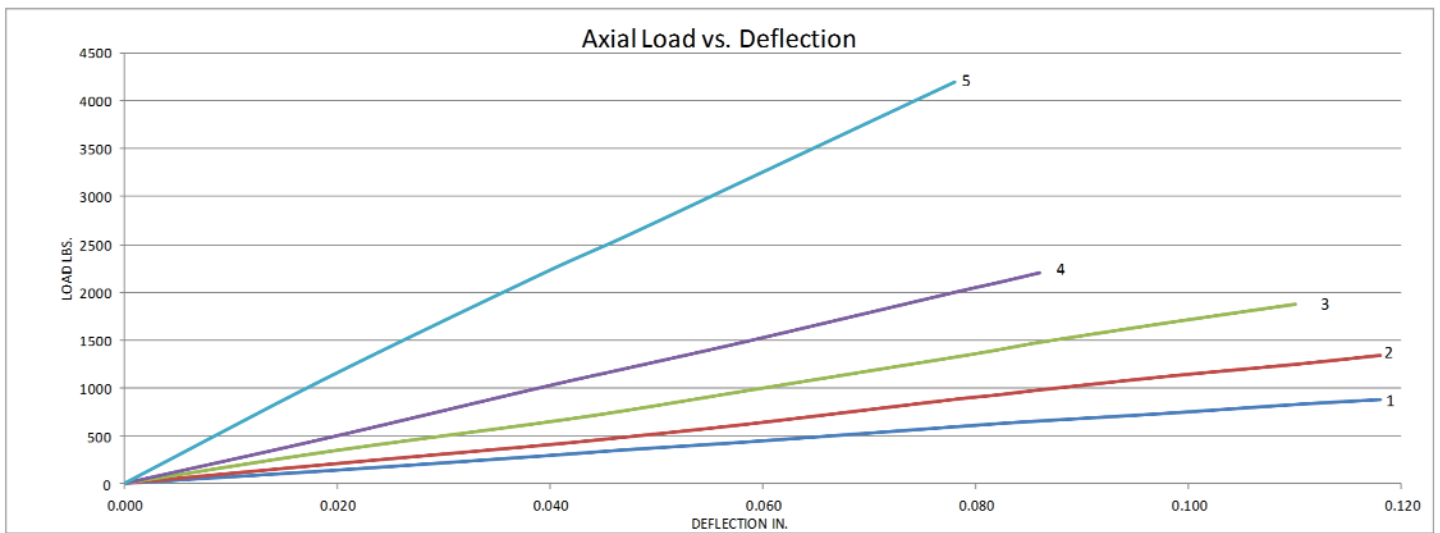
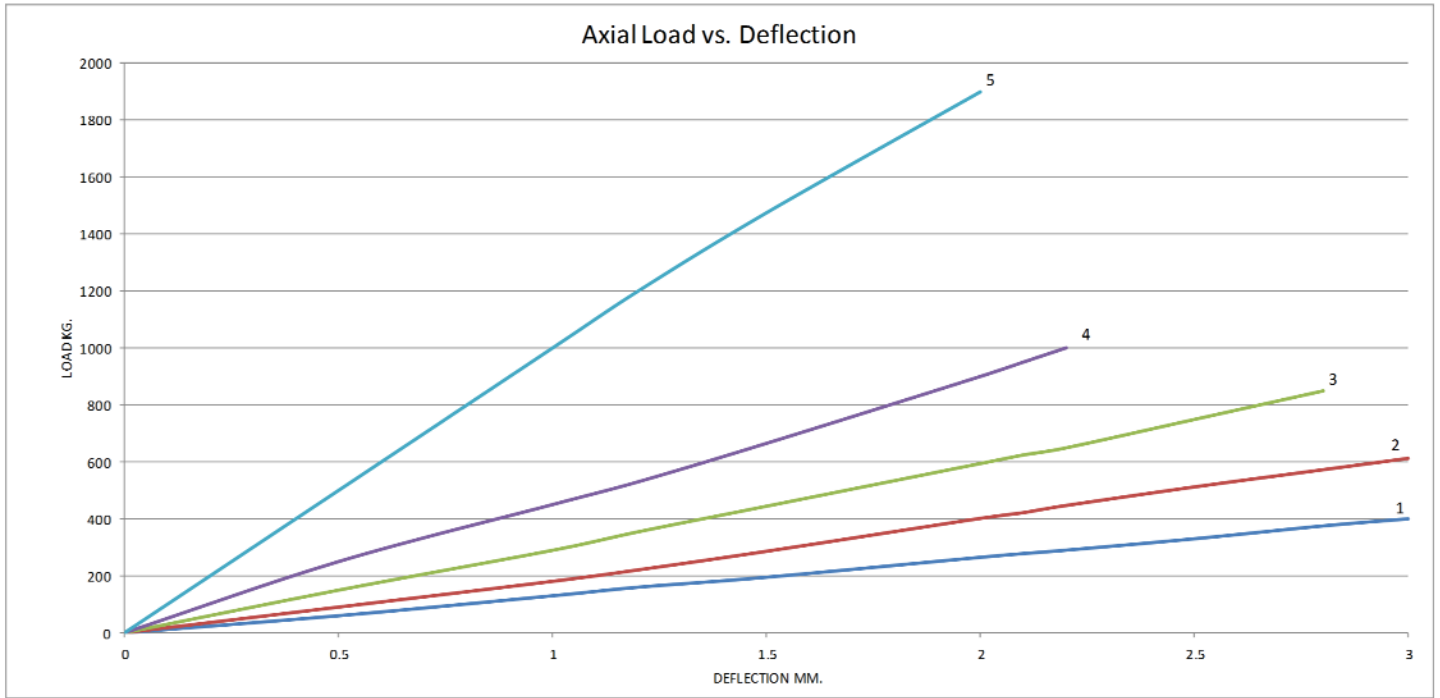
Dimension and Performance Characteristics

| Part Number | Load | | Deflection | |
|-------------|--------|-------|------------|------|
| | (lbs.) | (kgs) | (inch) | (mm) |
| 2207-1 | 882 | 400 | .118 | 3.0 |
| 2207-2 | 1345 | 610 | .118 | 3.0 |
| 2207-3 | 1874 | 850 | .110 | 2.8 |
| 2207-4 | 2205 | 1000 | .087 | 2.2 |
| 2207-5 | 4190 | 1900 | .079 | 2.0 |



Sandwich Mount Series: 2207

Dimension and Performance Characteristics



ARMORFLEX™ MOUNT SERIES



ArmorFlex™ Mount Series

2131-2133



Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- 3 sizes of mounts to handle loads up to 1750 lbs

Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Specifications

- Natural frequency—8-10 Hertz at rated load
- Transmissibility at resonance — 10 max (Neoprene)
- Standard material — zinc plated steel

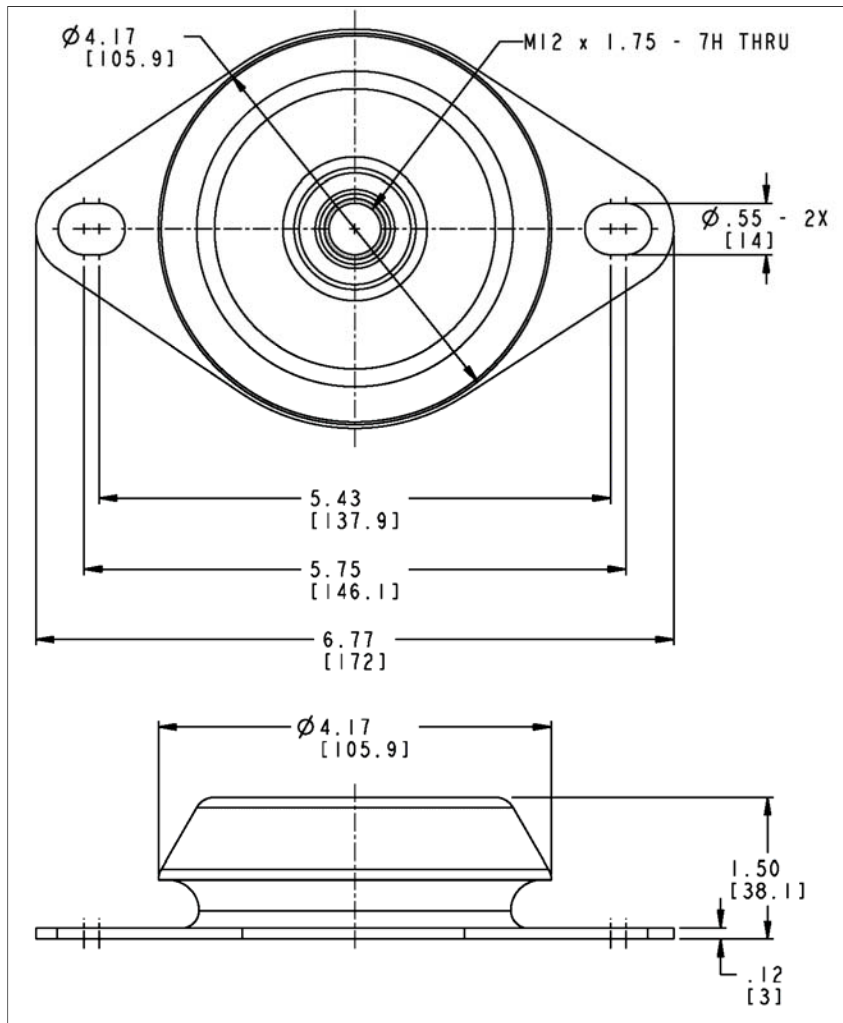
Elastomeric Data

- Neoprene has an operating temperature range of -40°F to 200°F (-40°C to +93°C), and is used where oil immersion is present
-

