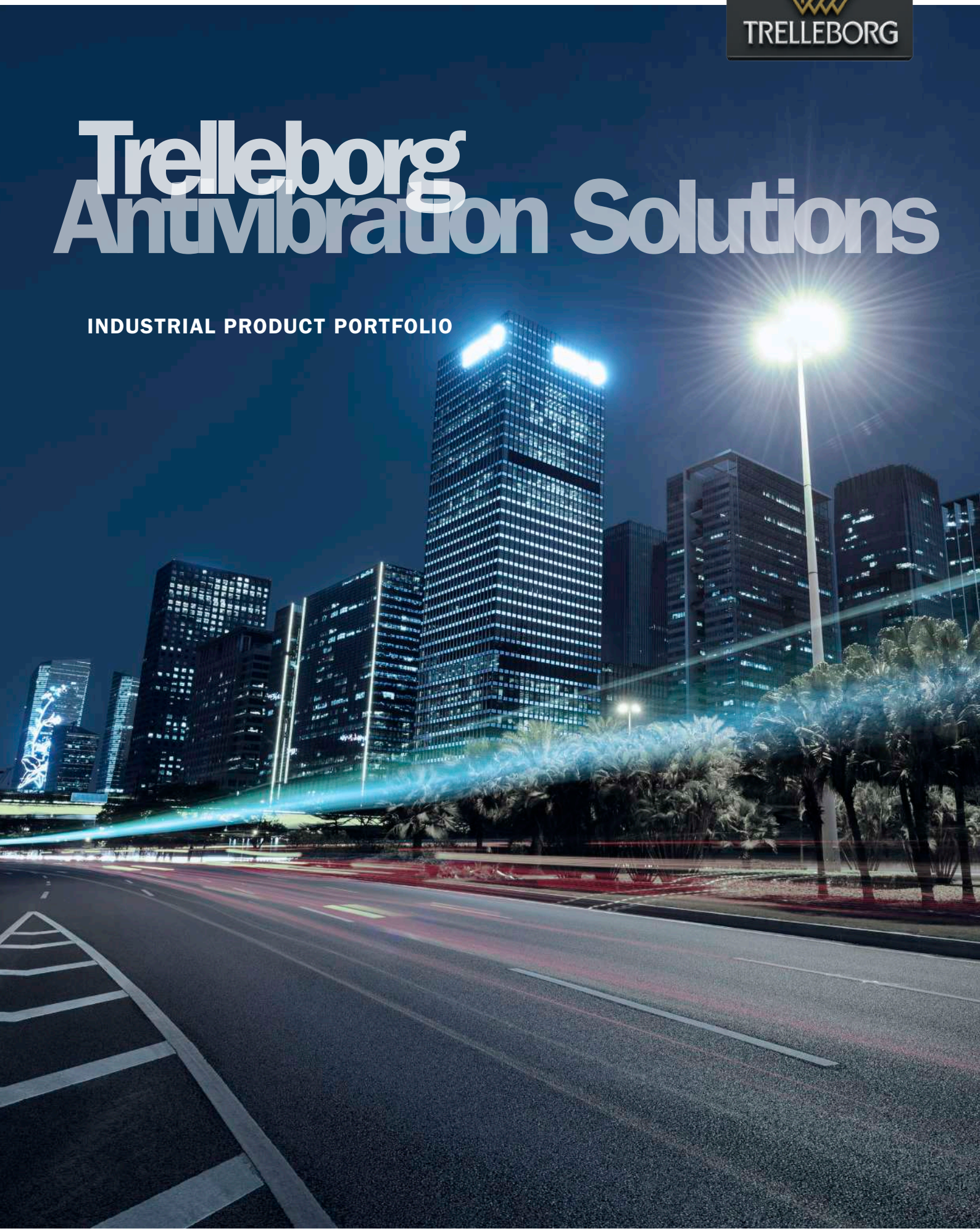
Trelleborg Antivibration Solutions

INDUSTRIAL PRODUCT PORTFOLIO



On the frontline of innovation

Noise and vibration in industrial equipment causes machine damage and discomfort to people. A global leader in polymer engineering, Trelleborg Industrial Antivibration Solutions specializes in minimizing these effects and delivering improvements people can physically feel. Calling on over 100 years' experience in the industrial sector, we deliver off-the-shelf products and bespoke solutions which add value to your operations.

Found in everything from stationary and mobile installations through to machine tools and processing equipment, all our solutions are modelled, tested and certified to perform in the most demanding environments. Our reputation rests on our ability to deliver compliant and pioneering solutions which enhance equipment, comfort and safety, while reducing downtime, maintenance and long-term cost of ownership.

Welcome to the frontline of industrial innovation. Welcome to Trelleborg.

CONTENTS

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

Choice, expertise, availability.

– AND EASY TO DO BUSINESS WITH

Our market-leading range of high quality solutions are fully tested and compliant with all international standards. The breadth and depth of our global service and support network means we're accessible in all territories. Our technology offers sustainability environmentally and operationally. And from design and testing through to installation and training, we'll work with you to optimize your application. In terms of choice, quality, support and logistics, we offer a complete, end-to-end service. We don't just make life feel better. We make it feel easier, too.

Our capabilities cover:

- **Solutions against vibration.** Our vibration isolation technology and solutions takeaway the stress caused by vibration to protect your investment and create safer and better places to work
- **Solutions against noise.** Our range of passive and active systems protect people in even the most challenging environments, ensuring both their safety and the continued operation of machinery
- **Solutions against shock.** Our range of products and services protect people, equipment and buildings from damaging impacts caused by drops, collision, explosion and even seismic activity.

Visit our website

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

The use of rubber as a spring material

Vibration isolation is based on installing machinery on springs or resilient material of known stiffness and damping.

The types of spring material which are used most often are rubber and steel. Another alternative is air springs.

Rubber has high load bearing capacity with an ability to accommodate overload conditions without the catastrophic failures associated with steel and other materials. It can carry complex loadings more easily and economically than other alternatives.

The bonding of rubber to a rigid material creates a product, which can accommodate movement without any sliding or rotating surfaces that require lubrication. This allows operation in many harsh environments without concern and with substantially reduced maintenance requirements

Components can be designed to integrate with the space limitations of the application and provide control in all six modes of freedom.

Steel springs are normally used in the form of coil springs or leaf springs. The benefit of these is that they permit relatively high deflections, but their disadvantage is that they provide very little damping. Due to this, excessive movement occurs when passing through the resonance range. Often special devices are installed in order to limit deflections.

Rubber springs however feature many unique characteristics such as high intrinsic damping which helps the designer keep vibration amplitudes to a minimum whilst simultaneously reducing high frequency structure borne noise.

To allow their properties to be fully utilized, Trelleborg AVS rubber mountings are available in various Hardness grades and polymer types.

Rubber as an engineering material

Compared with other engineering materials, rubber is very ductile. In some cases, the elongation may be higher than 500%, and by far the highest proportion of this strain is elastic. Metals, on the other hand, have very small strains below the elastic limit. Compared with metals, the tensile strength of rubber is low. The maximum level that can be achieved with rubber is 25-30 MPa. However, because of the high strain, rubber has a very large work absorption capacity compared with the best grade of steel.

If a material is subjected to a load below the elastic limit, the deformation will, according to Hooke´s law, be proportional to the load. This does not apply to rubber under tension or compression. This means that rubber does not have any constant tensile or compression modulus of elasticity. Metals will normally be softer towards the end of a tensile test, while the opposite is often the case with rubber. Rubber does not have a yield point, and the modulus is increased until there is abrupt failure.

High elasticity ductility

High elastic ductility is, therefore, the most pronounced feature of rubber. Just how easy it is to deform rubber is shown by the fact that the modulus of elasticity of compression for rubber within the normal Hardness range, 30-80° IRH, is between 2 and 12 MPa; while the modulus of elasticity of steel is 210,000 MPa, This means that rubber is about 100,000 times softer than steel.

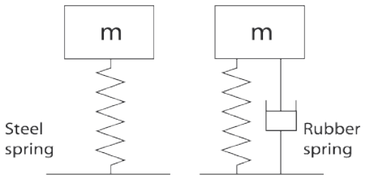
Sound insulation

As sound-insulating material, rubber is one of the very best. The effect of sound insulation increases with the thickness of the rubber. Rubber is an excellent absorber of impact sound, which occurs in foundations, floors, buildings, etc.

Damping capacity

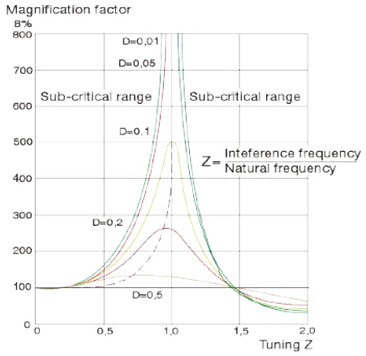
Damping capacity is an additional important feature of compound rubber. This is of particular importance when operating a machine that is supported on springs through the resonance range. In Fig.1 you can see the principle difference between an almost ideal spring and a rubber spring. The resonance deflection with rubber springs is only 1/5 to 1/50 compared with the deflection when using steel springs with the same stiffness, see Fig.2. With a spring made of natural rubber working with compression or shear load, the direct loss of energy is between 6 and 30% depending on the Hardness of the rubber. The energy loss is such that is it possible in many cases to use rubber springs as dampers. Care must be taken when it comes to damping in a rubber element. If the element works with high amplitudes, a substantial amount of energy is converted into heat, and the heat which is generated may cause the rubber element to be destroyed see Fig.3. In the case of simple impact, the vibration sequence will be as shown in Fig.4. The left-hand curve represents a steel spring, while the right hand curve represents a rubber spring. These two curves clearly show how quickly the vibrations degenerate in the rubber, while in the steel springs they diminish slowly.

Fig. 1



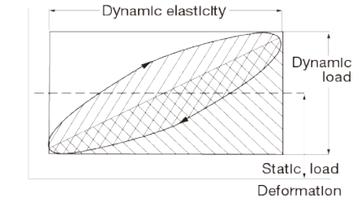
Schematic difference between rubber spring and steel spring

Fig. 2



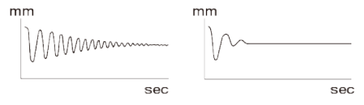
Resonance curve for spring material with different internal damping

Fig. 3



Schematic representation of the internal damping properties of rubber. The elliptical area indicates the loss of energy

Fig. 4



Vibrations sequence with single impact for steel and rubber springs

Product images are graphical representations. Actual items may differ in appearance

Environmental conditions

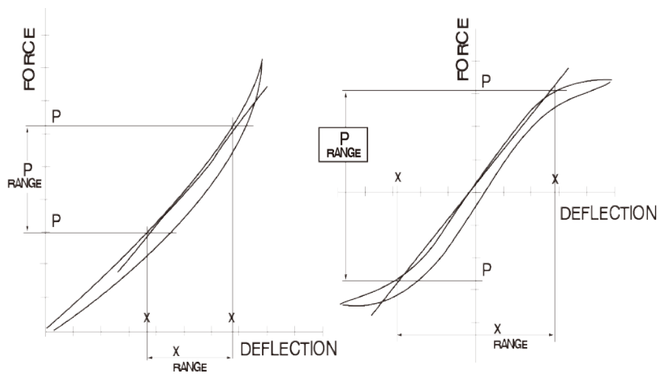
Trelleborg products are manufactured in a wide range of rubber compound types. A range of Hardness is available in each compound type to allow the required stiffness to be achieved. Each compound is carefully formulated to obtain the best performance for specific properties. The compound chosen depends upon the most important properties for the application's requirement. Strength and fatigue requirements, operating temperature, environmental conditions and potential contamination must be considered. Most Trelleborg rubber compounds are based on polyisoprenes, offering high strength and excellent performance characteristics. A range of synthetic rubber compounds is also available for special applications where resistance to continuous high temperatures (>75°C) or other harsh environmental conditions is required. Anti-oxidants and anti-ozonants are included in many formulations to provide resistance against ozone and ultra violet rays.

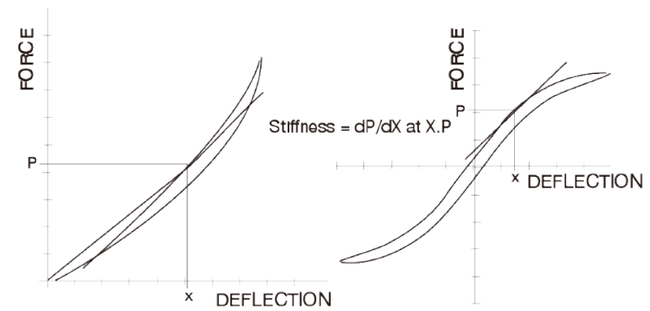
Static Stiffness

The stiffness of a spring is a measure of applied force (P) against a resulting Deflection (X). Measurements taken at a continuous feed rate (usually in the order of 1mm/sec velocity) provide static (or pseudo static) characteristic.

The curves in Fig. 5 show alternative methods of determining stiffness.

Fig. 5





dP/dX at XP average gradient over P (or X) range
(usually derived by least squares method of curve fitting)

Typical Compound Properties

COMMERCIAL NAME INTERNATIONAL DESIGNATION	BUTYL RUBBER IIR	ACRYLONITRILE BUTADIENE RUBBER NBR	NATURAL RUBBER NR
Hardness range IRH	45 - 70	40 - 70	35 - 80
Temperature range	-40 to + 120°C	-40 to + 130°C	-40 to + 70°C
PROPERTIES			
Creep performance	Moderate	Moderate	Good
Fatigue performance	Good	Moderate	Very Good
High temperature performance	Good	Good	Moderate
Low temperature performance	Good	Good	Good
Physical strength	Good	Good	Excellent
RESISTANT TO			
Acids	Very Good	Conditional	Conditional
Oil and greases	Not Suitable	Excellent	Not Suitable
Ozone	Very Good	Moderate	Moderate
Petrol	Not Suitable	Excellent	Not Suitable
Solvents, Aliphatic	Not Suitable	Very Good	Not Suitable
Solvents, Aromatic	Not Suitable	Conditional	Not Suitable
Solvents, Halogen	Not Suitable	Bad	Not Suitable
Water	Good	Good	Good
Durability	Good	Very Good	Very Good

Dynamic Stiffness

The stiffness of a rubber spring changes when a dynamic force is applied. This is known as the dynamic (or complex) stiffness. The dynamic stiffness is usually higher than the pseudo-static stiffness, (the difference being referred to as the dynamic to static ratio) and is affected by several factors including changes in frequency, temperature and amplitude. See Fig. 6.

The dynamic stiffness is considered to be unchanged between 5Hz and 80Hz under constant conditions. Above this frequency range, the dynamic stiffness of the springwill deviate from the ideal 'massless' spring stiffness. This is due to the mass effects of standing waves. "Wave effect" changes of dynamic stiffness are generated when the rubber section dimensions become comparable with multiples of the half wavelength of the propagated wave passing through the spring. Calculations of the deviation from ideal "massless" spring dynamic stiffness due to wave effect are complex and are normally obtained from test measurement. A typical stiffness curve for a large section rubber to metal bonded spring is shown across In Fig. 7.

Fig. 6

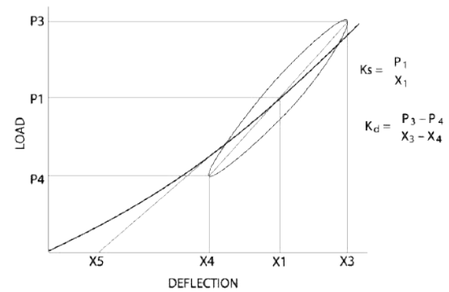
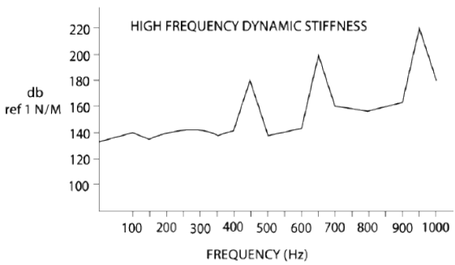


Fig. 7



Product images are graphical representations. Actual items may differ in appearance

Creep Performance

When a rubber spring is subjected to a constant load, the resultant deflection continues to increase with time. An example of creep that occurs in a pair of inclined springs is shown on the graph in Fig. 8. A typical creep characteristic for rubber used in antivibration mountings is 3-5% per time decade.

Gough-Joule Effect

Changes in temperature cause small changes in the deflection of loaded rubber springs. This change in deflection, which is reversible with temperature, is known as the Gough-Joule effect. For pairs of springs (Fig.9) shown a 10°C rise in temperature will cause an increase in clearance by approximately 4.5% of the nominal static deflection. See Fig.10.

Stiffness of a Rubber Spring

When calculating compression characteristics of rubber, it should be noted that the deflection is not directly proportional to the load, as the modulus of elasticity in compression increases with the degree of stress. The modulus of shear, however, remains constant for normal stresses.

The factor with the most effect on stiffness is the ratio between loaded and free surface area of rubber. This is the so-called shape factor (often designated S). With thin rubber sections, a very high modulus of elasticity can be achieved. In another respect, the stiffness of a rubber spring is determined by the dimensions and the Hardness of the rubber.

Fig. 11 illustrates the relationship between rubber Hardness and shear modulus, and Fig. 12 the dependence of the bulk modulus on the shape factor. The latter curve applies at 10% deformation.

The curves show that rubber at a shape factor of 0.25 for shear is about 6-8 times softer than compression for the same rubber Hardness. Since only 3-4 times the stress value in compression can be considered, it may be said that rubber is best used in shear to achieve large deflections and good isolation properties, particularly at low interference frequencies.

Fig. 8

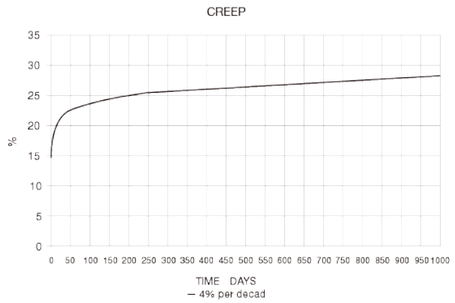


Fig. 9

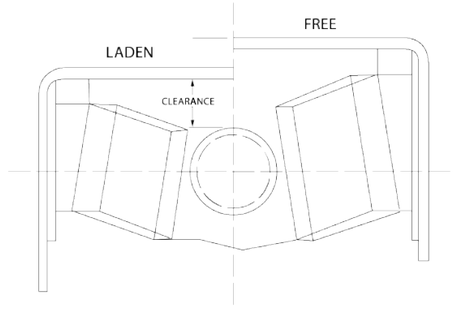
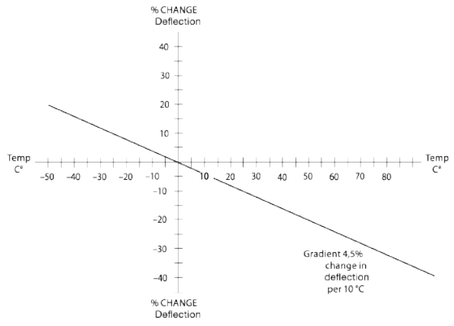


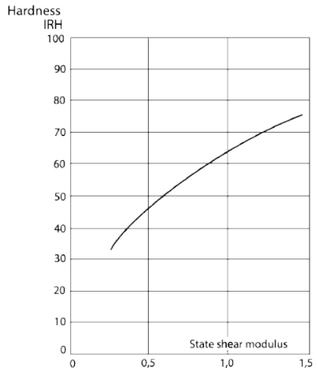
Fig. 10



Selecting an antivibration mount

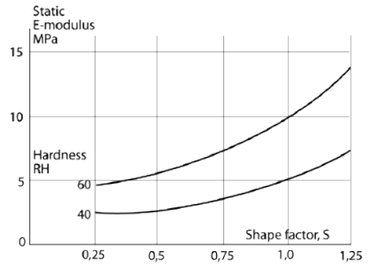
The principle relating to vibration isolation with springs is that they are placed between the machine and the base or plinth. To ensure effective isolation, the springs must be selected carefully, otherwise the result could be impaired performance. In favourable cases, the transmitted force can be reduced to only 2 or 3% of that of a rigidly mounted machine. In such cases, the vibrations are practically eliminated.

Fig. 11



Relationship between rubber Hardness and shear modulus

Fig. 12



The dependence of the compression modulus upon the shape factor

	SYMBOL	MEASUREMENT	DESCRIPTION
AMPLITUDE	A	(m)	The magnitude of the displacement of a vibration deflection from the mean position. The total vibration is thus twice the amplitude.
INTERFERENCE FREQUENCY	f	(Hz)	Is essentially the same as the frequency of the rotational speed of the machine or a harmonic.
FREQUENCY	f_o	(Hz)	The number of vibrations in a freely-oscillating system per unit of time.
MASS	m	(kg)	The mass of the oscillating system.
SPRING FORCE	F	(N)	The force emanating from a spring on the machine or the reverse.
DEFLECTION	d	(m)	The deformation of the spring from the neutral position.
STATIC SPRING STIFFNESS	Kstat	(N/m)	The force required in Newtons to compress the mounting 1 m.
DYNAMIC SPRING STIFFNESS	Kdyn	(N/m)	Spring stiffness when an alternating force is applied.
TUNING RATIO	Z	(-)	The ratio between interference frequency f and natural frequency fo.
INTERFERENCE FORCE	Fs	(N)	The force transmitted to the base of an isolated machine.
IMPULSE FORCE	Fi	(N)	The force transmitted to the base of a rigidly mounted machine.
MAGNIFICATION FACTOR	B	(-)	The part of the impulse force which is transmitted as a vibration force. Indicates the relation between the interference force Fs and impulse force Fi.
LEVEL OF ISOLATION	I	(-)	The part of the impulse force which is eliminated by the vibration isolation, (1-B) or, if B is expressed as a percentage, (100-B).
DAMPING COEFFICIENT	C	(Ns/m)	The linear viscous damping coefficient.
CRITICAL DAMPING	Ckr	(Ns/m)	The linear viscous damping coefficient at critical damping. A system is said to be critically damped if it returns to its initial static position without any over-oscillation after a displacement.
DAMPING FACTOR	D	(-)	The ratio between C and Ckr.
REDUCTION	R	(dB)	Isolation expressed in decibels.
DEFLECTION	δ_{stat}	(mm)	The static deflection for a spring.

Product images are graphical representations. Actual items may differ in appearance

Calculations

Calculation of deflection

When calculating deflection the following formula shall be used.

$$\delta_{stat} = \frac{F}{K_{stat}}$$

Calculation of isolation degree

The following formulas are used for calculating the isolation degree for a given spring.

The natural frequency:

$$f_o = \frac{1}{2\pi}\sqrt{\frac{K_{dyn}}{m}}$$

Tuning: $Z = f/f_o$

Magnification factor:

$$B = \frac{F_s}{F_i}\sqrt{\frac{1+4D^2Z^2}{(1-Z^2)^2+4D^2Z^2}}$$

The factor D depends on the internal damping of the spring material. In rubber D has the value 0.04-0.1 depending on Hardness of the rubber. The term $4D^2 \cdot Z^2$ can generally be neglected completely except in the resonance range, that is, when Z=1. If Z=1, that is, the machine speed (rpm) = the natural vibrations of the system, it is said that ther resonance, and the vibrations will be infinitely large if there is no damping.

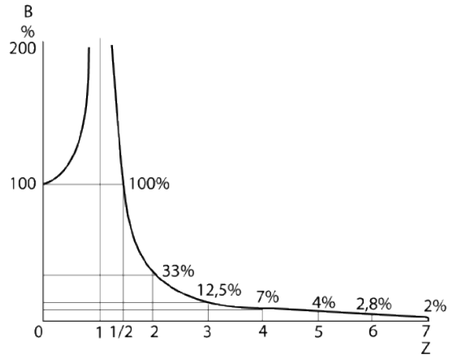
Here, then, a rubber spring has a direct advantage over a steel spring, which has minor internal damping and in which the amplitude, in theory, grows to a very high value in the resonance point. Refer to Fig. 2 on page 7.

Isolation degree I=(1-B) or as percentage, I=(1-B)x100

Reduction in dB R=20log(1/B)

The relative magnitude of the transmission of force depends entirely on the tuning ratio Z. If Z is high, the force transmission percentage will be small.

Fig. 13



Resonance curve

As can be seen in Fig. 13, B at Z=√2 has dropped to 100% and when Z is further increased, B drops rapidly. Vibration isolation is therefore of significance first when the operating frequency considerably exceeds the natural frequency. For practical applications, Z should be between 3 and 5, which means that 88 - 96 % of interference forces are eliminated.

Generally, the operating speed of a machine (interference frequency) is given. If the system´s natural vibration coefficient can be modified, and influence Z, it is possible to change the force transmitted. This is exactly what happens when vibration isolation is achieved. The low elasticity and shear moduli of rubber are used to achieve a low natural frequency.

To summarize, transmission of vibration forces can be effected in three ways:

1. Rigidly mounted machines transmit vibration forces in unchanged form to the base, which is therefore forced to be a part of the movement of the machine. The magnification factor can be regarded as being 100%.

2. In the case of an unsuitable spring system, the magnification factors will increase considerably and may amount to several hundred percent.

3. The force transmission percentage is reduced substantially by correct calculation and suitable mountings being installed between the machine and base. Typical reductions can be from 100 down to 10%, but in favourable circumstances can be as low as 2%.

All machines have more than one resonance point as, through many interacting movements, they can vibrate in different modes. The resonance points can be determined, but the methods of calculation are often difficult. Experience has shown that all resonance velocities that may arise do not need to be clarified. It is usually sufficient to calculate the more significant ones which can be determined easily. The desired level of isolation and the interference frequency determine where the resonance frequency shall be.

Shock isolation

Shock is usually described as a transient phenomenon as opposed to a vibration, which is a continuous process.

A shock pulse can normally be defined by parameters such as maximum amplitude (acceleration, for example), duration (in milliseconds, for example), and the shape of the pulse. The pulse may be a half sine wave, rectangular, saw tooth or other shape of wave.

The basic principle for achieving good shock isolation is to mount the machine on mountings that are soft enough to give a low natural frequency, and which can offer relatively large mounting deflections.

If the duration of a shock pulse is τ seconds, and the natural frequency of the set up is f_o Hz, then the product must be τf_o <approx. 0.25 if the isolation is to provide protection against the shock.

The value 0.25 is not an absolute value but depends on the shape of the shock pulse.

Storage

There may be changes in appearance and physical properties of rubber products during storage, particularly if adverse condition apply. ISO 2230 provides an ideal guide to the most suitable storage conditions, including:

- Moderate temperature (ideally 20°- 30°).
- Low humidity.
- Protection from intense light, radiation and high ozone concentrations.
- It is recommended that the storage period does not exceed five years.

Unit conversion

MULTIPLY	BY	TO OBTAIN
Feet	0.30480	Meters
Inches	0.02540	Meters
Pounds	0.453	Kilograms
Pound/Force	4.45	Newtons
Feet/Second	0.3048	Meters/Second
Inches/Second	0.0254	Meters/Second
Feet/Second^2	0.3048	Meters/Second^2
Inches/Second^2	0.0254	Meters/Second^2

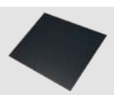
Important Considerations

- Flexible connections to the machine are required in order to achieve effective isolation. The application of Trelleborg expansion joints can be recommended.

- If required, there should be grounding for removing static electricity.

Product images are graphical representations. Actual items may differ in appearance

Application guide

APPLICATION	TYPE OF MOUNT					
Stationary Installations Combustion Engines Compressors, Generators	 RA/RAEM	 M MOUNT	 CUSHYFLOAT	 RA/RAB	 VEE MOUNT	 CUSHYFOOT
Mobile Installations Vehicle Engines, Compressors, Generators, Marine Engines	 CUSHYFLOAT	 METACONE	 VEE MOUNT	 RA	 RAEM	
Sensitive Equipment Electronics, Cameras, Fans, Small Pumps	 M MOUNT	 EQUI-FREQUENCY	 FLANGED INSTRUMOUNTING	 LOW FREQUENCY		
Transit Protection Computers, Test Equipment	 VT	 M MOUNT	 BA	 DOUBLE U-SHEAR	 TONNENLAGER (Spherical roller bearing)	
Vehicles Engines, Cabs, ROPS Cage	 METACONE	 CAB MOUNTS	 EH	 UH	 MDS	 HYDRO MOUNT
Instrument Mounts Electronic Racks, Radio TX/RX, Mobile Computer Systems	 M MOUNT	 INSTRUMOUNTS	 FLANGED INSTRUMOUNTS	 LOW FREQUENCY		
Heavy Duty Isolators Off Highway Vehicles, Vibratory Screens, Large Engines, Public Service Vehicles	 SAW RECTANGULAR	 SAW CIRCULAR	 SAW			
Building & Construction Inertia Blocks, Heavy Plant, Ductwork, Suspended Ceilings	 GK	 VT	 AV-PLATE			
Machine Tools Lathes, Punch Presses, Grinders, Woodworking Equipment	 TF	 AV-PLATE				
Motion Control Re-Bound, Motion Limitation	 ZELLPUFFER	 BUFFERS	 ANB	 TONNENLAGER (Spherical roller bearing)		
Vehicle Suspension Pivot Arms, Trunnion Mounts, Gearbox Mountings	 VP/UD	 SP BEARINGS	 METAXENTRIC BUSHES			
General Purpose Mounts Exhaust Systems, Small Fans, Instrument Panels	 TONNENLAGER (Spherical roller bearing)	 METACONE	 M MOUNT			

Product images are graphical representations. Actual items may differ in appearance

Mount Finder Pro

ANTIVIBRATION MOUNT SELECTION MADE EASY

Find your perfect anti-vibration mount with the new MountFinder Pro mobile application.