ArmorFlex™ Mount Series: 2131

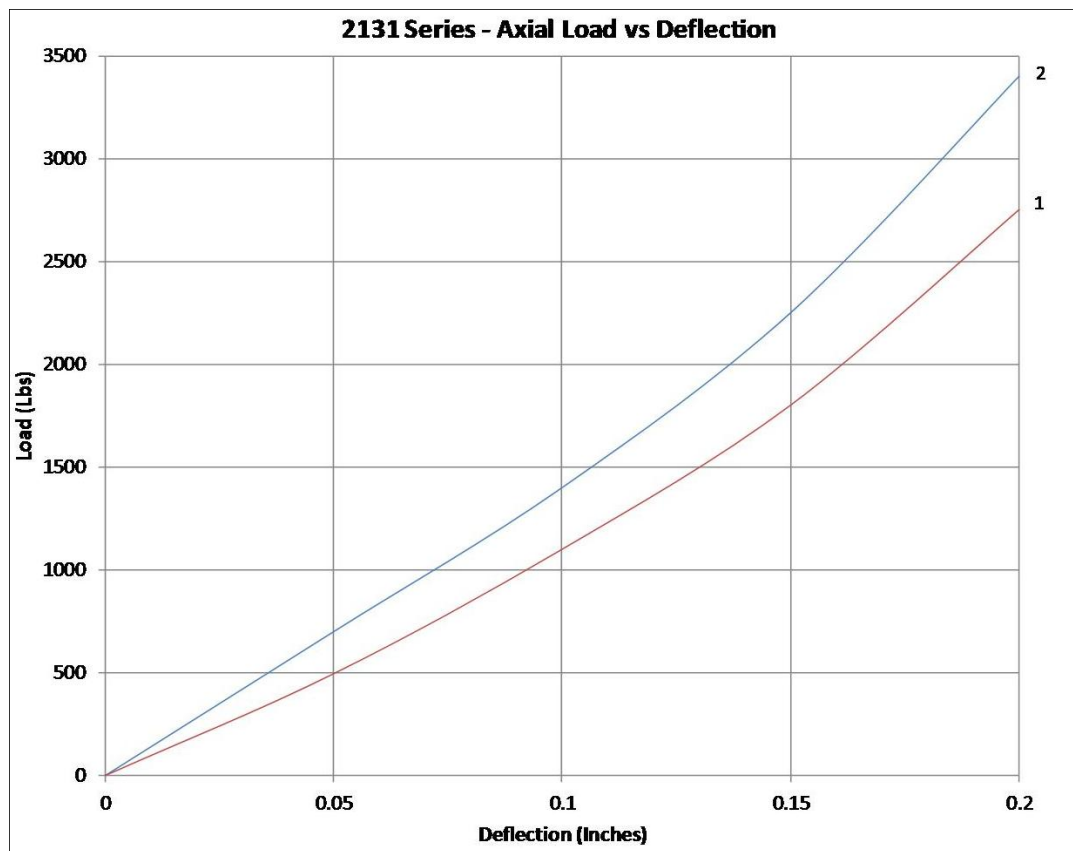
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | |
|-------------|----------------------------------|------------------------------|---------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Color Code |
| 2131-1 | 1100 (499) | .118 (3.0) | Red |
| 2131-2 | 1450 (658) | .118 (3.0) | Orange |



ArmorFlex™ Mount Series: 2131

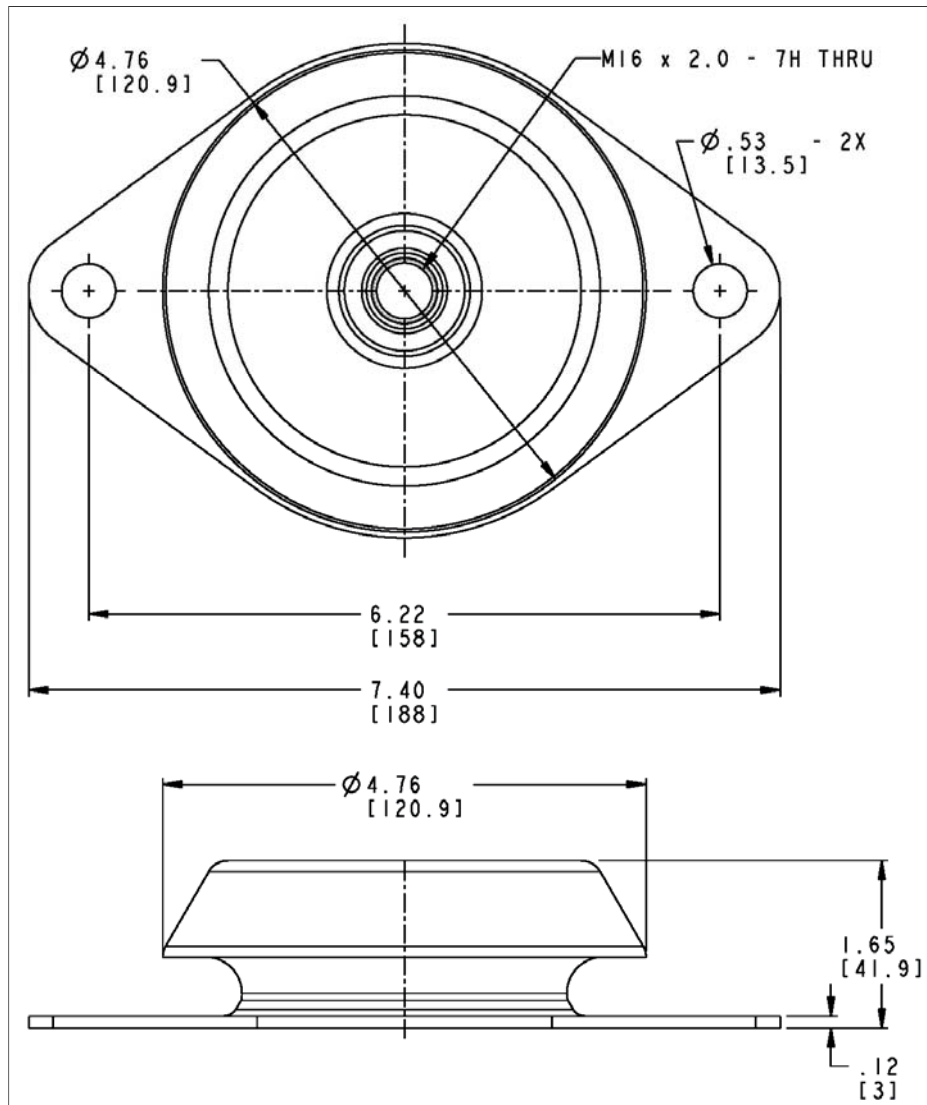
Dimension and Performance Characteristics



ArmorFlex™ Mount Series: 2132

Dimension and Performance Characteristics

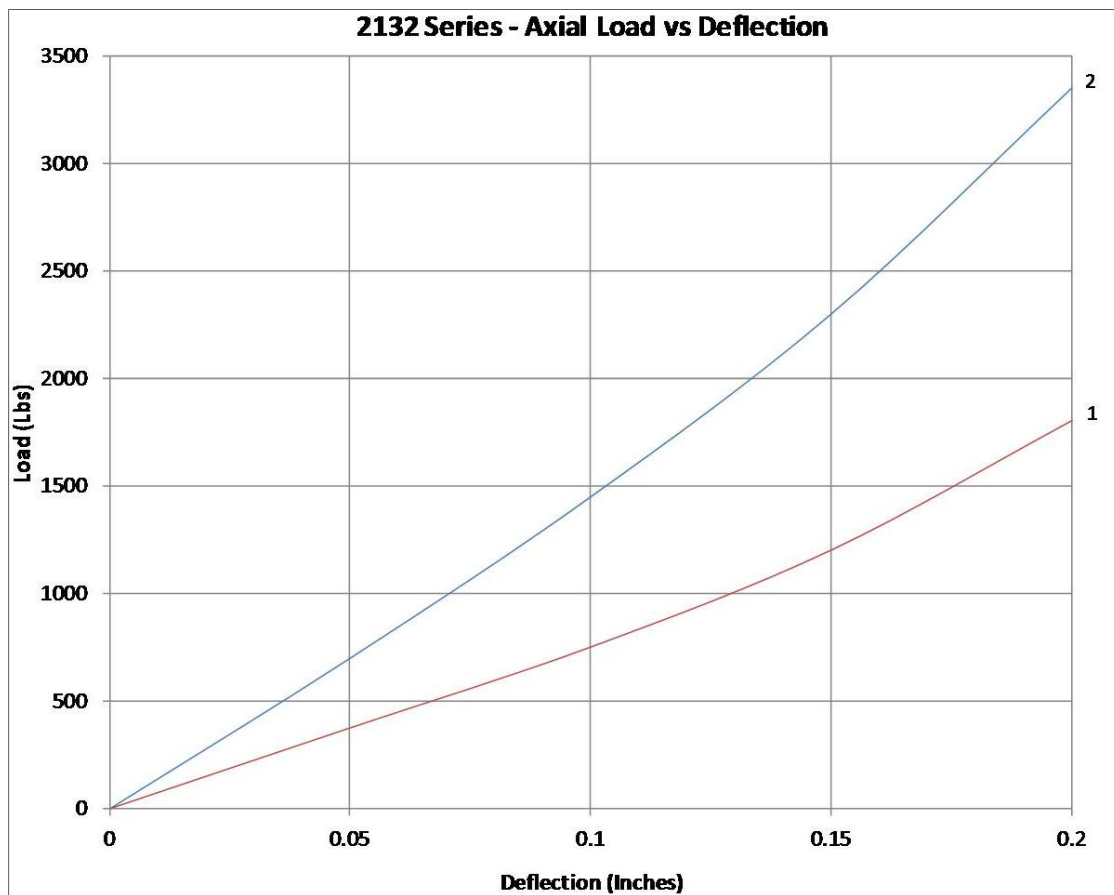
| Part Number | Load vs. Deflection Requirements | | |
|-------------|----------------------------------|------------------------------|---------------|
| | Load \pm 15% lbs. (kg) | Deflection inches (mm) | Color Code |
| 2132-1 | 990 (449) | .118 (3.0) | Red |
| 2132-2 | 1550 (703) | .118 (3.0) | Orange |



S

ArmorFlex™ Mount Series: 2132

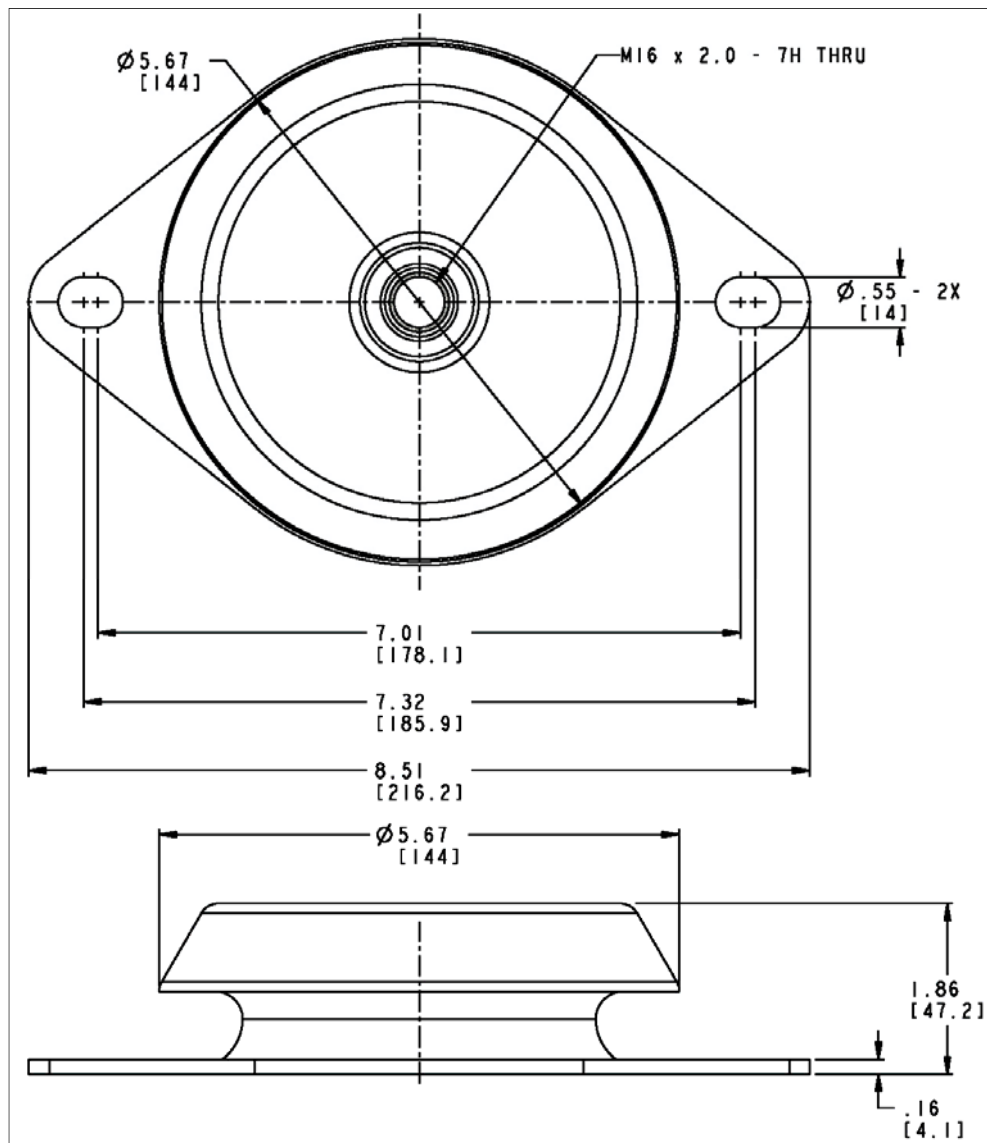
Dimension and Performance Characteristics



ArmorFlex™ Mount Series: 2133

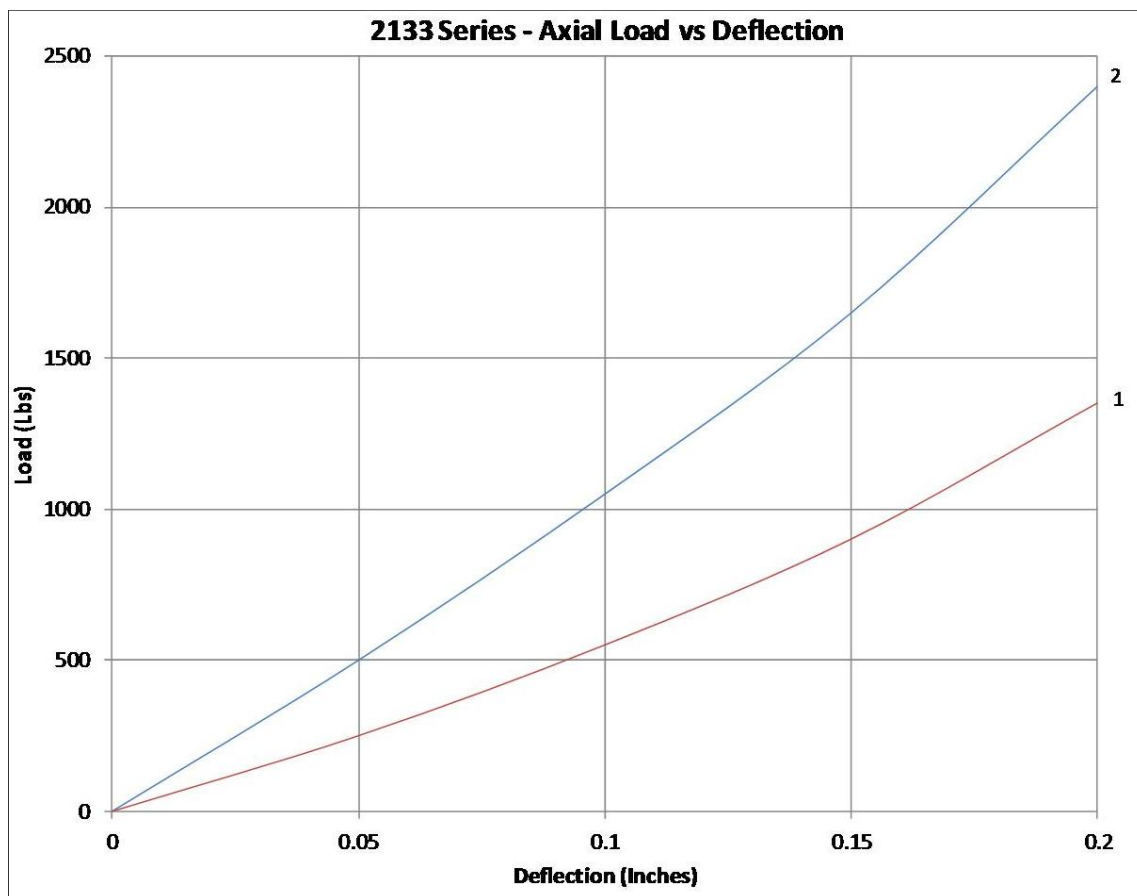
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | |
|-------------|----------------------------------|------------------------------|---------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Color Code |
| 2133-1 | 990 (449) | .118 (3.0) | Red |
| 2133-2 | 1750 (794) | .118 (3.0) | Orange |



ArmorFlex™ Mount Series: 2133

Dimension and Performance Characteristics



ArmorFlex™ Mount Series 2189



Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 165 lbs.