MountFinder Pro directly measures your machines RPM to help determine the very best anti-vibration solution for your application.

Scan QR code to download now!

Product images are graphical representations. Actual items may differ in appearance

Sustainable, productive, cost-effective.

Factories and operating machinery run round-the-clock to demanding schedules and in noisy environments. Manufacturers are driven by the need to achieve maximum productivity from their equipment, and maximum comfort for their employees. By minimizing the damage caused by vibration and noise, we help our industrial customers achieve both, reliably and cost-effectively.

Calling on quality products which range from buffers and bushes to a wide range of mounts, we're experts in providing 'fit and forget' solutions on everything from machine tools to processing plant. We also work with OEMs to develop custom solutions, and back up our service with a robust and reliable global supply chain to optimize production, productivity and costs.

INDUSTRIAL APPLICATIONS

We provide performance you can rely on to fit and forget. Our antivibration solutions give you a firm foundation to build sustainable productivity plans upon, across all manufacturing and processing equipment installations. Our strong supply chain means we can reduce costs and deliver on time and on budget.

Our intelligent innovation is focused on the outcomes you want to achieve: providing a safe environment for machine operators, reducing noise pollution, reducing downtime to save costs and increase revenue. We partner with you to provide so much more than products.

ANB

Buffer type ANB consists of a cylindrical rubber body bonded to a square baseplate of steel. Each corner of the baseplate has a fixing hole.

Special high-hysteresis rubber compound is used to ensure as much energy absorption as possible. The volume of the rubber is used at optimum efficiency. For new machine developments simpler designs and lighter calculated forces can be considered enabling a lower cost.

Through the damping of the rubber a high degree of energy absorption is achieved. The rubber is stiffer under dynamic conditions compared to static or pseudo static loading; hence more energy is absorbed for a given deformation.

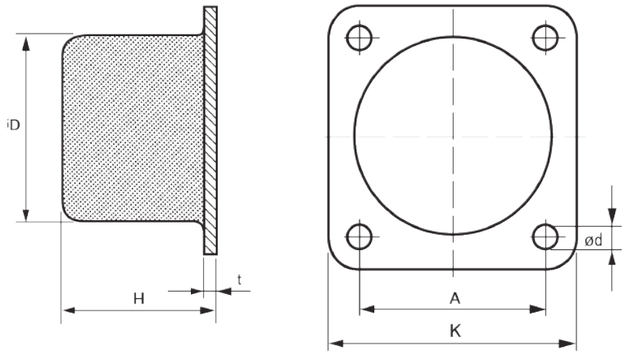
The shock buffer type ANB is used to effectively limit movement of equipment or machine components.

These buffers are made from an oil and chemical resistant Nitrile rubber.

Typical applications:

- Lifting cranes
- Forestry vehicles
- Material handling equipment

Technical Drawing



Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)						MAX. LOAD (kg)
			K	A	ØD	Ød	H	t	
ANB50	15-4034	10-00151	70	50	50	7	43	3	815
ANB75	15-4035	10-00152	100	75	75	9	63	3	2,040
ANB100	15-4037	10-00153	130	100	100	11	84	4	4,180
ANB150	15-4032	10-00010	185	150	150	13.5	126	6	9,175
ANB200	15-4033	10-00011	240	200	200	13.5	168	8	18,350

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

BA and Double U-Shear

BA and Double U-Shear are equally suitable for isolating vibrations from low speed machines and equipment, protecting sensitive and light weight units from external shocks and vibrations.

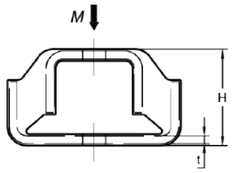
The mountings utilize bonded rubber in shear to permit relatively high deflections, providing excellent isolation of low frequencies. (Type BA 20/2 is a half section suitable for very light loads).

On rotating equipment applications the soft axis should be at right angles to the shaft. On mobile applications the stiff axis should be aligned in the direction of travel. For transit case applications the mountings need to be arranged so that the horizontal stiffness is the same in all directions.

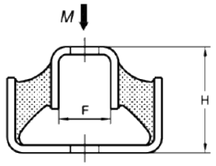
Typical applications:

- Light fans and compressors
- Portable gensets and pumps
- Computers and electronic units
- Measuring and test equipment

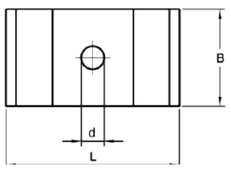
Technical Drawing



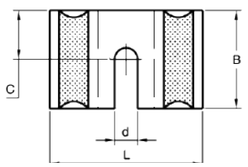
DOUBLE U-SHEAR HOLE FIXING



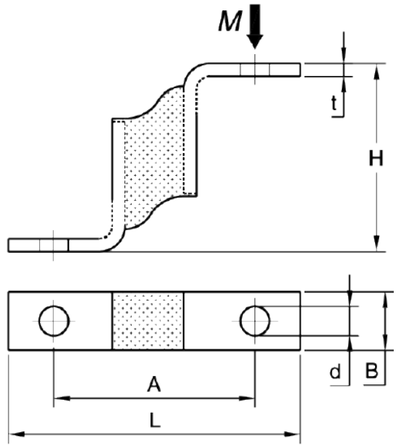
DOUBLE U-SHEAR HOLE FIXING



DOUBLE U-SHEAR HOLE FIXING



DOUBLE U-SHEAR SLOTTED



BA

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)								MAX. LOAD (Kg)	MAX. DEFLECTION (mm)
			B	L	H	A	F	C	d	t		
BA												
BA 20/2 40 °IRHD	17-4345	10-00005	20	90	58	62	-	-	8	4	12	7.3
BA 20/2 60 °IRHD	17-4345	10-00006	20	90	58	62	-	-	8	4	27	5.8

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)								MAX. LOAD (Kg)	MAX. DEFLECTION (mm)
			B	L	H	A	F	C	d	t		
DOUBLE U-SHEAR HOLE FIXING												
BA 20 40 °IRHD	17-4035	10-00145	20	90	50	-	-	-	10	4	20	6
BA 20 60 °IRHD	17-4035	10-00146	20	90	50	-	-	-	10	4	35	5.2
BA 50 40 °IRHD	17-4036	10-00147	50	90	50	-	-	-	12	4	60	6.5
BA 50 60 °IRHD	17-4036	10-00148	50	90	50	-	-	-	12	4	110	5.5
DOUBLE U-SHEAR SLOTTED												
45 NR 11	053 18 004	96764	20	61	43	-	20.4	10	6.6	3	12	6.1
40 °IRHD	17-1492	10-00518	19	60	43	-	19	10.3	6.7	3	14	8.2
50 NR 11	053 18 004	96763	20	61	43	-	20.4	10	6.6	3	15	5.6
60 NR 11	053 18 004	96765	20	61	43	-	20.4	10	6.6	3	16	4.3
50 °IRHD	17-1492	10-00519	19	60	43	-	19	10.3	6.7	3	20	7.8
50 NR 11	053 18 003	96769	25	71	62	-	26.4	12.5	11	4	22	7
60 NR 11	053 18 003	96771	25	71	62	-	26.4	12.5	11	4	30	5.2
70 NR 11	053 18 003	96770	25	71	62	-	26.4	12.5	11	4	30	3.3
40 °IRHD	17-1482	10-00515	51	60	41	-	20	25	11	3	37	8.5
50 °IRHD	17-1482	10-00516	51	60	41	-	20	25	11	3	56	7.8
40 °IRHD	17-1480	10-00511	51	80	78	-	32	25	13	5	70	8
50 NR 11	053 18 002	96775	50	81.5	78	-	32.4	25	13.5	4.5	85	7
60 NR 11	053 18 002	96777	50	81.5	78	-	32.4	25	13.5	4.5	85	4.2
70 NR 11	053 18 002	96773	50	81.5	78	-	32.4	25	13.5	4.5	98	3
50 °IRHD	17-1480	10-00512	51	80	78	-	32	25	13	5	100	7.4
40 °IRHD	17-1479	10-00509	64	86	108	-	38	32	16.7	5	150	8
50 NR 11	053 18 001	96779	65	87	108	-	38.4	32.5	17.5	5	200	7
60 NR 11	053 18 001	96781	65	87	108	-	38.4	32.5	17.5	5	200	3.5
70 NR 11	053 18 001	96784	65	87	108	-	38.4	32.5	17.5	5	200	2.8
50 °IRHD	17-1479	10-00510	64	86	108	-	38	32	16.7	5	220	7.8

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

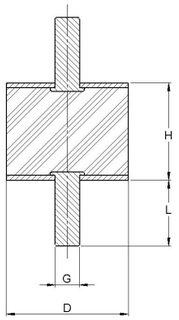
Bobbin Type A

Bobbin mounts can be used in a wide variety of applications to permit relative movement of the suspended mass and isolation from the effects of noise, vibration and shock. The bobbin mounts are designed to have a higher compressive stiffness and a lower shear stiffness.

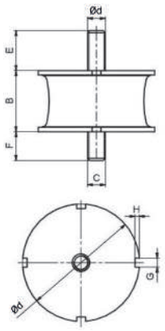
Typical applications:

- Light fans
- Engines and pumps
- Compressors
- Measuring and test equipment

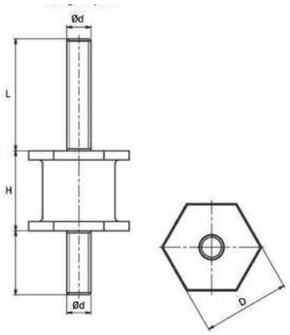
Technical Drawing



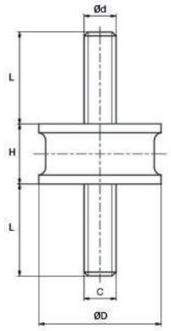
TYPE A



TYPE A NOTCHED



TYPE A HEXAGONAL PLATE



CONTOURED

Product Data

Figures stated are for natural rubber Hardness 60° IRH. Other Hardness are available upon request. The technical values are to be used for info only.

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			Ød	H	Ød	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE A											
A10/10	19-0272	20-01435	10	10	M4	10	4	0.9	2	2	1.6
A10/15	19-0400	20-01066	10	15	M4	10	4.1	1.2	1.5	3.1	1.6
A13/10	A 1310	509003	13	10	M5	10	4.8	0.8	2.6	1.6	2.7
A13/15	A 1315	509007	13	15	M5	10	4	1.0	2.6	2.6	2.7
A13/20	A 1320	509015	13	20	M5	10	4	1.0	2.6	2.6	2.7
A15/8	A 1508	509018	15	8	M4	12	9.5	0.4	3.4	1.0	1.3
A15/10	A 1510	509019	15	10	M4	12	7.5	0.6	3.4	1.4	1.3
A15/15	19-0769	20-01068	15	15	M4	10	10	1.5	4	3.2	1.6
A15/15	A 1515	509020	15	15	M4	12	5.8	1.0	3.4	2.4	1.3
A15/20	A 1520	509022	15	20	M4	12	5.2	1.4	3.4	3.3	1.3
A15/30	A 1530	509048	15	30	M4	12	4.8	2.1	3.4	5.3	1.3
A16/10	A 1610	509049	16	10	M5	12	8.9	0.6	3.9	1.4	2.7
A16/15	A 1615	509050	16	15	M5	12	6.7	1.0	3.9	2.4	2.7
A16/20	A 1620	509051	16	20	M5	12	6	1.4	3.9	3.3	2.7
A16/25	A 1625	509052	16	25	M5	12	6	1.8	3.9	4.3	2.7
A20/8.5	A 208,5	509053	20	8.5	M6	17	22	0.4	6.1	1.0	4.7
A20/10	19-0296	20-00418	20	10	M6	15/18	17	0.5	7	1.4	8.3
A20/15	A 2015	509056	20	15	M6	17	12.1	0.9	6.1	2.1	4.7
A20/15	19-0383	20-01226	20	15	M6	18	16	1.2	7	2.6	8.3
A20/20	19-0384	20-00541	20	20	M6	15/18	16	1.7	7	4.5	8.3
A20/20	A 2020	509063	20	20	M6	17	10.3	1.3	6.1	3.1	4.7
A20/25	A 2025	509064	20	25	M6	17	9.5	1.7	6.1	4.1	4.7
A20/25	19-0387	20-01228	20	25	M6	15/18	15	2.1	6	6.2	8.3
A20/30	A 2030	509065	20	30	M6	17	9.5	2.2	6.1	5.0	4.7
A25/10	19-0297	20-00557	25	10	M6	18	31	0.8	12	1.5	8.3
A25/10	A 2510	509067	25	10	M8	20	18.4	0.3	6.1	0.8	11
A25/15	19-0415	20-00558	25	15	M6	18	30	1.5	11	2.5	8.3
A25/15	A 2515	509069	25	15	M6	18	21.6	0.9	9.5	2.2	4.7
A25/15	A 2515	509070	25	15	M8	20	21.6	0.9	9.5	2.2	11
A25/20	A 2520	509071	25	20	M6	18	17.6	1.3	9.5	3.1	4.7
A25/20	19-0416	20-00559	25	20	M6	18	29	2.6	11	3.8	8.3
A25/22	A 2522	509072	25	22	M8	20	17.6	1.5	9.5	3.6	11
A25/25	19-0419	20-01437	25	25	M6	18	27	2.7	11	5.4	8.3
A25/25	A 2525	509073	25	25	M6	18	15.8	1.7	9.5	4.1	4.7
A25/25	A 2525	509074	25	25	M8	20	15.8	1.7	9.5	4.1	11
A25/30	19-0421	20-01629	25	30	M6	18	25	3.4	9	6.7	8.3
A25/30	A 2530	509075	25	30	M8	20	14.8	2.1	9.5	5.2	11
A25/40	A 2540	509077	25	40	M8	20	13.7	2.9	9.5	7.2	11
A30/15	19-0267	20-01536	30	15	M8	20	51	0.9	17	2.6	20
A30/15	A 3015	509119	30	15	M8	25	35.3	0.9	13.7	2.2	11
A30/20	19-0388	20-01438	30	20	M8	20	45	1.7	17	3.9	20
A30/20	A 3020	509120	30	20	M8	25	27.7	1.3	13.7	3.1	11
A30/22	A 3022	509121	30	22	M8	25	27.7	1.5	13.7	3.5	11
A30/25	19-0389	20-01440	30	25	M8	20	41	2.1	16	5.3	20
A30/30	19-0392	20-01441	30	30	M8	20	39	2.9	15	6.6	20
A30/30	A 3030	509122	30	30	M8	25	22.5	2.1	13.7	5.2	11
A30/40	19-0393	20-00438	30	40	M8	20	31	4	10	10	20
A30/40	A 3040	509123	30	40	M8	25	20.6	2.8	13.7	7.1	11
A40/20	19-0268	20-01423	40	20	M8	23	92	1.5	31	3.8	20
A40/20	A 4020	509124	40	20	M10	25	58.8	1.3	24.3	3.1	23
A40/28	A 4028	509125	40	28	M10	25	46.4	1.9	24.3	4.7	23
A40/30	19-0395	20-01443	40	30	M8	23	71	2.4	31	6.6	20
A40/30	A 4030	509126	40	30	M8	23	46.4	2.2	24.3	5.1	11
A40/35	A 4035	509127	40	35	M10	25	41.7	2.4	24.3	6.1	23
A40/40	19-0397	20-00563	40	40	M8	23	66	3.5	27	9	20
A40/40	A 4040	509128	40	40	M8	23	41.7	2.9	24.3	7.0	11
A40/40	A 4040	509129	40	40	M10	25	41.7	2.9	24.3	7.0	23
A40/45	A 4045	509130	40	45	M10	25	38.1	3.3	24.3	7.9	23
A50/20	A 5020	509131	50	20	M10	25	115.3	1.2	38	2.9	23
A50/20	19-0270	20-01444	50	20	M10	28	204	2.1	51	3.6	40