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

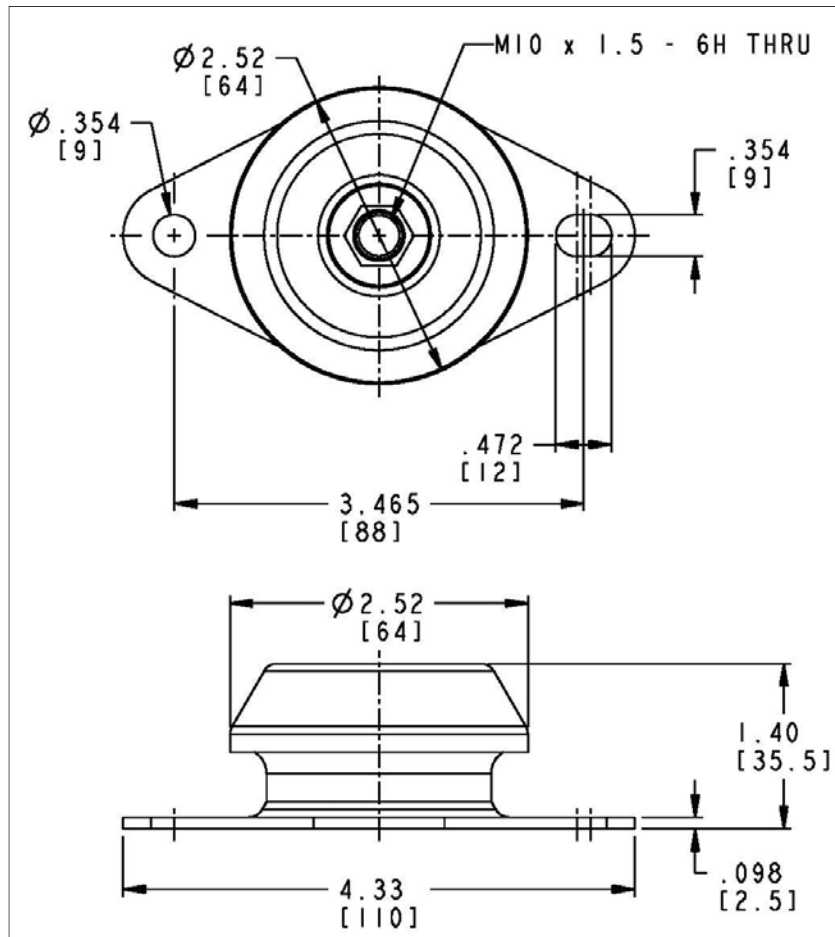
Elastomeric Data

- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$).

ArmorFlex™ Mount Series: 2189

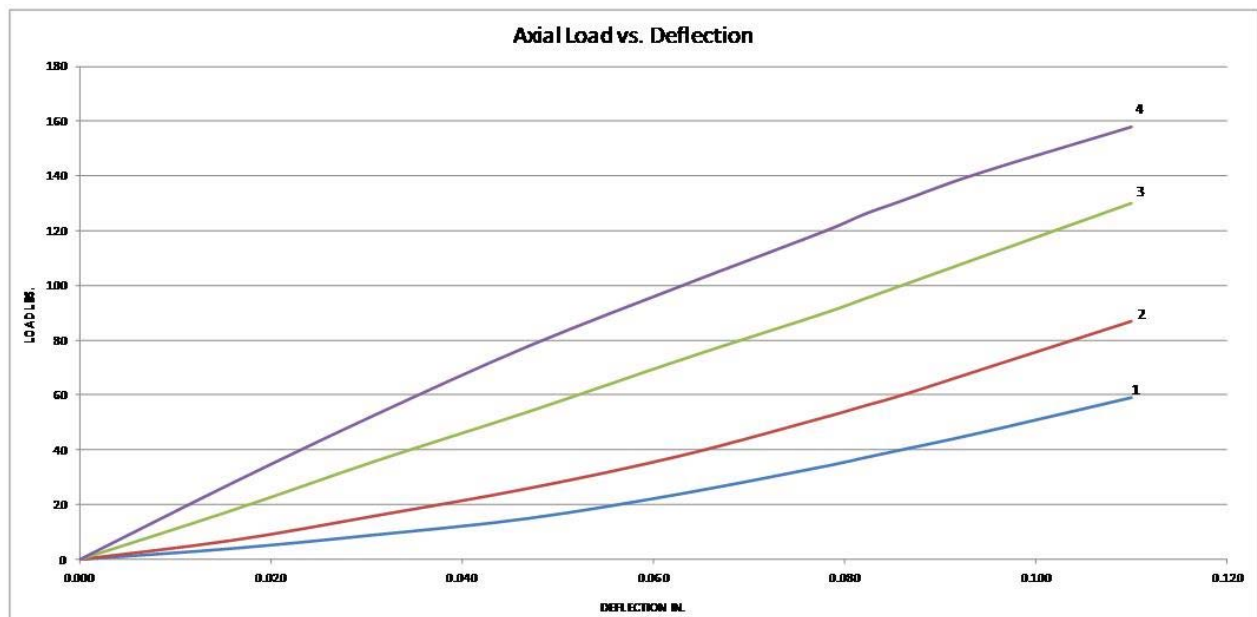
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------------|-----------|------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Durometer | Color Code |
| 2189-1 | 66 (30) | .118 (3.0) | 40 | Red |
| 2189-2 | 99 (45) | .118 (3.0) | 50 | Orange |
| 2189-3 | 143 (65) | .118 (3.0) | 60 | Yellow |
| 2189-4 | 165 (75) | .118 (3.0) | 70 | Green |



ArmorFlex™ Mount Series: 2189

Dimension and Performance Characteristics



ArmorFlex™ Mount Series 2191



Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 309 lbs.