Product images are graphical representations. Actual items may differ in appearance

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			Ød	H	Ød	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE A											
A50/25	A 5025	509132	50	25	M10	25	91.9	1.6	38	3.9	23
A50/25	19-0401	20-00564	50	25	M10	28	143	2.5	51	4.6	40
A50/30	A 5030	509133	50	30	M10	25	79.8	2.0	38	4.9	23
A50/30	19-0402	20-01445	50	30	M10	28	143	3.2	51	6.4	40
A50/35	A 5035	509134	50	35	M10	25	72.5	2.4	38	5.9	23
A50/40	A 5040	509135	50	40	M10	25	67.7	2.7	38	6.9	23
A50/40	19-0404	20-01446	50	40	M10	28	112	3.8	46	8.5	40
A50/45	A 5045	509136	50	45	M10	25	67.7	3.3	38	7.8	23
A50/45	19-0405	20-00882	50	45	M10	28	107	4.1	46	10.1	40
A50/50	A 5050	509137	50	50	M10	25	61.8	3.5	38	8.9	23
A50/50	19-0407	20-00549	50	50	M10	28	107	4.8	43	11.7	40
A60/25	A 6025	509138	60	25	M10	25	151.9	1.6	54.7	3.9	23
A60/36	A 6036	509139	60	36	M10	25	112.9	2.5	54.7	6.1	23
A60/45	A 6045	509140	60	45	M10	25	99.6	3.1	54.7	7.9	23
A70/35	A 7035	509141	70	35	M10	25	175.9	2.3	74.5	5.7	23
A70/45	19-0512	20-01253	70	45	M10	28	235	4.2	92	9.9	40
A75/40	19-0306	20-00547	75	40	M12	37	296	3.6	102	4.9	70
A70/50	A 7050	509142	70	50	M10	25	139.1	3.4	74.5	8.6	23
A70/70	A 7070	509144	70	70	M10	25	120.5	5.0	74.5	12.6	23
A75/25	A 7525	509145	75	25	M12	35	303.9	1.5	85.5	3.7	39
A75/40	A 7540	509146	75	40	M12	35	190.5	2.6	85.5	6.7	39
A75/50	A 7550	509147	75	50	M12	35	159.1	3.3	85.5	8.6	39
A75/55	A 7555	509148	75	55	M12	35	159.1	3.9	85.5	9.6	39
A80/30	A 8030	509149	80	30	M14	35	295.2	1.9	97.3	4.7	62
A80/40	A 8040	509150	80	40	M14	35	225.9	2.6	97.3	6.7	62
A80/70	A 8070	509151	80	70	M14	35	164.7	5.0	97.3	1.3	62
A80/80	A 8080	509153	80	80	M14	35	164.7	6.1	97.3	14.5	62
A100/40	19-0273	20-01259	100	40	M16	41	673	3.9	204	8.2	170
A100/40	A 10040	509154	100	40	M16	47	415.3	2.6	152.1	6.7	94.5
A100/55	19-0412	20-00568	100	55	M16	41	520	6.1	204	12.4	170
A100/55	A 10055	509155	100	55	M16	47	323.1	3.8	152.1	9.6	94.5
A100/80	A 10080	509156	100	80	M16	47	246.9	5.4	152.1	14.5	94.5
TYPE A CONTOURED											
A10/9	052 18 242	91015	10	9	M4	6	1.8	0.9	1.4	2.7	1.3
A10/9	052 18 242	90505	10	9	M4	6	5	0.7	4	3.9	1.3
A15/8	052 18 129	90872	15	8	M4	6	4.5	0.7	3	2.9	1.3
A15/8	052 18 129	91007	15	8	M4	6	10	0.6	8	2.6	1.3
A15/15	052 18 058	91019	15	15	M4	15	5.1	1.7	2.4	2.4	1.3
A15/15	052 18 058	91008	15	15	M4	15	12	1.5	5	4.9	1.3
A16/6	052 18 057	91014	16	6	M4	10	10	0.4	4	2.0	1.3
A16/6	052 18 057	91695	16	6	M4	10	15	0.5	10	2.0	1.3
A20/15	052 18 039	91397	20	15	M6	15	11	1.3	4.5	4.4	4.7
A20/15	052 18 039	90589	20	15	M6	15	25	1.3	11.5	3.8	4.7
A20/20	052 18 149	97176	20	20	M6	10	8	2.0	6.5	6.4	4.7
A20/20	052 18 149	97175	20	20	M6	10	16	1.7	14	6.9	4.7
A20/20	052 18 061	97165	20	20	M6	18.5	10	1.6	5	4.9	4.7
A20/20	052 18 061	97164	20	20	M6	18.5	19.5	1.7	10	4.9	4.7

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			Ød	H	Ød	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE A CONTOURED											
A20/25	052 18 095	91064	20	25	M6	18.5	16	2.2	14	13.7	4.7
A25/20	052 18 132	90678	25	20	M6	10	14	2.0	11	5.4	4.7
A25/20	052 18 132	470951	25	20	M6	10	24	1.8	22	10.8	4.7
A25/20	052 18 132	90679	25	20	M6	10	24	1.8	22	10.8	4.7
A25/20	052 18 086	91055	25	20	M6	15	14	2.0	11	5.4	4.7
A25/20	052 18 086	90646	25	20	M6	15	24	1.8	22	10.8	4.7
A25/30	052 18 050	54001266	25.0	30.0	M6	18.5	9.6	2.5	7.5	8.2	4.7
A25/30	052 18 050	90605	25	30	M6	18.5	30	2.9	13.5	13.2	4.7
A25/35	052 18 125	92267	25	35	M6	18.5	11	3.6	11	10.8	4.7
A25/35	052 18 125	90936	25	35	M6	18.5	22	3.1	22	21.6	4.7
A30/15	052 18 151	92149	30	15	M8	23	27	1.3	15	4.9	11
A30/15	052 18 151	480188	30	15	M8	23	64	1.1	44	4.3	11
A30/18	052 18 151	90985	30	18	M8	23	50	1.1	30	5.9	11
A30/20	052 18 099	97208	30	20	M8	12	22	1.8	15	7.4	11
A30/20	052 18 099	97209	30	20	M8	12	40	1.6	30	7.4	11
A30/20	052 18 051	97202	30	20	M8	23	24	1.8	16	7.8	11
A30/20	052 18 051	97201	30	20	M8	23	60	1.8	40	7.8	11
A30/25	052 18 095	91393	30	25	M6	18.5	7.5	2.5	6.5	6.4	4.7
A30/25	052 18 163	91608	30	25	M8	23	20	2.5	15	7.4	11
A30/25	052 18 163	91149	30	25	M8	23	38	2.3	30	9.8	11
A30/30	052 18 067	91386	30	30	M8	23	25	3.1	9.5	9.3	11
A30/30	052 18 067	91061	30	30	M8	23	53	3.1	22.5	7.4	11
A40/30	052 18 123	90999	40	30	M8	22.5	40	3.0	28	9.2	11
A40/30	052 18 123	91091	40	30	M8	22.5	92	2.9	55	12.0	11
A40/30	052 18 123	90973	40	30	M8	22.5	134	3.1	100	11.5	11
A40/30	052 18 018	90574	40	30	M10	17.5	92	2.9	55	12.0	23
A40/30	052 18 070	91234	40	30	M10	27.5	47	2.9	21	10.3	23
A40/30	052 18 070	90634	40	30	M10	27.5	92	2.9	55	12.0	23
A40/30	052 18 070	91116	40	30	M10	27.5	109	3.0	72.5	11.9	23
A40/40	052 18 153	90918	40	40	M8	22.5	35	4.3	28	13.7	11
A40/40	052 18 153	90691	40	40	M8	22.5	65	4.0	60	14.7	11
A40/40	052 18 168	93006	40	40	M8	27.5	30	3.7	30	14.7	11
A40/40	052 18 168	90744	40	40	M8	27.5	65	4.0	60	14.7	11
A40/40	052 18 116	90668	40	40	M10	27.5	65	4.0	60	14.7	23
A50/30	052 18 089	90108	50	30	M10	17.5	70	2.9	45	9.8	23
A50/30	052 18 089	90649	50	30	M10	17.5	130	2.7	90	11.0	23
A50/30	052 18 040	92162	50	30	M10	27.5	85	3.0	42.5	10.4	23
A50/30	052 18 040	91279	50	30	M10	27.5	194	2.9	94	10.2	23
A50/30	052 18 040	90451	50	30	M10	27.5	198	2.9	130	9.8	23
A50/40	052 18 104	91145	50	40	M10	17.5	110	3.9	90	14.7	23
A50/40	052 18 072	90915	50	40	M10	27.5	80	3.9	45	14.7	23
A50/40	052 18 072	90636	50	40	M10	27.5	140	3.9	72	14.1	23
A50/45	052 18 174	461948	50	45	M10	27.5	140	4.2	120	16.8	23
A50/45	052 18 174	90924	50	45	M10	27.5	100	4.1	90	17.7	23
A50/45	052 18 174	90747	50	45	M10	27.5	55	0.5	45	14.7	23
A50/50	052 18 110	92076	50	50	M10	27.5	50	5.5	45	22.1	23
A50/50	052 18 110	90662	50	50	M10	27.5	100	4.5	90	17.7	23

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			Ød	H	Ød	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE A CONTOURED											
A50/50	052 18 232	90734	50	20	M10	27.5	180	1.7	90	6.8	23
A60/45	052 18 273	91784	60	45	M10	19.5	160	4.4	130	18.2	23
A70/45	052 18 206	90396	70	45	M10	27.5	140	4.7	90	16.7	23
A70/45	052 18 206	90771	70	45	M10	27.5	240	4.4	180	17.7	23
A70/60	052 18 075	90322	70	60	M12	37	60	7.8	20	19.6	39
A70/60	052 18 075	91036	70	60	M12	37	320	7.8	120	19.6	39
A75/25	052 18 078	91257	75	25	M12	37	107	0.3	230	6.8	39
A75/25	052 18 078	91185	75	25	M12	37	475	3.0	98	6.9	39
A75/25	052 18 078	49014357	75	25	M12	37	1063	3.0	280	6.9	39
A75/40	052 18 196	97223	75	40	M12	37	167	3.6	130	15.9	39
A75/40	052 18 272	97237	75	40	M12	25	180	4.0	100	14.0	39
A75/40	052 18 196	97224	75	40	M12	37	300	3.6	210	15.8	39
A75/50	052 18 052	91065	75	50	M12	37	360	4.9	195	17.4	39
A75/55	052 18 210	90452	75	55	M12	37	150	5.9	100	19.6	39
A75/55	052 18 210	91077	75	55	M12	37	240	5.2	210	20.6	39
A75/70	052 18 113	91683	75	70	M12	37	140	7.6	100	24.5	39
A75/70	052 18 113	90665	75	70	M12	37	200	6.3	210	25.8	39
A75/70	052 18 113	92303	75	70	M12	37	600	7.1	500	28.9	39
A100/40	052 18 131	97185	100	40	M16	36	400	3.7	200	14.0	94.5
A100/40	052 18 016	97184	100	40	M16	46	500	3.9	175	11.4	94.5
A100/40	052 18 016	97183	100	40	M16	46	970	3.9	340	11.9	94.5
A100/55	052 18 100	92137	100	55	M16	46	300	5.5	200	19.6	94.5
A100/55	052 18 100	90657	100	55	M16	46	500	5.3	380	20.7	94.5
A100/55	052 18 100	92090	100	55	M16	46	900	5.3	700	24.5	94.5
A100/75	052 18 083	90644	100	75	M16	46	260	7.7	200	28.0	94.5
A110/75	052 18 083	91135	110	75	M16	46	420	7.4	380	31.1	94.5
A160/75	052 18 159	90694	160	75	M16	46	1500	7.8	1000	26.5	94.5
A160/114	052 18 178	92001	160	114	M16	44	14200	9.8	1000	31.0	94.5

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)					COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	I	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE A HEXAGONAL PLATE												
45 CR 57	052 18 895	49002825	21	20	M6	16	16	14.5	2.4	6	6.3	4.7
45 CR 57	052 18 898	49004238	21	15	M6	16	16	16	1.5	7	4.3	4.7
60 CR 57	052 18 895	49011379	21	20	M6	16	16	24.5	2.4	10	6.3	4.7
45 NR 97	052 18 895	49016672	21	20	M6	16	16	14.5	2.4	6	6.3	4.7
60 CR 57	052 18 906	49038588	21	20	M6	28	16	24.5	2.4	10	6.3	4.7
45 CR 57	052 18 920	49039148	26	34	M8	12	12	25	3.0	95	87.9	11
45 CR 57	052 18 921	49039149	26	34	M8	19	19	25	3.0	95	87.9	11

Product images are graphical representations. Actual items may differ in appearance

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)							COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	I	G	H	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE A NOTCHED PLATE														
A105/55	052 18 389	49037737	105	55	M16	26	36	8	4	300	5.9	160	19.6	200
A105/55	052 18 389	49037738	105	55	M16	26	36	8	4	410	5.8	220	19.6	200
A105/55	052 18 389	49037739	105	55	M16	26	36	8	4	560	5.8	300	19.6	200
A105/55	052 18 389	49037740	105	55	M16	26	36	8	4	750	5.9	400	19.6	200

Product images are graphical representations. Actual items may differ in appearance

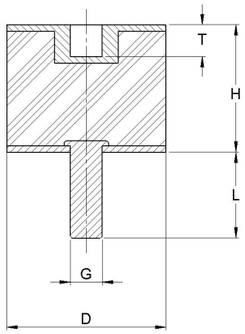
Bobbin Type B

Bobbin mounts can be used in a wide variety of applications to permit relative movement of the suspended mass and isolation from the effects of noise, vibration and shock. The bobbin mounts are designed to have a higher compressive stiffness and a lower shear stiffness.

Typical applications:

- Light fans
- Engines and pumps
- Compressors
- Measuring and test equipment

Technical Drawing



Product Data

Figures stated are for natural rubber Hardness 60° IRH. Other Hardness are available upon request. The technical values are to be used for info only.

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)					COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	T	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE B												
B10/10	19-0307	20-01449	10	10	M4	10	4	6	0.9	1	2.3	1.6
B10/15	B1015	54001136	10	15	M4	10	4	1.5	1.2	1.2	3.4	1.3
B10/15	B1015	54001137	10	15	M4	10	4	2.9	1.2	2.2	3.6	1.3
B15/15	19-0529	20-01698	15	15	M4	10	5	12	1.4	5	3.8	1.6
B15/15	B 1515	509078	15	15	M4	12	3	6.8	0.5	3.1	1.3	1.3
B16/10	B 1610	509079	16	10	M5	12	3	8	0.5	3.1	5.1	2.7
B16/15	B 1615	509080	16	15	M5	12	3	6.1	0.9	3.5	1.3	2.7
B16/20	B 1620	509081	16	20	M5	12	3	5.4	1.2	3.5	2.1	2.7
B16/25	B 1625	509082	16	25	M5	12	3	5.1	1.6	3.5	3.8	2.7
B20/15	B 2015	509083	20	15	M6	17	4	10.9	0.8	5.5	1.9	4.7
B20/15	19-0310	20-01264	20	15	M6	18	6	16	0.9	11	3.8	8.3
B20/20	B 2020	509085	20	20	M6	17	4	9.3	1.2	5.5	2.8	4.7
B20/20	19-0524	20-01265	20	20	M6	18	6	16	1.2	9	5	8.3
B20/25	B 2025	509086	20	25	M6	17	4	8.5	1.5	5.5	3.9	4.7
B20/25	19-0526	20-01266	20	25	M6	18	6	15	2.5	9	6.3	8.3
B20/30	B 2030	509087	20	30	M6	18	5	8.1	1.8	5.5	4.5	4.7
B25/15	19-0311	20-01267	25	15	M6	18	6	30	1.3	16	3.8	8.3
B25/20	B 2520	509091	25	20	M8	20	5	15.8	1.2	8.6	2.0	11
B25/20	19-0539	20-01268	25	20	M6	18	6	29	2.1	15	5	8.3
B25/22	B 2522	509094	25	22	M8	20	6	15.1	1.3	8.6	2.8	11
B25/25	B 2525	509095	25	25	M8	20	6	14.2	1.5	8.6	3.7	11
B25/25	19-0540	20-00573	25	25	M6	18	6	27	2.9	14	6.3	8.3
B25/30	B 2530	509096	25	30	M8	20	6	13.3	1.9	8.6	3.7	11
B25/30	19-0541	20-01016	25	30	M6	18	6	25	3.2	14	7.5	8.3
B25/40	B 2540	509097	25	40	M8	20	6	12.4	2.5	8.6	4.7	11
B30/15	B 3015	509098	30	15	M8	25	6	31.7	0.8	8.6	6.5	11
B30/15	19-0542	20-01269	30	15	M8	20	8	69	1.4	21	3.4	20
B30/20	B 3020	509099	30	20	M8	25	6	25	1.2	12.3	1.9	11
B30/20	19-0543	20-00898	30	20	M8	20	8	39	1.6	21	5	20
B30/22	B 3022	509100	30	22	M8	25	6	23.5	1.3	12.3	2.9	11
B30/25	19-0546	20-00464	30	25	M8	20	8	38	2.3	20	6.3	20
B30/30	B 3030	509101	30	30	M8	25	6	20.3	1.9	12.3	3.2	11
B30/30	19-0547	20-00575	30	30	M8	20	8	36	2.8	19	7.5	20
B30/40	B 3040	509102	30	40	M8	25	6	18.5	2.6	12.3	4.6	11
B40/20	B 4020	509103	40	20	M10	25	8	53	1.2	21.9	4.2	23
B40/28	B 4028	509104	40	28	M10	25	8	41.8	1.7	21.9	4.6	23
B40/30	B 4030	509105	40	30	M10	25	8	40.3	1.9	21.9	5.5	23
B40/30	19-0554	20-00466	40	30	M8	20	8	61	2.4	35	7.5	20
B40/35	B 4035	509106	40	35	M10	25	8	37.5	2.2	21.9	6.3	23
B40/40	B 4040	509107	40	40	M10	25	8	35.6	2.5	21.9	2.8	23
B40/40	19-0555	20-00821	40	40	M8	23	8	61	3.8	34	10	20
B40/45	B 4045	509108	40	45	M10	25	8	34.2	2.9	21.9	6.3	23
B50/20	B 5020	509109	50	20	M10	25	8	103.8	1.1	21.9	7.2	23
B50/20	19-0556	20-01273	50	20	M10	28	10	133	1	46	4	40
B50/30	B 5030	509110	50	30	M10	25	8	71.8	1.8	34.2	3.5	23
B50/30	19-0557	20-00577	50	30	M10	28	10	122	2.6	51	7	40
B50/35	B 5035	509111	50	35	M10	25	8	65.3	2.2	34.2	4.4	23
B50/40	B 5040	509112	50	40	M10	25	8	61	2.5	34.2	5.3	23
B50/40	19-0558	20-00578	50	40	M10	28	10	112	3.6	32	10	40
B50/45	B 5045	509113	50	45	M10	25	8	56.3	2.7	34.2	6.2	23
B50/50	B 5050	509114	50	50	M10	25	8	55.6	3.1	34.2	7.0	23
B50/50	19-0561	20-01276	50	50	M10	28	10	107	5.1	51	12.5	40
B60/36	B 6036	509115	60	36	M10	25	8	101.6	2.2	49.2	3.5	23
B60/45	B 6045	509116	60	45	M10	25	8	89.6	2.8	49.2	5.5	23
B70/35	B 7035	509117	70	35	M10	25	9	158.3	2.1	42.9	7.0	23
B70/50	B 7050	509207	70	50	M10	25	9	125.2	3.1	67.1	5.1	23
B70/70	B 7070	509208	70	70	M10	25	9	125.2	3.1	67.1	7.7	23
B75/40	B 7540	509209	75	40	M12	35	8	171.4	2.5	77	3.3	39
B75/45	B 7545	509210	75	45	M12	35	8	158.1	2.7	77	6.9	39
B75/50	B 7550	509211	75	50	M12	35	8	148.5	3.1	77	6.0	39
B75/50	19-0536	20-01283	75	50	M12	37	12	265	4.3	121	12.5	70
B75/55	19-0537	20-00824	75	55	M12	37	12	245	4.7	119	13.8	70

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)					COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	T	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE B												
B80/40	B 8040	509212	80	40	M14	35	12	203.3	3.4	87.6	4.2	62
B80/70	B 8070	509213	80	70	M14	35	12	162	5.3	97.3	13.1	62
B80/80	B 8080	509214	80	80	M14	35	12	164.7	6.1	97.3	14.5	62
B100/40	B 10040	509215	100	40	M16	45	16	357.5	2.6	136.9	6.0	94.5
B100/40	19-0322	20-00581	100	40	M16	41	16	663	3.2	236	10	170
B100/55	B 10055	509216	100	55	M16	45	16	323.1	3.8	152.1	9.6	94.5
B100/55	19-0535	20-01285	100	55	M16	41	16	520	5	222	13.8	170
B100/60	19-0849	20-01286	100	60	M16	41	16	510	5.6	217	15	170
B100/80	B 10080	509217	100	80	M16	45	16	264.9	5.8	152.1	14.5	94.5
B100/100	B 100100	509218	100	100	M16	45	16	244	7.4	152	18.4	94.5
TYPE B CONTOURED												
B10/9	052 18 251	91158	10	9	M4	6	3.5	1.8	0.9	1.4	2.7	1.3
B10/9	052 18 251	90786	10	9	M4	6	3.5	5	0.7	4	3.9	1.3
B15/15	052 18 059	90614	15	15	M4	15	4	7.5	1.5	3.6	3.9	1.3
B15/15	052 18 059	90615	15	15	M4	15	4	15	1.5	6.5	4.0	1.3
B20/20	052 18 137	97170	20	20	M6	10.5	6.5	8	2.0	6.5	6.4	4.7
B20/20	052 18 137	97169	20	20	M6	10.5	6.5	16	1.7	14	6.9	4.7
B20/20	052 18 062	97166.0	20.0	20.0	M6	18.5	5.8	17.0	2.1	9.0	8.8	4.7
B20/20	052 18 137	97171	20	20	M6	10.5	6.5	22	2.0	19.3	6.3	4.7
B20/20	052 18 137	97167	20	20	M6	18.5	5.8	32	2.1	17	8.3	4.7
B20/20	052 18 015	97172	20	20	M6	10.5	6.5	36	2.0	32	6.3	4.7
B20/25	052 18 076	91865	20	25	M6	18.5	5.8	7.5	2.5	6.5	6.4	4.7
B20/25	052 18 096	91519	20	25	M6	18.5	5.8	16	2.2	14	13.7	4.7
B25/20	052 18 150	91514	25	20	M6	10	5.8	14	2.0	11	5.4	4.7
B25/20	052 18 087	91192	25	20	M6	15	5.8	14	2.0	11	5.4	4.7
B25/20	052 18 087	90647	25	20	M6	15	5.8	24	1.8	22	10.8	4.7
B25/30	052 18 096	91839	25	30	M6	18.5	5.8	20	3.9	10	12.3	4.7
B25/30	052 18 063	91163	25	30	M6	18.5	5.8	48	3.6	24	11.8	4.7
B25/35	052 18 071	91617	25	35	M6	18.5	5.8	22	3.1	22	21.6	4.7
B30/20	052 18 195	97210	30	20	M8	13	7.4	40	1.6	30	7.4	11
B30/20	052 18 195	97211	30	20	M8	13	7.4	55	1.6	45	7.4	11
B30/20	052 18 137	597205	30	20	M8	23	7.4	70	2.0	24	5.9	11
B30/20	052 18 197	97212	30	20	M8	13	7.4	75	1.6	90	8.0	11
B30/20	052 18 195	97206	30	20	M8	23	7.4	124	1.9	50	6.1	11
B30/30	052 18 068	91441	30	30	M8	23	7.4	30	3.3	16	15.7	11
B30/30	052 18 068	90632	30	30	M8	23	7.4	70	3.3	38	12.4	11
B40/30	052 18 124	91000	40	30	M8	22.5	7.9	28	3.1	30	9.8	11
B40/30	052 18 071	91107	40	30	M10	27.5	10	55	3.0	28	9.2	23
B40/30	052 18 124	90671	40	30	M8	22.5	7.9	70	3.0	60	11.8	11
B40/30	052 18 114	92476	40	30	M8	22.5	7.9	120	2.9	90	11.0	11
B40/30	052 18 071	90635	40	30	M10	27.5	10	130	3.0	67	9.4	23
B40/30	052 18 158	91654	40	30	M10	27.5	10	180	2.9	98	9.6	23
B40/40	052 18 015	92089	40	40	M8	22.5	7.9	35	4.3	28	13.7	11
B40/40	052 18 152	91561	40	40	M8	22.5	7.9	65	4.0	60	14.7	11
B45/50	052 18 187	91079	45	50	M8	22.5	7.9	30	4.9	30	14.7	11
B45/50	052 18 187	90758	45	50	M8	22.5	7.9	80	5.2	70	17.2	11
B50/30	052 18 090	91468	50	30	M10	17.5	10	50	2.6	35	11.4	23

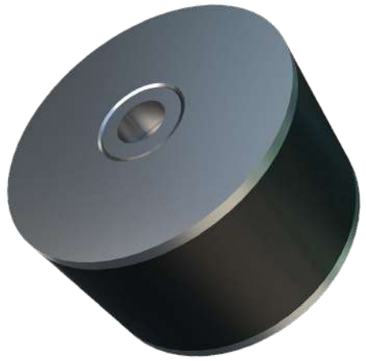
TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)					COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	T	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE B CONTOURED												
B50/30	052 18 090	91254	50	30	M10	17.5	10	130	2.7	90	11.0	23
B50/30	052 18 090	91321	50	30	M10	17.5	10	180	2.6	120	10.7	23
B50/30	052 18 046	90601	50	30	M10	27.5	10	190	3.0	100	9.8	23
B50/40	052 18 073	91312	50	40	M10	27.5	10	186	4.6	102	14.3	23
B50/50	052 18 101	92075	50	50	M10	27.5	10	50	5.5	45	22.1	23
B50/50	052 18 111	90844	50	50	M10	27.5	10	100	4.5	90	17.7	23
B60/45	052 18 158	92502	60	45	M10	19.5	10.5	90	4.6	65	15.9	23
B60/45	052 18 274	91476	60	45	M10	19	10	160	4.4	130	18.2	23
B70/45	052 18 126	91607	70	45	M10	27.5	10.5	140	4.7	90	17.7	23
B70/45	052 18 200	90768	70	45	M10	27.5	10.5	240	4.4	180	17.7	23
B70/60	052 18 156	92004	70	60	M12	37	10.5	145	7.5	80	26.2	39
B70/60	052 18 076	90639	70	60	M12	37	10.5	275	7.3	145	23.7	39
B75/40	052 18 197	97227	75	40	M12	37	10.5	180	4.0	100	14.0	39
B75/40	052 18 197	97226	75	40	M12	37	10.5	300	3.6	210	15.8	39
B75/40	052 18 101	97228	75	40	M12	37	10.5	500	3.9	320	14.9	39
B75/50	052 18 081	91575	75	50	M12	37	10.5	210	5.9	115	18.8	39
B75/50	052 18 081	90642	75	50	M12	37	10.5	420	5.9	120	19.6	39
B75/55	052 18 124	92459	75	55	M12	37	10.5	240	5.2	210	20.6	39
B75/55	052 18 211	90899	75	55	M12	37	10.5	400	5.6	320	20.9	39
B75/70	052 18 274	92491	75	70	M12	37	10.5	140	7.6	100	24.5	39
B75/70	052 18 114	90666	75	70	M12	37	10.5	200	6.3	210	25.8	39
B100/40	052 18 065	597187	100	40	M16	36	15.8	400	3.4	200	14.0	94.5
B100/40	052 18 156	97182	100	40	M16	46	15.8	450	3.4	190	11.6	94.5
B100/40	052 18 065	97186	100	40	M16	36	15.8	700	3.4	380	13.8	94.5
B100/40	052 18 015	97181	100	40	M16	46	15.8	1010	3.4	450	11.6	94.5
B100/40	052 18 062	92744	100	40	M16	36	15.8	1200	3.4	600	13.7	94.5
B100/40	052 18 111	92046	100	40	M16	36	15.8	1680	3.4	660	13.8	94.5
B100/40	052 18 084	92152	100	40	M16	46	15.8	1750	3.4	720	11.8	94.5
B100/55	052 18 156	500635	100	55	M16	46	15.8	250	5.3	180	19.6	94.5
B100/55	052 18 101	90658	100	55	M16	46	15.8	500	5.3	330	19.0	94.5
B100/55	052 18 152	92087	100	55	M16	46	15.8	800	5.3	530	18.6	94.5
B100/55	052 18 101	91108	100	55	M16	46	15.8	1200	5.3	800	18.7	94.5
B100/75	052 18 158	92274	100	75	M16	46	15.8	420	7.4	380	31.1	94.5
B160/75	052 18 156	92530	160	75	M16	46	15.8	900	7.8	500	28.9	94.5
B160/75	052 18 158	90693	160	75	M16	46	15.8	1500	7.8	1000	29.7	94.5
B160/75	052 18 211	92458	160	75	M16	46	15.8	2100	7.8	1380	29.4	94.5
B160/75	052 18 063	91795	160	75	M16	46	15.8	4000	7.8	2400	29.4	94.5
B160/114	052 18 179	90752	160	114	M16	44	15.8	8000	8.8	800	35.7	94.5

Bobbin Type C

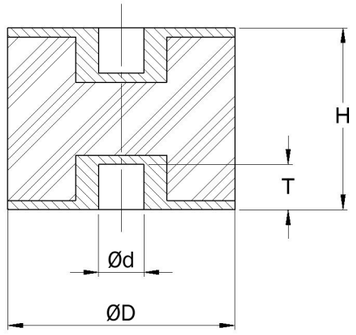
Bobbin mounts can be used in a wide variety of applications to permit relative movement of the suspended mass and isolation from the effects of noise, vibration and shock. The bobbin mounts are designed to have a higher compressive stiffness and a lower shear stiffness.