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

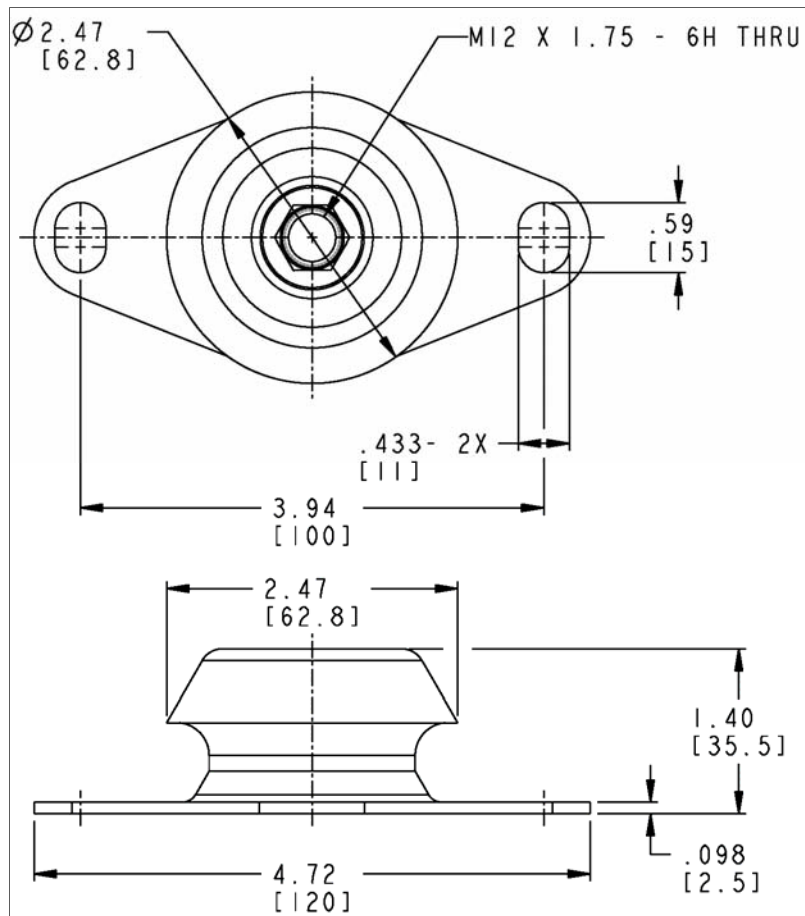
Elastomeric Data

- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$).
-

ArmorFlex™ Mount Series: 2191

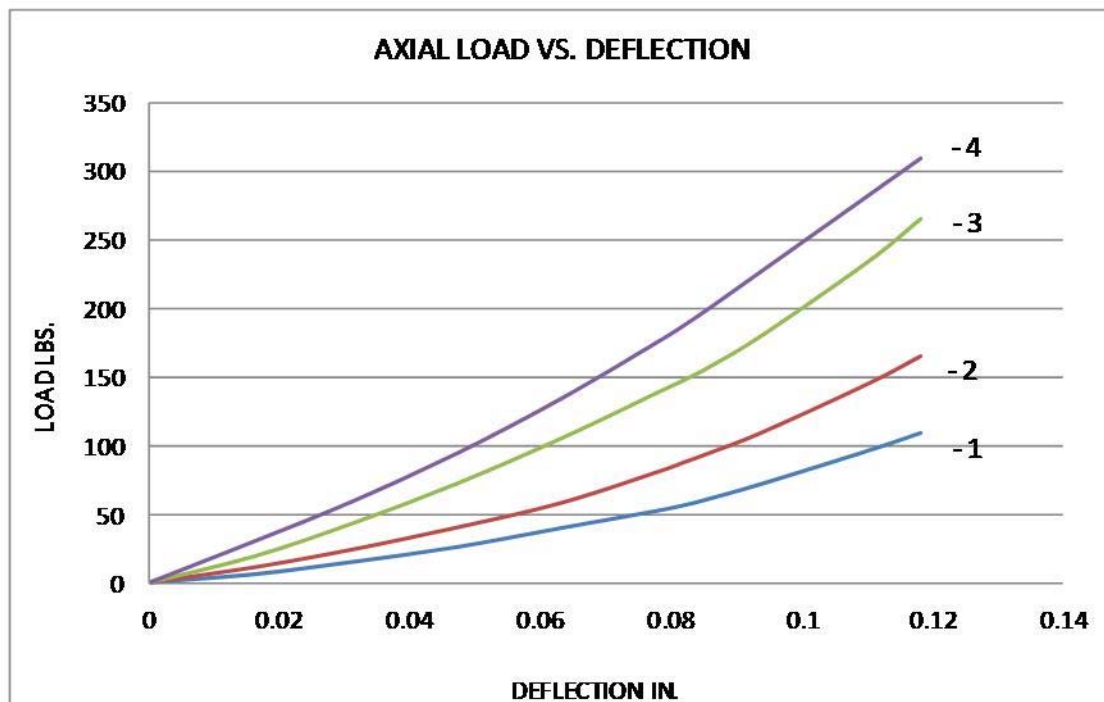
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------------|-----------|------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Durometer | Color Code |
| 2191-1 | 110 (50) | .118 (3.0) | 40 | Red |
| 2191-2 | 165 (75) | .118 (3.0) | 50 | Orange |
| 2191-3 | 265 (120) | .118 (3.0) | 60 | Yellow |
| 2191-4 | 309 (140) | .118 (3.0) | 70 | Green |



ArmorFlex™ Mount Series: 2191

Dimension and Performance Characteristics



ArmorFlex™ Mount Series 2193



Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 518 lbs.

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

Elastomeric Data

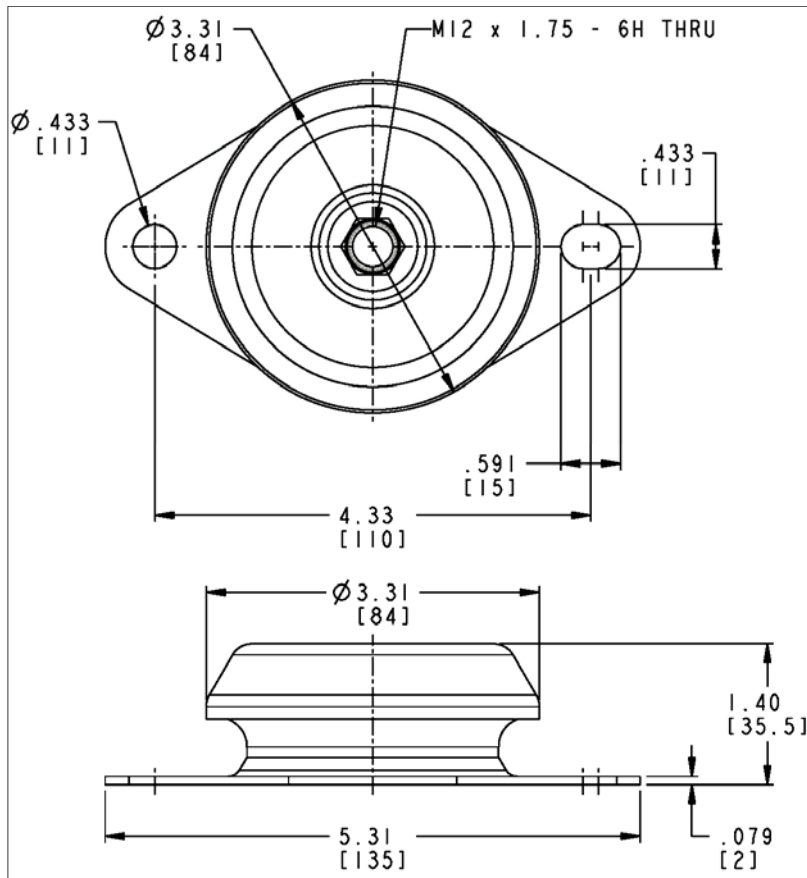
- Natural Rubber has an operating range of -25°F to +160°F (-37°C to +70°C).



ArmorFlex™ Mount Series: 2193

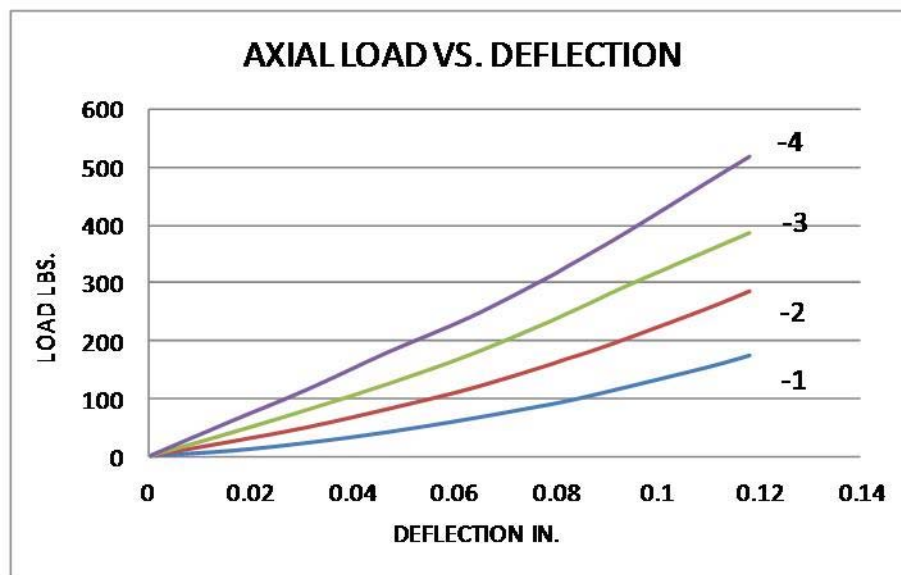
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------------|-----------|------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Durometer | Color Code |
| 2193-1 | 176 (80) | .118 (3.0) | 40 | Red |
| 2193-2 | 287 (130) | .118 (3.0) | 50 | Orange |
| 2193-3 | 386 (175) | .118 (3.0) | 60 | Yellow |
| 2193-4 | 518 (235) | .118 (3.0) | 70 | Green |



ArmorFlex™ Mount Series: 2193

Dimension and Performance Characteristics



ArmorFlex™ Mount Series 2197



Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 992 lbs.

Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

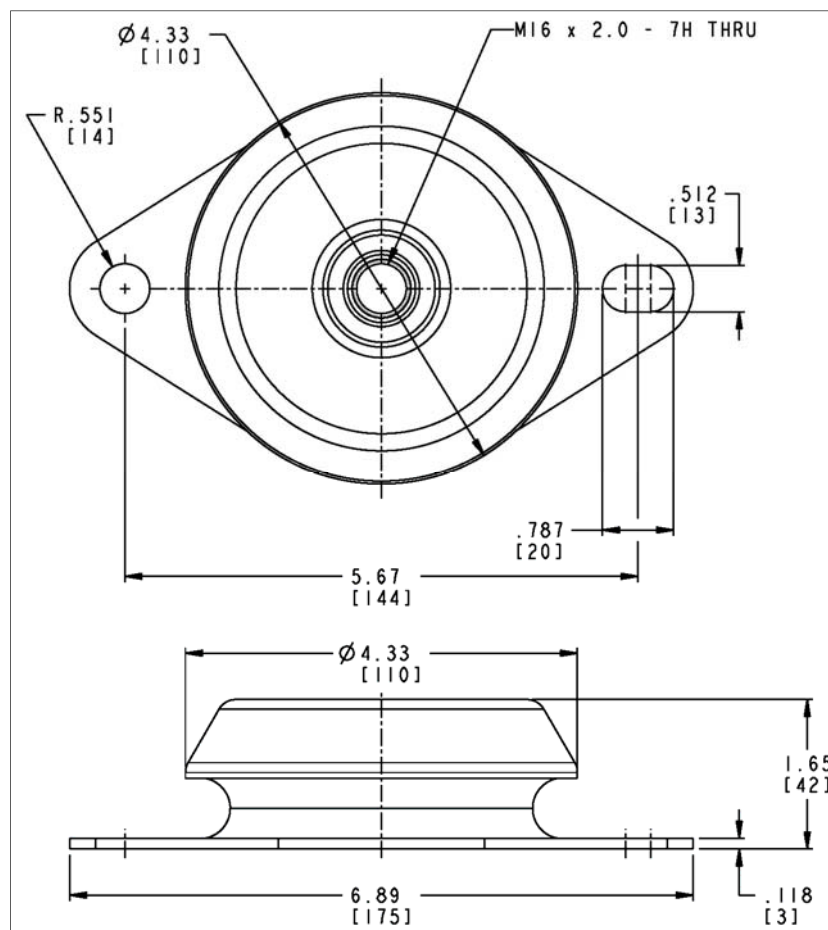
Elastomeric Data

- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$).
-

ArmorFlex™ Mount Series: 2197

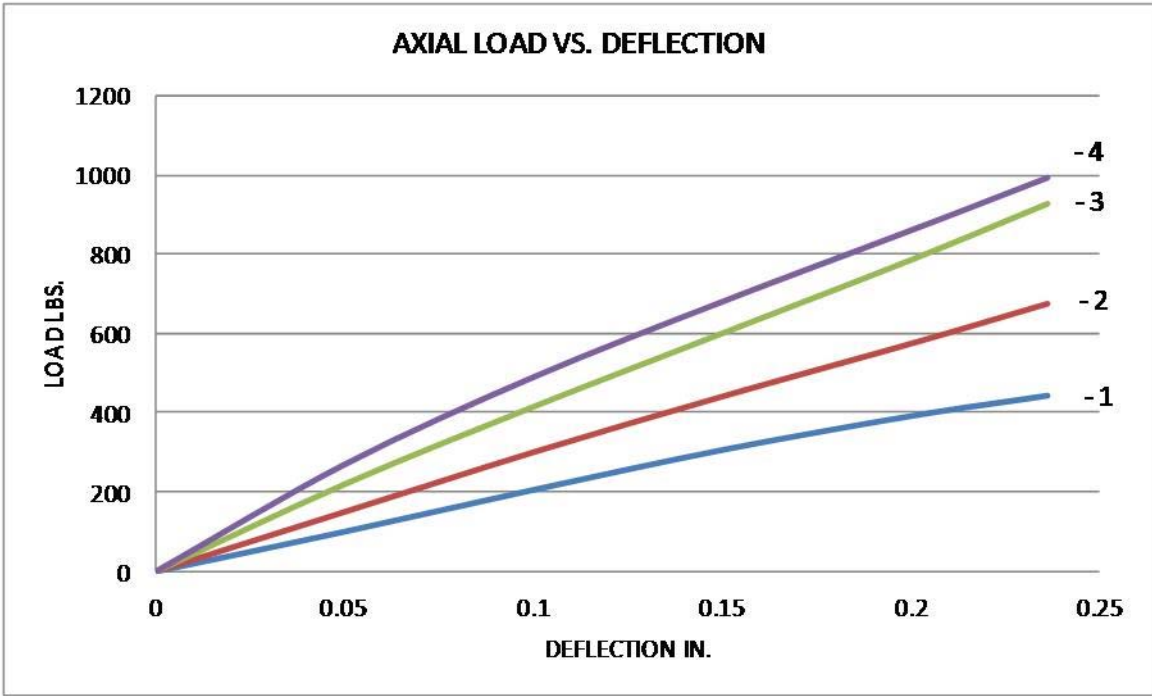
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------|-----------|------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Durometer | Color Code |
| 2197-1 | 441 (200) | .236 (6.0) | 40 | Red |
| 2197-2 | 673 (305) | .236 (6.0) | 50 | Orange |
| 2197-3 | 926 (420) | .236 (6.0) | 60 | Yellow |
| 2197-4 | 992 (450) | .236 (6.0) | 70 | Green |



ArmorFlex™ Mount Series: 2197

Dimension and Performance Characteristics



ArmorFlex™ Mount Series 2199



Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 2205 lbs.

Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

Elastomeric Data

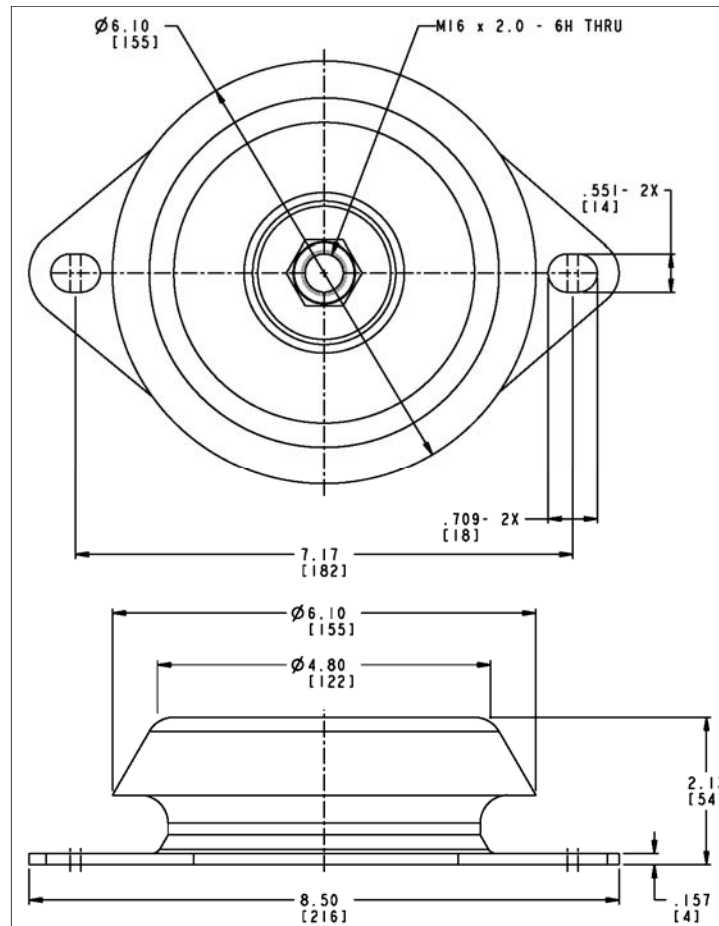
- Natural Rubber has an operating range of -25°F to +160°F (-37°C to +70°C).



ArmorFlex™ Mount Series: 2199

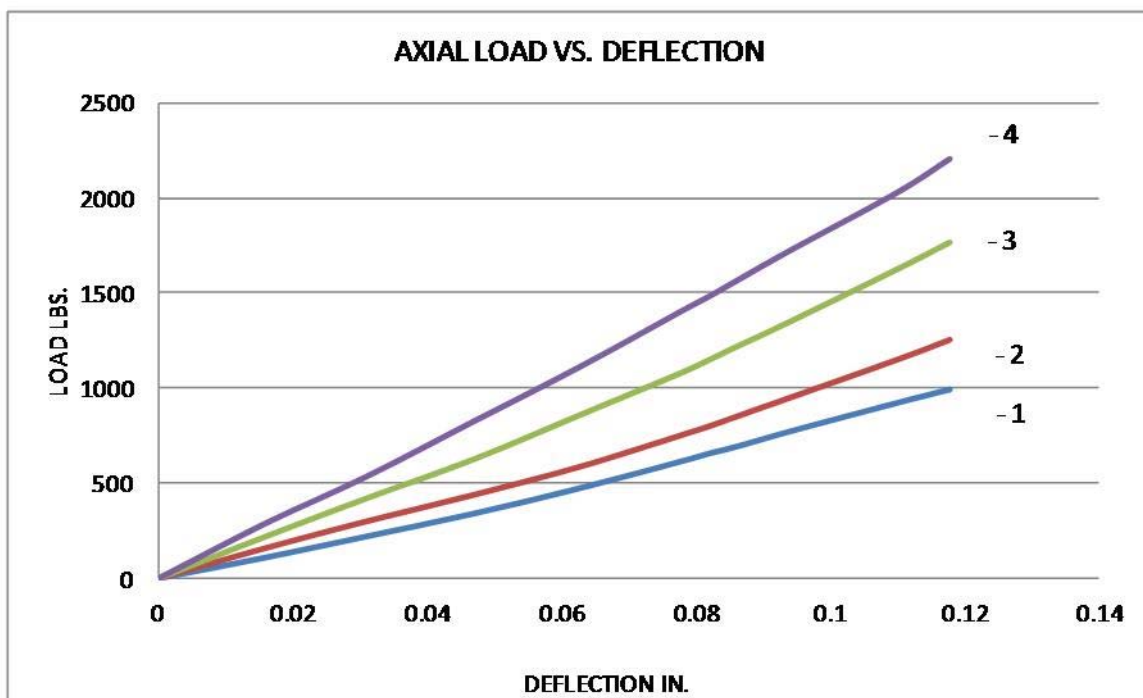
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------------|-----------|------------|
| | Load ± 15% lbs. (kg) | Deflection Inches (mm) | Durometer | Color Code |
| 2199-1 | 992 (450) | .118 (3.0) | 40 | Red |
| 2199-2 | 1257 (570) | .118 (3.0) | 50 | Orange |
| 2199-3 | 1764 (800) | .118 (3.0) | 60 | Yellow |
| 2199-4 | 2205 (1000) | .118 (3.0) | 70 | Green |



ArmorFlex™ Mount Series: 2199

Dimension and Performance Characteristics



ArmorFlex™ Mount Series 2201



Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 5799 lbs.

Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

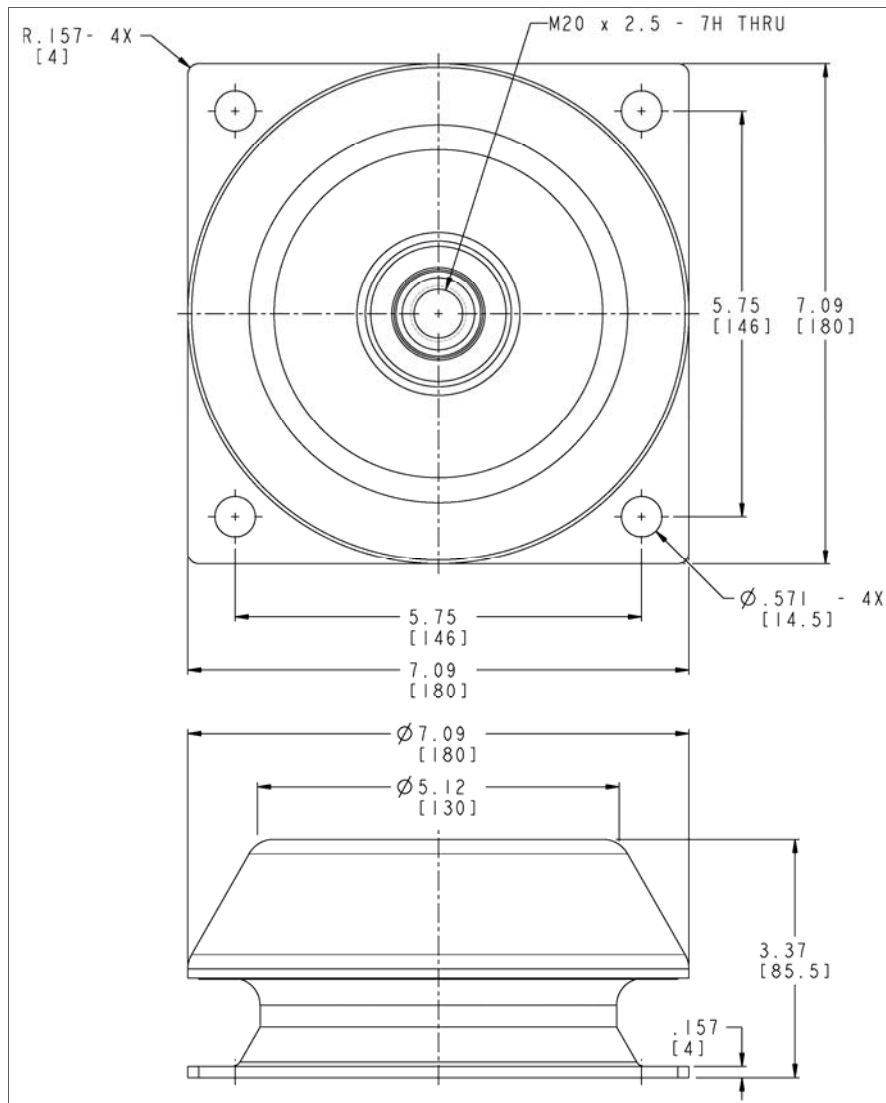
Elastomeric Data

- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$).
-

ArmorFlex™ Mount Series: 2201

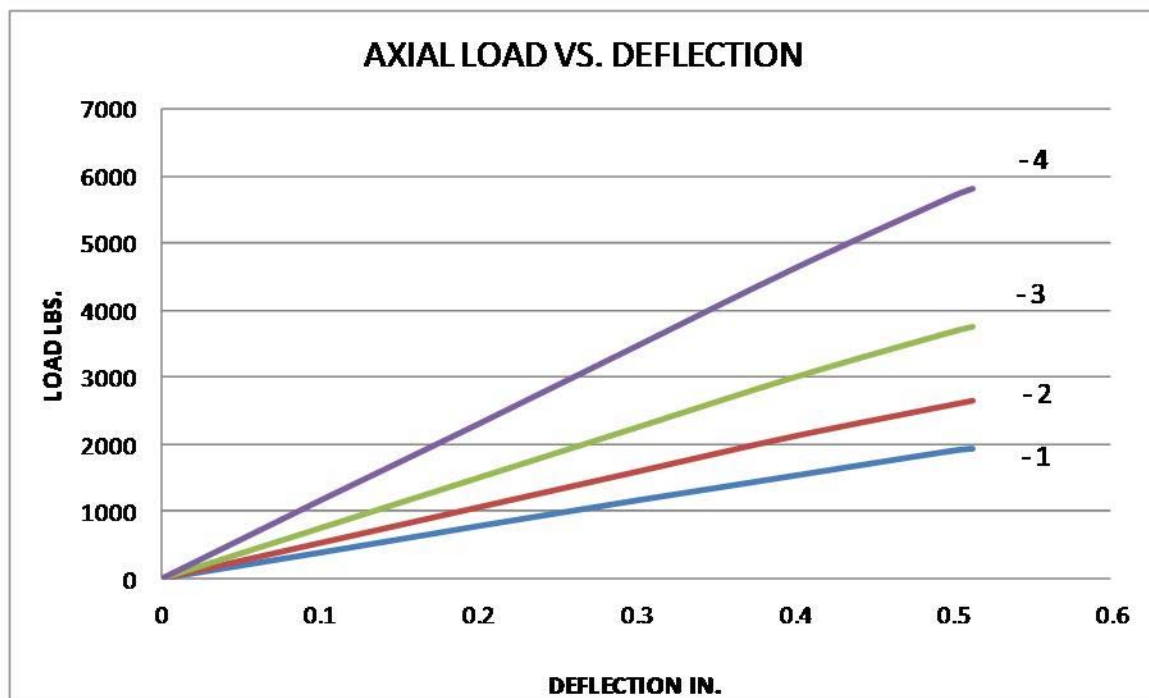
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------------|-----------|------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Durometer | Color Code |
| 2201-1 | 1929 (875) | .512 (13.0) | 40 | Red |
| 2201-2 | 2646 (1200) | .512 (13.0) | 50 | Orange |
| 2201-3 | 3749 (1700) | .512 (13.0) | 60 | Yellow |
| 2201-4 | 5799 (2630) | .512 (13.0) | 70 | Green |



ArmorFlex™ Mount Series: 2201

Dimension and Performance Characteristics



ArmorFlex™ Mount Series

2202



Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 9261 lbs.

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

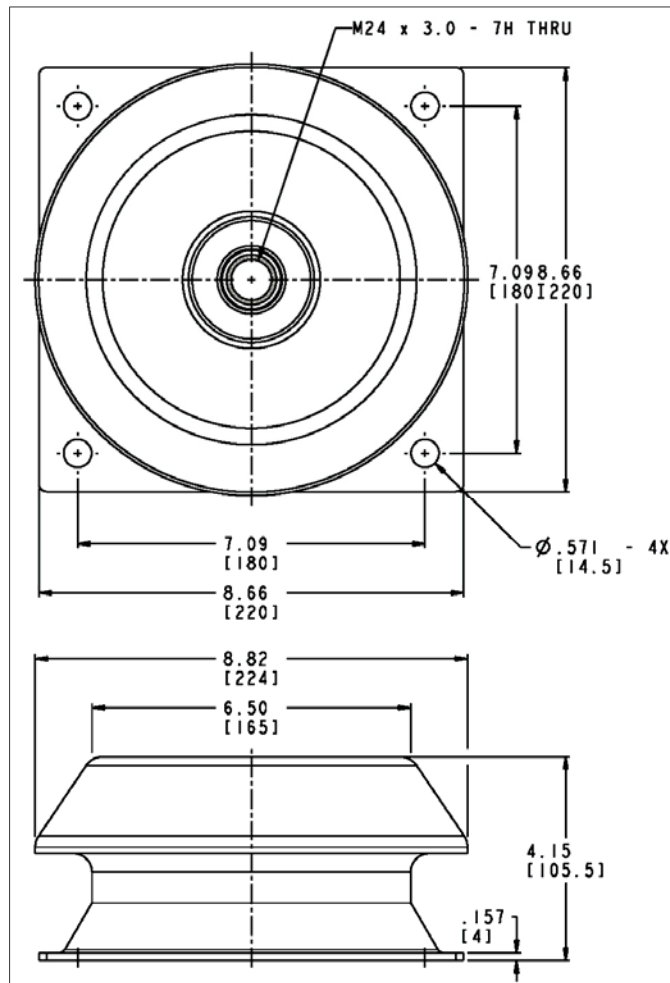
Elastomeric Data

- Natural Rubber has an operating range of -25°F to $+160^{\circ}\text{F}$ (-37°C to $+70^{\circ}\text{C}$).