Typical applications:

- Light fans
- Engines and pumps
- Compressors
- Measuring and test equipment



Technical Drawing



Product Data

Figures stated are for natural rubber Hardness 60° IRH. Other Hardness are available upon request. The technical values are to be used for info only.

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	T	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE C											
C10/10	19-0324	20-00095	10	10	M4	4	10	1.6	1	1.2	1.6
C10/15	C1015	54001138	10	15	M4	4	1.5	1.1	1.2	3.9	1.3
C10/15	C1015	54001139	10	15	M4	4	2.9	1.2	2.2	3.6	1.3
C15/15	19-0325	20-00583	15	15	M4	4	12	1.5	4	2	1.6
C15/20	C1520	54001169	15	20	M4	4	3.4	1.7	2.6	5.1	1.3
C15/20	C1520	54001170	15	20	M4	4	6.5	1.7	5	4.9	1.3
C16/15	C 1615	509219	16	15	M5	3	5.7	0.8	3.3	2.9	2.7
C16/20	C 1620	509220	16	20	M5	3	5.1	1.1	3.3	3.6	2.7
C16/25	C 1625	509221	16	25	M5	3	4.8	1.5	5.1	1.8	2.7
C20/15	C 2015	509222	20	15	M6	4	10.2	0.7	5.1	3.3	4.7
C20/20	C 2020	509223	20	20	M6	4	8.6	1.1	5.1	4.2	4.7
C20/20	19-0551	20-01289	20	20	M6	4/6	17	1.6	5	2.5	8.3
C20/25	C 2025	509224	20	25	M6	4	7.9	1.4	5.1	5.0	4.7
C20/25	19-0552	20-00584	20	25	M6	6	15	2.2	4	2.7	8.3
C20/30	C 2030	509225	20	30	M6	5	7.6	1.7	5.1	6.3	4.7
C20/30	19-0553	20-00363	20	30	M6	6	12	2.5	4	3	8.3
C25/20	C 2520	509226	25	20	M8	6	14.8	1.1	8	3.0	11
C25/20	19-0327	20-01291	25	20	M6	6	29	1.7	9	3	8.3
C25/22	C 2522	509227	25	22	M8	6	14.1	1.2	8	3.4	11
C25/25	C 2525	509228	25	25	M8	6	13.3	1.4	8	4.4	11
C25/25	19-0424	20-01292	25	25	M6	6	27	2.2	8	3.5	8.3
C25/30	C 2530	509229	25	30	M8	6	12.4	1.7	8	6.0	11
C25/40	C 2540	509230	25	40	M8	6	11.5	2.4	11.5	1.8	11
C30/22	C 3022	509231	30	22	M8	6	21.9	1.2	11.5	4.3	11
C30/25	19-0328	20-00475	30	25	M8	8	38	2.2	12	3.6	20
C30/30	C 3030	509232	30	30	M8	6	18.9	1.7	11.5	5.9	11
C30/30	19-0427	20-01455	30	30	M8	10	36	2.6	11	4.1	20
C30/40	C 3040	509233	30	40	M8	6	17.3	2.4	20.4	2.6	11
C30/40	19-0812	20-00476	30	40	M8	8	44	3.6	21	10.9	20
C40/28	C 4028	509234	40	28	M10	8	39	1.6	20.4	5.9	23
C40/30	C 4030	509235	40	30	M10	8	38	1.7	20.4	5.9	23
C40/30	19-0329	20-00551	40	30	M8	8	71	2.7	25	5.2	20
C40/35	C 4035	509236	40	35	M10	8	35	2.0	20.4	6.7	23
C40/40	C 4040	509237	40	40	M10	8	33	2.4	20.4	4.4	23
C40/40	19-0423	20-00587	40	40	M8	8	66	3.9	25	7.4	20
C40/45	C 4045	509238	40	45	M10	8	32	2.7	32	2.5	23
C50/30	19-0330	20-01456	50	30	M10	10	122	2.4	41	5.2	40
C50/30	C 5030	509239	50	30	M10	8	67	1.6	32	5.0	23
C50/35	C 5035	509240	50	35	M10	8	61	2.0	32	5.8	23
C50/40	C 5040	509241	50	40	M10	8	57	2.3	32	6.5	23
C50/40	19-0436	20-01457	50	40	M10	10	112	3.3	41	7.4	40
C50/45	C 5045	509242	50	45	M10	8	54	2.6	32	7.3	23
C50/45	19-0438	20-01025	50	45	M10	10	107	4.1	41	8.6	40
C50/50	C 5050	509243	50	50	M10	8	52	3.0	46	3.6	23
C50/50	19-0440	20-01313	50	50	M10	10	107	4.9	41	9.7	40
C60/36	C 6036	509244	60	36	M10	8	95	2.0	46	6.5	23
C60/45	C 6045	509245	60	45	M10	8	84	2.6	63	4.8	23
C70/35	C 7035	509246	70	35	M10	9	148	1.9	63	7.3	23
C70/50	C 7050	509247	70	50	M10	9	117	2.9	63	10.7	23
C70/70	C 7070	509248	70	70	M10	9	101	4.2	72	3.2	23
C75/40	C 7540	509249	75	40	M12	9	160	2.2	72	7.3	39
C75/40	19-0447	20-01318	75	40	M12	12	296	3.2	92	7	70
C75/45	19-0448	20-01541	75	45	M12	12	280	3.5	92	8	70
C75/50	C 7550	509261	75	50	M12	9	139	2.9	72	8.0	39
C75/50	19-0450	20-01320	75	50	M12	12	265	4.1	92	9	70
C75/55	C 7555	509262	75	55	M12	9	159	3.9	86	9.7	39
C75/55	19-0451	20-00125	75	55	M12	12	245	4.6	92	10.1	70
C80/40	C 8040	509263	80	40	M14	12	190	2.3	82	10.6	62
C80/70	C 8070	509265	80	70	M14	12	162	5.3	97	13.0	62
C80/80	C 8080	509266	80	80	M14	12	165	6.1	97	14.4	62
C100/40	C 10040	509267	100	40	M16	14	334	2.4	128	8.0	95

Product images are graphical representations. Actual items may differ in appearance

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	T	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE C											
C100/40	19-0332	20-01324	100	40	M16	16	663	2.9	153	5.6	170
C100/55	C 10055	509268	100	55	M16	14	323	3.8	152	9.6	95
C100/55	19-0446	20-01325	100	55	M16	16	520	4.9	153	9.1	170
C100/60	C 10060	509269	100	60	M16	14	306	4.2	152	10.6	95
C100/75	C 10075	509271	100	75	M16	14	273	5.4	152	13.6	95
C100/80	C 10080	509272	100	80	M16	14	265	5.8	152	14.5	95
C100/100	C 100100	509273	100	100	M16	14	244	7.4	152	18.4	95
TYPE C CONTOURED											
C15/15	052 18 060	90767	15	15	M4	4	12	1.0	35	49.1	1.3
C15/15	052 18 060	90617	15	15	M4	4	24	1.0	8	4.9	1.3
C20/20	052 18 053	97163	20	20	M6	5.8	18	1.0	8	3.9	4.7
C20/20	052 18 053	97162	20	20	M6	5.8	35	1.0	20	3.9	4.7
C20/25	052 18 097	91741	20	25	M6	5.8	7	2.3	7	8.6	4.7
C20/25	052 18 097	91063	20	25	M6	5.8	16	2.2	17	8.8	4.7
C25/20	052 18 088	90648	25	20	M6	5.8	24	1.8	18	8.8	4.7
C30/25	052 18 165	91028	30	25	M8	7.4	60	0.9	34	3.5	11
C30/30	052 18 069	91161	30	30	M8	7.4	35	2.3	14	6.9	11
C30/30	052 18 069	91062	30	30	M8	7.4	70	2.1	35	6.9	11
C40/30	052 18 021	91273	40	30	M8	7.9	70	1.5	40	4.9	11
C40/30	052 18 002	90565	40	30	M10	10	142	1.2	67	5.1	23
C40/30	052 18 002	91112	40	30	M10	10	210	1.2	88	4.8	23
C40/40	052 18 043	92282	40	40	M8	7.9	37	3.3	20	9.8	11
C40/40	052 18 043	90596	40	40	M8	7.9	90	3.4	55	10.8	11
C50/30	052 18 091	92163	50	30	M10	10	70	3.0	50	9.8	23
C50/30	052 18 091	91074	50	30	M10	10	130	2.7	80	9.8	23
C50/40	052 18 074	91110	50	40	M10	10	75	3.1	50	9.8	23
C50/40	052 18 074	91236	50	40	M10	10	144	3.1	90	9.8	23
C50/40	052 18 074	91197	50	40	M10	10	211	3.0	130	9.8	23
C50/45	052 18 176	91402	50	45	M10	10	55	4.9	500	163.5	23
C50/50	052 18 112	91412	50	50	M10	10	50	5.5	38	18.6	23
C50/50	052 18 112	91037	50	50	M10	10	100	4.5	95	18.6	23
C60/45	052 18 275	93159	60	45	M10	10	160	4.4	130	18.2	23
C70/45	052 18 207	90772	70	45	M10	10.5	240	4.4	150	14.7	23
C70/60	052 18 077	90640	70	60	M12	10.5	250	5.5	150	18.4	39
C75/40	052 18 198	97233	75	40	M12	10.5	180	4.0	100	14.0	39
C75/40	052 18 198	97230	75	40	M12	10.5	300	3.6	180	13.6	39
C75/40	052 18 198	97229	75	40	M12	10.5	600	4.0	380	13.8	39
C75/40	052 18 198	97234	75	40	M12	10.5	700	3.5	460	13.7	39
C75/50	052 18 082	90643	75	50	M12	10.5	290	4.3	120	11.8	39
C75/50	052 18 082	91460	75	50	M12	10.5	490	4.4	200	11.5	39
C75/55	052 18 212	91045	75	55	M12	10.5	240	5.2	210	20.6	39
C75/55	052 18 212	92517	75	55	M12	10.5	400	5.4	320	20.9	39
C75/70	052 18 115	90667	75	70	M12	10.5	200	6.3	210	25.8	39
C100/55	052 18 102	91611	100	55	M16	15.8	300	5.5	200	19.6	95
C100/55	052 18 102	90975	100	55	M16	15.8	500	5.3	360	19.6	95
C100/55	052 18 102	91522	100	55	M16	15.8	900	5.3	560	19.6	95
C100/75	052 18 049	90602	100	75	M16	15.8	270	6.3	160	19.6	95

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	T	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE C COUNTURED											
C100/75	052 18 049	90603	100	75	M16	15.8	410	6.4	225	20.1	95
C160/75	052 18 146	90684	160	75	M16	15.8	900	7.8	500	27.3	95
C160/75	052 18 146	91431	160	75	M16	15.8	1500	7.8	870	27.5	95
C200/70	052 18 162	90618	200	70	M16	15.8	3600	6.9	1550	24.5	95
C200/70	052 18 162	92531	200	70	M16	15.8	1800	6.8	800	24.5	95

Product images are graphical representations. Actual items may differ in appearance

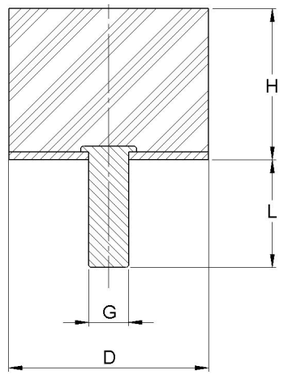
Bobbin Type D

Bobbin mounts can be used in a wide variety of applications to permit relative movement of the suspended mass and isolation from the effects of noise, vibration and shock. The bobbin mounts are designed to have a higher compressive stiffness and a lower shear stiffness.

Typical applications:

- Light fans
- Engines and pumps
- Compressors
- Measuring and test equipment

Technical Drawing



Product Data

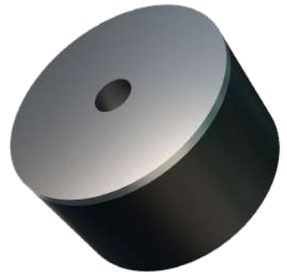
Figures stated are for natural rubber Hardness 60° IRH. Other Hardness are available upon request. The technical values are to be used for info only.