ArmorFlex™ Mount Series: 2202

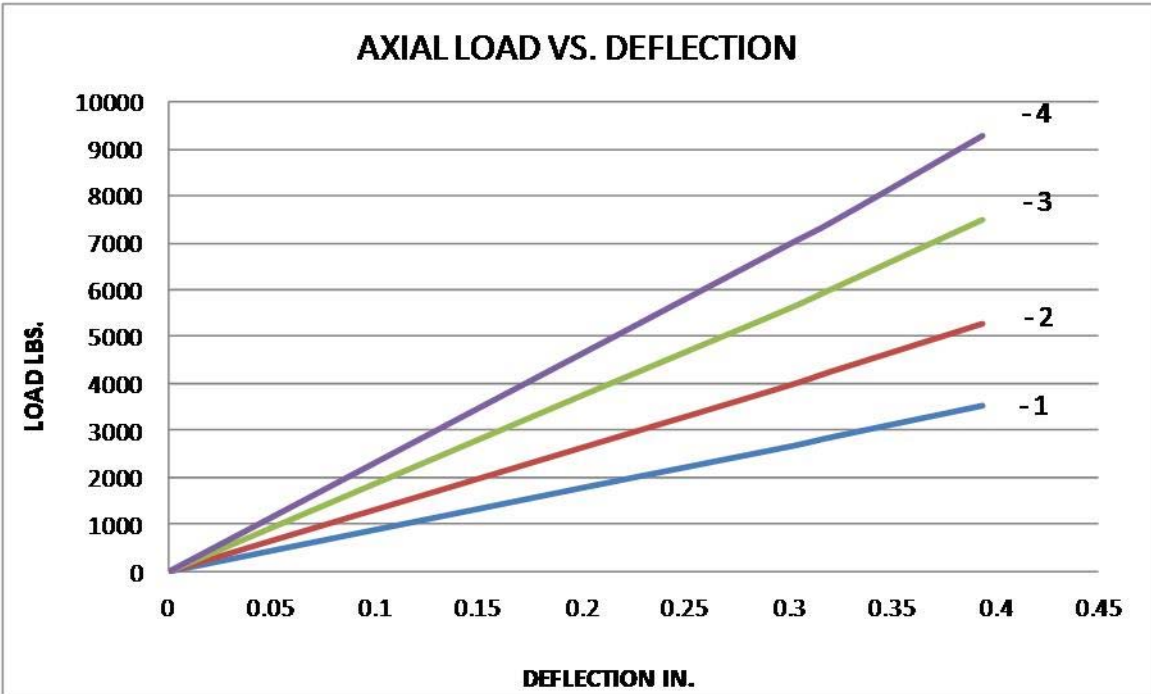
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------------|-----------|------------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Durometer | Color Code |
| 2202-1 | 3528 (1600) | .394 (10.0) | 40 | Red |
| 2202-2 | 5292 (2400) | .394 (10.0) | 50 | Orange |
| 2202-3 | 7497 (3400) | .394 (10.0) | 60 | Yellow |
| 2202-4 | 9261 (4200) | .394 (10.0) | 70 | Green |



ArmorFlex™ Mount Series: 2202

Dimension and Performance Characteristics



ArmorFlex™ Mount Series: 2208

Dimension and Performance Characteristics



Attributes

- Fail-safe
- Compact, low profile design
- Easy to install
- Zinc plated construction

Applications

- Marine engines
- Marine generators
- Off-highway equipment
- Construction equipment

Benefits

- Rugged construction
- All steel construction
- Can handle loads up to 287 lbs.

Specifications

- Natural frequency - 8-10 Hertz at rated load
- Transmissibility at resonance - 10 max
- Standard material - zinc plated steel

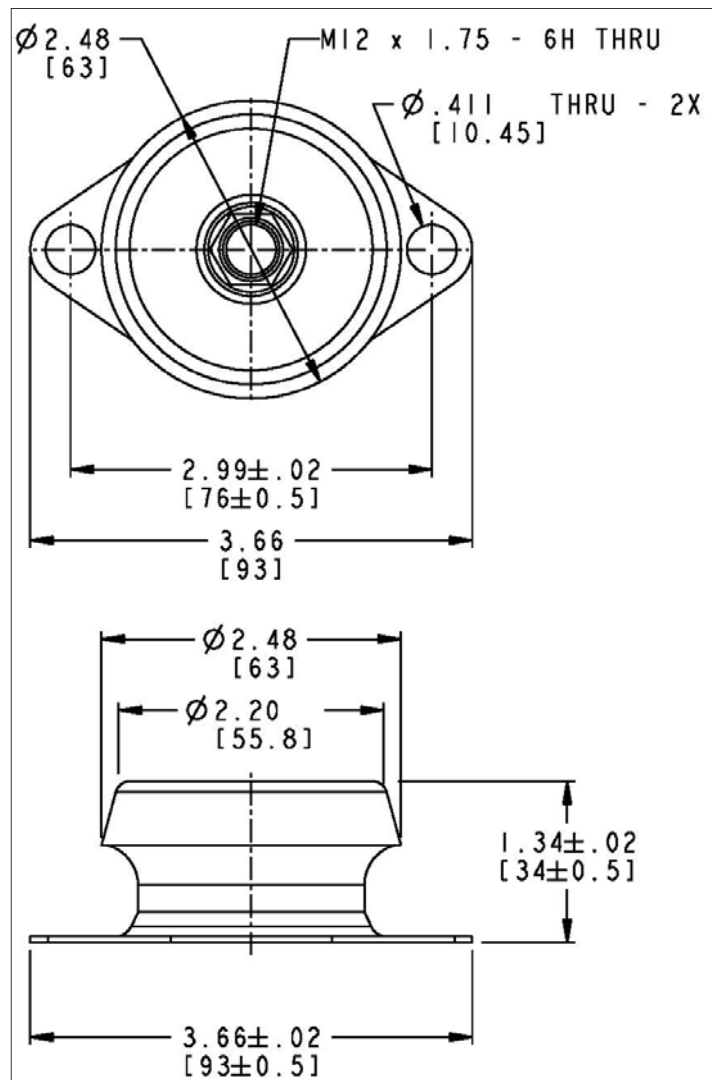
Elastomeric Data

- Natural Rubber has an operating range of -25°F to +160°F (-37°C to +70°C).
-

ArmorFlex™ Mount Series: 2208

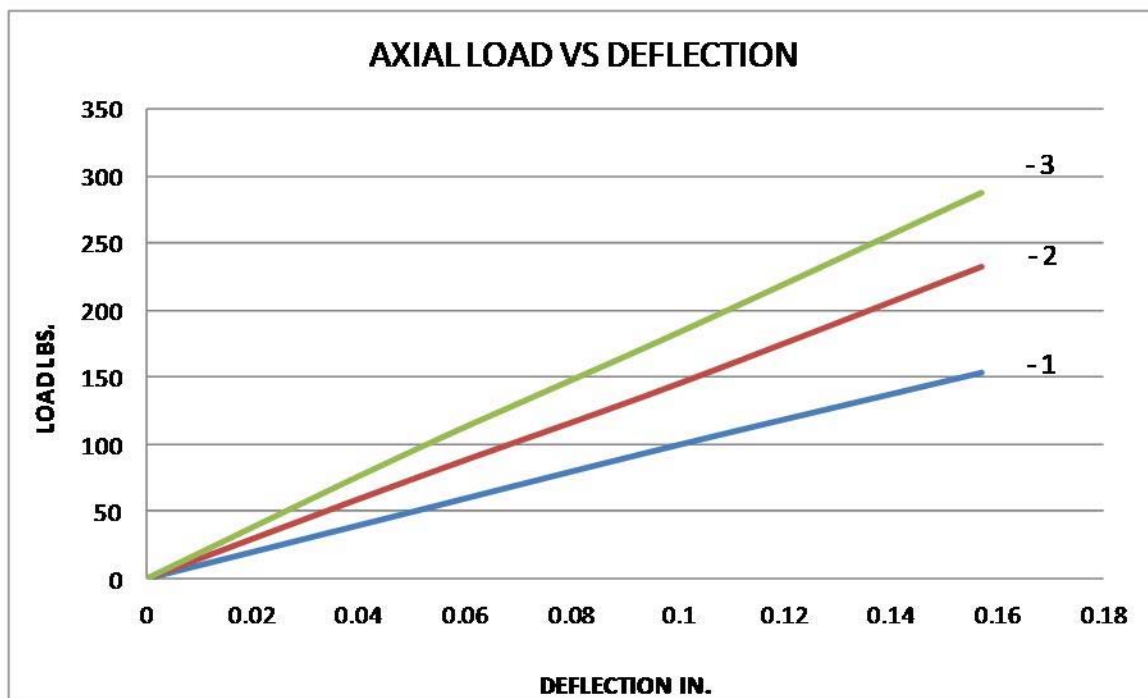
Dimension and Performance Characteristics

| Part Number | Load vs. Deflection Requirements | | | |
|-------------|----------------------------------|------------------------------|-----------|--------|
| | Load ± 15% lbs. (kg) | Deflection inches (mm) | Durometer | Color |
| 2208-1 | 154 (70) | .157 (4.0) | 40 | Red |
| 2208-2 | 232 (105) | .157 (4.0) | 50 | Orange |
| 2208-3 | 287 (130) | .157 (4.0) | 60 | Yellow |



ArmorFlex™ Mount Series: 2208

Dimension and Performance Characteristics



PRODUCT INFORMATION

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Elastomeric Solutions



Polymer Technologies is the most dynamic and fastest growing manufacturing company of noise, vibration and temperature control solutions. Exceptional customer service, technical support and engineering without material bias set us apart.

Our strong commitment to ISO 9001 and AS9100 quality standards insures consistent quality products with each shipment.

Our philosophy is to be a reliable resource and to develop close working relationships in the process. The mission is to deliver engineered solutions that add value and provide a competitive edge for our customers.



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Engineering Sound Solutions™

Elastomeric Solutions Division



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