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE D									
D13/10	D 1310	509157	13	10	M5	10	4.6	0.7	2.7
D13/13.5	D 1313	509158	13	13.5	M5	10	4.1	1.0	2.7
D13/15	D 1315	509159	13	15	M5	10	4.1	1.1	2.7
D13/20	D 1320	509160	13	20	M5	10	3.7	1.5	2.7
D15/10	D 1510	54001836	15	10	M4	10	8.7	0.8	1.3
D15/15	D 1515	54001846	15	15	M4	10	7	1.3	1.3
D16/10	D 1610	509161	16	10	M5	12	7.9	0.7	2.7
D16/15	D 1615	509164	16	15	M5	12	6.5	1.1	2.7
D16/20	D 1620	509165	16	20	M5	12	5.9	1.4	2.7
D16/25	D 1625	509166	16	25	M5	12	5.9	1.9	2.7
D20/8.5	D 208,5	509167	20	8.5	M6	16.5	17.2	0.5	4.7
D20/15	D 2015	509168	20	15	M6	16.5	11.2	1.0	4.7
D20/20	D 2020	509169	20	20	M6	16.5	9.9	1.4	4.7
D20/25	D 2025	509170	20	25	M6	16.5	9.2	1.8	4.7
D20/30	D 2030	509171	20	30	M6	16.5	9.2	2.3	4.7
D25/10	D 2510	509172	25	10	M8	20	27.3	0.6	11
D25/15	D 2515	509173	25	15	M8	20	19.5	1.0	11
D25/19	D 2519	509174	25	19	M8	20	17.1	1.3	11
D25/22	D 2522	509176	25	22	M8	20	16.1	1.6	11
D25/25	D 2525	509177	25	25	M8	20	16.1	1.9	11
D25/30	D 2530	509178	25	30	M8	20	14.5	2.2	11
D25/40	D 2540	509179	25	40	M8	20	13.6	3.0	11
D30/15	D 3015	509180	30	15	M8	25	28.7	1.2	11
D30/22	D 3022	509181	30	22	M8	25	24.9	1.6	11
D30/30	D 3030	509182	30	30	M8	25	22	2.2	11
D30/40	D 3040	509183	30	40	M8	25	20.3	3.0	11
D40/20	D 4020	509184	40	20	M10	25	54.4	1.4	23
D40/25	D 4025	509185	40	25	M10	25	47.4	1.8	23
D40/35	D 4035	509186	40	35	M10	25	40.7	2.6	23
D40/40	D 4040	509187	40	40	M10	25	40.7	3.1	23
D40/45	D 4045	509188	40	45	M10	25	37.6	3.4	23
D50/20	D 5020	54001952	50	20	M10	28	124	1.8	23
D50/25	D 5025	509189	50	25	M10	25	85	1.8	23
D50/35	D 5035	509190	50	35	M10	25	70	2.6	23
D50/45	D 5045	509191	50	45	M10	25	63	2.9	23
D60/22	D 6022	509193	60	22	M10	25	155	1.5	23
D60/25	D 6025	509194	60	25	M10	25	139	1.8	23
D60/36	D 6036	509195	60	36	M10	25	108	2.6	23
D60/45	D 6045	509196	60	45	M10	25	97	3.3	23
D70/35	D 7035	509197	70	35	M10	25	165	2.5	23
D70/50	D 7050	509198	70	50	M10	25	135	3.7	23
D70/70	D 7070	509199	70	70	M10	25	135	3.7	23
D80/25	D 8025	509201	80	25	M14	35	320	1.7	62
D80/30	D 8030	509203	80	30	M14	35	267	2.1	62
D80/40	D 8040	509204	80	40	M14	35	214	2.9	62
D80/70	D 8070	509205	80	70	M14	35	162	5.3	62
D80/80	D 8080	509206	80	80	M14	35	162	6.3	62
TYPE D CONTURED									
D15/6	030 18 068	90496	15	6	M4	15	14	0.6	1.3
D15/13	030 18 029	91040	15	13	M4	15	6.5	1.3	1.3
D16/4	030 18 027	90308	16	4	M4	10	32	0.5	1.3
D20/12	030 18 055	90335	20	12	M6	10.5	17.5	1.1	4.7
D20/12	030 18 055	91589	20	12	M6	10.5	27	1.2	4.7
D20/16	030 18 031	97159	20	16	M6	18.5	12.5	2.0	4.7
D20/16	030 18 031	97155	20	16	M6	18.5	24	2.1	4.7
D20/16	030 18 031	97156	20	16	M6	18.5	27	2.0	4.7
D30/16	030 18 094	97196	30	16	M8	20	38	1.5	11
D30/16	030 18 095	97197	30	16	M8	13	38	1.5	11
D30/16	030 18 035	597193	30	16	M8	23	72	2.1	11
D30/18	030 18 133	97198	30	18	M8	23	31	1.9	11

Product images are graphical representations. Actual items may differ in appearance

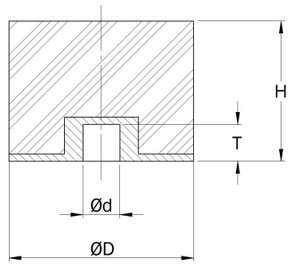
TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE D CONTURED									
D30/26	030 18 037	90317	30	26	M8	23	60	3.9	11
D40/26	030 18 039	91070	40	26	M10	27.5	100	3.0	23
D40/30	030 18 120	90358	40	30	M8	22.5	80	2.9	11
D40/30	030 18 023	90305	40	30	M10	27.5	120	3.9	23
D50/12	030 18 026	90307	50	12	M10	27.5	320	1.2	23
D50/36	030 18 041	90321	50	36	M10	27.5	170	4.0	23
D50/37.5	030 18 054	500068	50	37.5	M10	27.5	150	4.5	23
D70/55	030 18 043	90324	70	55	M12	37	280	7.4	39
D75/30	030 18 137	90362	75	30	M12	37	480	4.0	39
D75/20	030 18 045	597219	75	20	M12	37	510	2.0	39
D75/45	030 18 047	91616	75	45	M12	37	430	6.5	39
D160/65	030 18 165	91253	160	65	M16	46	1830	8.2	94.5

Bobbin Type E



Bobbin mounts can be used in a wide variety of applications to permit relative movement of the suspended mass and isolation from the effects of noise, vibration and shock. The bobbin mounts are designed to have a higher compressive stiffness and a lower shear stiffness.

Technical Drawing



Product Data

Figures stated are for natural rubber Hardness 60° IRH. Other Hardness are available upon request. The technical values are to be used for info only.

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	T	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
E15/13	030 18 030	90310	15	13	M4	3.8	6.5	1.2	1.3
E20/12	030 18 159	90377	20	12	M6	6.8	16	1.0	4.7
E20/16	030 18 032	97160	20	16	M6	6.5	12	1.5	4.7
E30/15	E 3015	54001897	30	15	M8	8	39	3.5	11
E30/18	030 18 161	597200	30	18	M8	6.9	17.5	2.0	11
E30/30	E 3030	54001920	30	30	M8	8	27.5	2.3	11
E40/20	E 4020	54001932	40	20	M10	8	68	11.1	23
E40/30	030 18 162	90379	40	30	M8	6.9	62	2.9	11
E40/30	030 18 099	93047	40	30	M10	8.5	60	1.5	23
E40/40	E 4040	54001943	40	40	M10	8	48	11.8	23
E50/20	E 5020	54001953	50	20	M10	8	124	1.8	23
E50/20	19-0350	20-00501	50	20	M10	10	153	2	40
E50/36	19-0456	20-00607	50	36	M10	10	52	3.5	40
E50/36	19-0456	20-00502	50	36	M10	10	120	3.5	40
E50/40	19-0834	20-01406	50	40	M10	10	112	4.3	40
E50/45	19-0457	20-01407	50	45	M10	11	107	5.1	40
E50/50	E 5050	54001980	50	50	M10	8	76	4.7	23
E75/20	030 18 046	97221	75	20	M12	9.5	510	2.0	39
E75/30	030 18 164	90381	75	30	M12	9.5	320	2.9	39
E75/30	030 18 164	500194	75	30	M12	9.5	500	3.0	39
E75/45	030 18 048	92047	75	45	M12	9.5	130	2.6	39
E75/45	030 18 048	91537	75	45	M12	9.5	260	2.6	39
E75/45	030 18 048	90327	75	45	M12	9.5	410	2.6	39
E100/69	030 18 050	91773	100	69	M16	15	645	6.9	94.5
E160/65	030 18 166	91265	160	65	M16	15	1250	5.9	94.5
E160/65	030 18 166	95139	160	65	M16	15	810	5.9	94.5

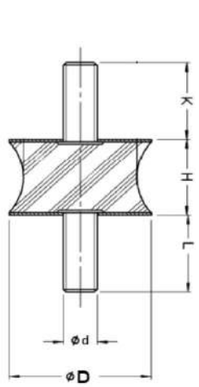
Bobbin Type TA, KD, KPD

Bobbin mounts can be used in a wide variety of applications to permit relative movement of the suspended mass and isolation from the effects of noise, vibration and shock. The bobbin mounts are designed to have a higher compressive stiffness and a lower shear stiffness.

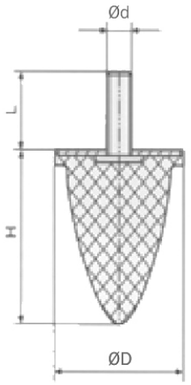
Typical applications:

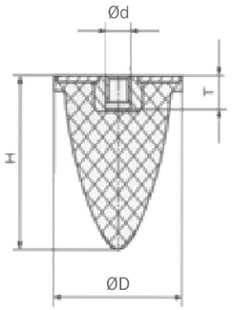
- Light fans
- Engines and pumps
- Compressors
- Measuring and test equipment

Technical Drawing

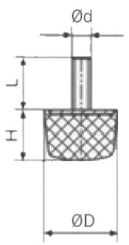


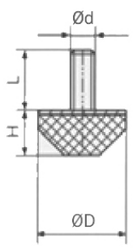
TYPE TA

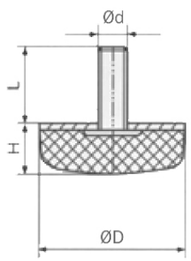


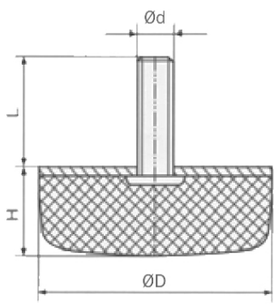


TYPE KPD









TYPE KD

Product Data

Figures stated are for natural rubber Hardness 60° IRH. Other Hardness are available upon request. The technical values are to be used for info only.

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)					COMPRESSION		SHEAR		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	K	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE TA												
TA 25/20	19-0581	20-01610	25	20	M6	12	18	31	1	12	2	8
TA 40/30	19-0699	20-01647	41	30	M8	20	20	45	1.7	17	3.9	20

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				COMPRESSION		MAX. BOLT TORQUE (Nm)
			ØD	H	Ød	L	MAX. LOAD (kg)	MAX. DEFLECTION (mm)	
TYPE KD									
KD 25/12	15-4069	10-00087	25	12	M6	16	31	0.8	8.3
KD 25/13	15-3452	20-00013	25	13	M6	16	30	0.8	8.3
KD 25/17	19-0582	20-01611	25	17	M6	18	29	2	8.3
KD 50/17	19-0506	20-00595	50	17	M10	28	155	2	40
KD 50/50	19-0851	20-01469	50	50	M8	23	107	5.1	20
TYPE KPD									
KPD	030 18 131	92544	26	18	22.5	M6	40	1.5	4.5
KPD 30/30	19-0604	20-00686	30	30	M8	20	35	6	20
KPD 30/36	19-0507	20-00929	30	36	M8	20	35	7	20
KPD	030 18 025	49009020	35	40	23	M8	9	4.4	9
KPD	030 18 025	90306	35	40	23	M8	22	3.6	9
KPD	030 18 025	91311	35	40	23	M8	32	3.9	9
KPD	030 18 061	90337	50	20	27.5	M10	190	3.0	18
KPD	14.10235	54001982	50	58	28	M10	400	35.7	35
KPD	030 18 158	90376	125	78	46	M16	1000	19.6	210

Product images are graphical representations. Actual items may differ in appearance

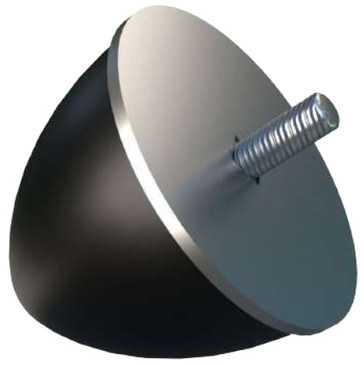
Product images are graphical representations. Actual items may differ in appearance

Buffers

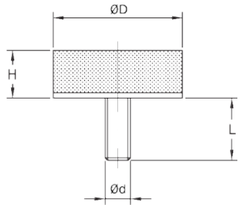
Buffers are designed to protect structures and equipment from impact forces. They are usually fitted as non-metallic stops or incorporated in vehicle suspension systems to provide progressive stiffening under increasing load. Circular and rectangular types are easily fitted.

Typical applications:

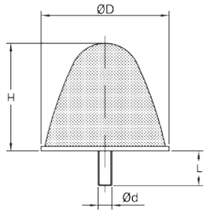
- Cranes
- Dump Trucks
- Off-Road Vehicles
- Handling Equipment
- Vehicle Suspensions



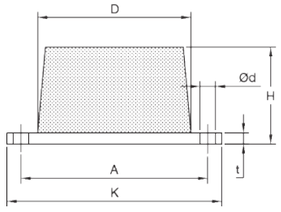
Technical Drawing



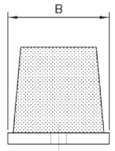
CYLINDICAL BUFFER



CONICAL BUFFER



RECTANGULAR BUFFER



Product Data

DRAWING NO.	PART NO.	DIMENSIONS (mm)					MAX. LOAD (kg)	MAX. DEFLECTION (mm)	MAX. BOLT TORQUE (Nm)
		ØD	H	Ød	L	t			
CYLINDRICAL BUFFER									
15-3463	10-00341	21	19	M6	15	-	100	8	8.3
031 18 588	92896	58	64	M12	-	10	400	6	-
15-3459	10-00337	50.8	19	M10	25	-	640	7	40
031 18 587	90478	58	106	M12	-	10	660	21	-
031 18 001	54001785	100	80	M16	36	-	4500	11	95
031 18 001	54001786	100	80	M16	36	-	7000	11	95
CONICAL BUFFER									
15-3462	10-00340	28.6	37	M6	15	-	100	18	8.3
15-3443	10-00335	108	119	M12	30	-	200	60	70
15-3461	10-00339	38	38	M8	20	-	250	18	20
15-3445	10-00336	108	93	M12	30	-	250	53	70
15-3435	10-00334	48	51	M10	25	-	270	18	40
15-3460	10-00338	70.3	46	M12	30	-	500	15	70

DRAWING NO.	PART NO.	DIMENSIONS (mm)							MAX. LOAD (kg)	MAX. DEFLECTION (mm)
		H	K	B	t	Ød	A	D		
RECTANGULAR BUFFER										
19-0564	20-00417	22	84	32	3	6.7	68.5	51	815	7
15-0260	10-00317	36.5	155.5	63.5	6	13.5	127	89	1000	10
15-0437	10-00322	55	120.5	47.5	6	8.7	104.8	86	1750	24
15-0238	10-00315	55	120.5	57	6	8.7	104.8	86	4600	23
15-0238	10-00316	55	120.5	57	6	8.7	104.8	86	6760	23

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

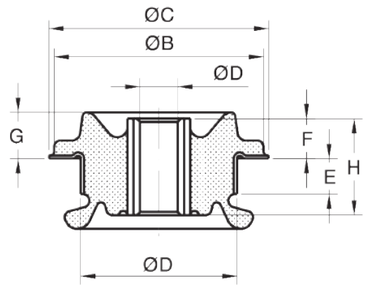
Cab Mount

The CAB mount has been designed to provide optimum suspension characteristics. This has been achieved through ensuring the Compression and Shear stiffness characteristics being relatively stiff in their respective directions. The CAB mounts can withstand small shock loadings to help improve driving conditions for the operator. The mount should be installed with washers top and bottom to ensure a failsafe system.

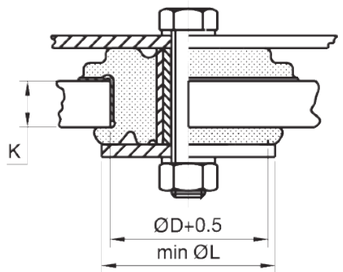
Typical applications:

- Commercial and Off-Highway vehicles
- Tractors
- Engines

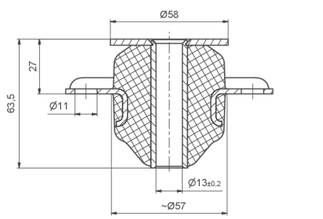
Technical Drawing

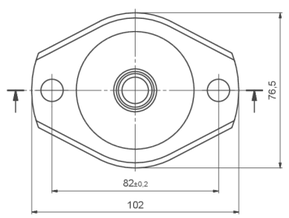


STANDARD CAB MOUNT

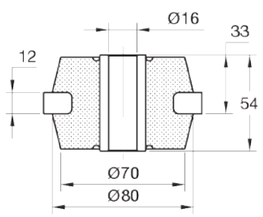


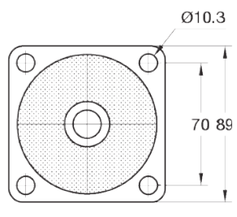
TYPICAL FITTING ARRANGEMENT





CAB MOUNT 058 18 001





BOLTED CAB MOUNT

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)										AXIAL MAX. LOAD (kg)	BOLT SIZE	MAX. BOLT TORQUE (Nm)	AXIAL STIFFNESS (N/mm)	WASHER PART NO.
			ØD	ØB	ØC	Ød	E	F	G	H	K	L					
STANDARD CAB MOUNT																	
45 °IRHD	11-1028	20-00875	59	-	80	16	-	20	-	40	16	80	75	M16	250	390	20-00532
60 °IRHD	11-1028	20-01109	59	-	80	16	-	20	-	40	16	80	150	M16	250	780	20-00532
65 °IRHD	11-1028	20-01035	59	-	80	16	-	20	-	40	16	80	180	M16	250	950	20-00532
45 °IRHD	11-1027	20-01107	59	-	80	20	-	20	-	40	16	80	75	M20	380	390	20-00003
50 °IRHD	11-1027	20-00002	59	-	80	20	-	20	-	40	16	80	95	M20	380	495	20-00003
55 °IRHD	11-1027	20-01061	59	-	80	20	-	20	-	40	16	80	120	M20	380	626	20-00003
65 °IRHD	11-1027	20-00874	59	-	80	20	-	20	-	40	16	80	180	M20	380	950	20-00003
45 °IRHD	17-1671-1	10-00563	75	100	105	16.5	17	19	22	46	20	105	160	M16	180	330	20-00533
45 °IRHD	17-1997-1	10-00626	75	100	105	16.5	17	19	22	46	20	105	190	M16	180	600	20-01494
45 °IRHD	17-1650	10-00552	75	100	105	22	17	19	22	46	20	105	300	M20	180	464	20-00533
60 °IRHD	17-1650	10-00944	75	100	105	22	17	19	22	46	20	105	500	M20	180	1200	20-00533
45 °IRHD	17-1650-1	10-00554	75	100	105	16.5	17	19	22	46	20	105	300	M16	180	464	20-00533
60 °IRHD	17-1650-1	10-00555	75	100	105	16.5	17	19	22	46	20	105	500	M16	180	1200	20-00533
45 °IRHD	17-1814	10-00598	89	115	120	25	23	13	21	47	25	120	410	M24	270	1797	20-00534
60 °IRHD	17-1814	10-00603	89	115	120	25	23	13	21	47	25	120	760	M24	270	3314	20-00534
70 °IRHD	17-1814	10-04461	89	115	120	25	23	13	21	47	25	120	1120	M24	270	4870	20-00534
45 NR 11	058 18 001	91928	SEE DRAWINGS										210	M12	35	300	93950
60 NR 11	058 18 001	90827	SEE DRAWINGS										430	M12	35	620	93950
70 NR11	058 18 001	92539	SEE DRAWINGS										630	M12	35	900	93950
BOLTED CAB MOUNT																	
45 °IRHD	17-0890	10-00440	SEE DRAWINGS										300	M16	250	1027	20-00532
60 °IRHD	17-0890	10-00441	SEE DRAWINGS										500	M16	250	1693	20-00532
70 °IRHD	17-0890	10-00442	SEE DRAWINGS										750	M16	250	2000	20-00532

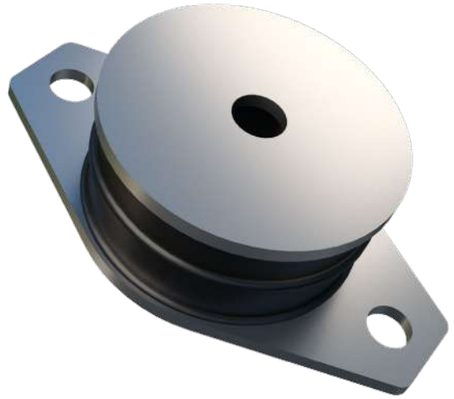
Product images are graphical representations. Actual items may differ in appearance

Circular SAW

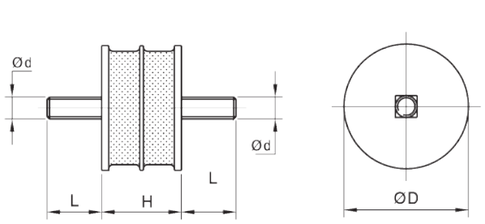
The metal interleaf incorporated in the design provides a higher compression to shear stiffness ratio, thereby increasing the load capacity in the compression or combined compression and shear modes.

The 17-1780 engine mounting features a void in the rubber section to allow the use of a central snubber device. 17-1780 can be fitted with a rebound washer for mobile applications.

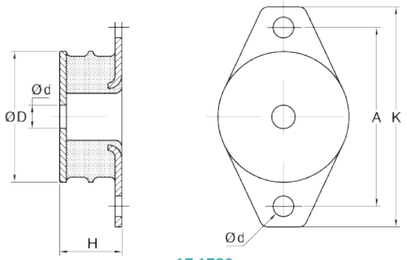
Typical applications:
- Vibratory rollers
- Small vibrating screens
- Small engines



Technical Drawing



17-1392



17-1780

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)							MAX. LOAD (kg)	
			ØD	H	L	Ød	A	K	Øh	COMPRESSION	SHEAR
45 °IRHD	17-1392	10-00492	57	37	25	M10	-	-	-	120	50
60 °IRHD	17-1392	10-00493	57	37	25	M10	-	-	-	250	70
70 °IRHD	17-1392	10-00494	57	37	25	M10	-	-	-	330	85
45 °IRHD	17-1780	10-00577	95	45	-	17	130	160	15	180	135
60 °IRHD	17-1780	10-00578	95	45	-	17	130	160	15	350	160

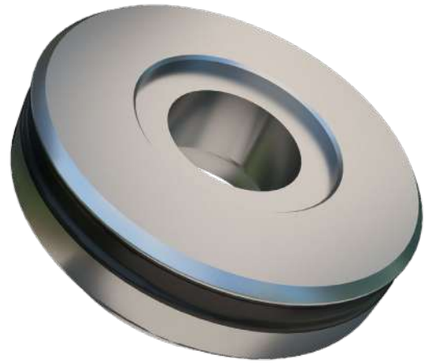
Product images are graphical representations. Actual items may differ in appearance

Conical Bearing

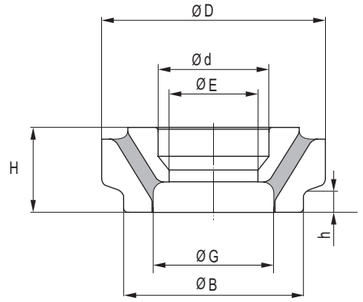
Each bush comprises of a high Tolerance conical metals with high quality natural rubber compounds featuring low creep and high tear and tensile properties. This provides for high fatigue resistance at high loads and movements. They also provide superior shock attenuation whilst providing good control in the radial and axial directions.

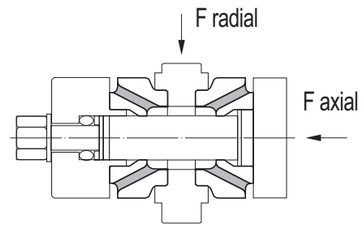
Conical bearings are used usually in pairs to transfer radial and axial loads whilst allowing large torsional movement and some conical. These are therefore suitable in applications where controlled flexibility is required such as in large travel suspension systems.

The high accuracy components provide:
- High fatigue life
- Wide radial load range
- High torsional movement



Technical Drawing





TYPICAL FITTING ARRANGEMENT
The conical bearings shall be mounted in pairs and preloaded axial roughly 7 mm each. Installed with an axial pre-loaded

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)							AXIAL		RADIAL STIFFNESS (N/mm)
			H	h	ØD	ØB	ØE	Ød	ØG	STIFFNESS (N/mm)	MAX. LOAD (kg)	
NR	040 18 084	96734	41	9	120	90	-	46	54	34800	5000	-
NR39	040 18 827	2121948	41	9	120	90	-	46	50.5	150000	5000	-
NR	040 18 050	96133	41	10	115	90	40	60	54	130000	13000	30000
NR	040 18 902	49014124	41.2	7	125	90	-	46	54	60000	6000	5000
45 NR11	040 18 876	49026815	41.8	10	112	90	44	55	60	17000	3100	17000
50 NR11	040 18 876	49009121	41.8	10	112	90	44	55	60	22000	4000	22000
60 NR11	040 18 876	49026816	41.8	10	112	90	44	55	60	34000	6100	34000
70 NR11	040 18 876	2129382	41.8	10	112	90	44	55	60	55000	9900	55000
NR	4059	54000585	41.8	10	125	100	54	65	70	34000	6100	34000
NR	201553	54000884	42.2	8	115	90	40	60	48	32000	7000	3080
NR	031 18 809	596222	45	9	125	90	-	46	54	10200	2000	-

Product images are graphical representations. Actual items may differ in appearance

Cushyfloat

The Cushyfloat mounting is a general purpose unit designed to provide effective isolation of vibration and noise arising from both static and mobile equipment. Originally designed for use with marine engines, the Cushyfloat is a simple to install, compact, low profile mounting. It combines 3 way control of the suspended equipment with relatively large static deflections where the rubber is loaded in shear and compression.

The design incorporates bump and rebound control features which limits excessive movement under shock loading. Top metal gives protection against oil contamination and the protective finish resists corrosion attack. Propeller thrust on marine applications is accommodated.

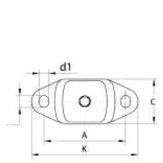
There are four sizes in the standard range with varying degrees of rubber Hardness catering for point loads from 32Kg to 3000kg. Natural frequencies as low as 8Hz are possible.

Typical applications:

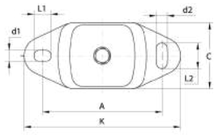
- Marine/Industrial vehicle engines
- Generator sets
- Pumps and compressors

When used in marine engine application when thrust forces are involved, the maximum load capacity is substantially reduced.

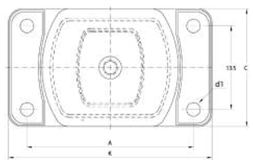
Technical Drawing



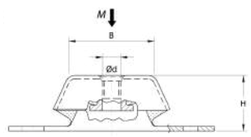
17-1600



17-1609, 17-1657



17-1841



SIDE VIEW

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)										MAX. LOAD (kg)		MAX. THRUST LOAD (N)	MAX. BOLT TORQUE (Nm)
			B	C	A	K	H	d_1	L_1	d_2	L_2	Ød	VERTICAL	VERTICAL WITH THRUST		
45 °IRHD	17-1600-1	10-00535	62	60	100	120	38-40.5	11	14	11	14	M12	50	35	370	25
55 °IRHD	17-1600-1	10-00536	62	60	100	120	38-40.5	11	14	11	14	M12	65	55	560	25
65 °IRHD	17-1600-1	10-00537	62	60	100	120	38-40.5	11	14	11	14	M12	100	80	830	25
75 °IRHD	17-1600-1	10-04525	62	60	100	120	38-40.5	11	14	11	14	M12	145	115	1200	25
45 °IRHD	17-1609-1	10-00545	76	75	140	183	49	13	20	13	30	M16	150	95	1000	50
55 °IRHD	17-1609-1	10-00546	76	75	140	183	49	13	20	13	30	M16	210	140	1500	50
65 °IRHD	17-1609-1	10-00547	76	75	140	183	49	13	20	13	30	M16	300	210	2300	50
75 °IRHD	17-1609-1	10-00548	76	75	140	183	49	13	20	13	30	M16	450	315	3300	50
45 °IRHD	17-1657-1	10-00557	72	112.5	182	228	70	18	26	18	34	M20	300	250	2800	100
55 °IRHD	17-1657-1	10-00558	72	112.5	182	228	70	18	26	18	34	M20	520	370	4200	100
65 °IRHD	17-1657-1	10-00559	72	112.5	182	228	70	18	26	18	34	M20	800	560	6400	100
75 °IRHD	17-1657-1	10-00560	72	112.5	182	228	70	18	26	18	34	M20	1000	700	11800	100
40 °IRHD	17-1841-2	10-00605	120	190	270	330	112	22	-	-	-	M24	950	630	5300	200
50 °IRHD	17-1841-2	10-00606	120	190	270	330	112	22	-	-	-	M24	1400	945	7100	200
60 °IRHD	17-1841-2	10-00607	120	190	270	330	112	22	-	-	-	M24	2200	1575	12500	200
70 °IRHD	17-1841-2	10-00608	120	190	270	330	112	22	-	-	-	M24	3000	2100	18000	200

Product images are graphical representations. Actual items may differ in appearance

Cushyfloat HT

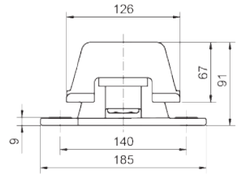
The Cushyfloat HT (High Thrust) mounting has been developed to meet the increased torque output and higher thrust load requirements of many modern marine power units. By careful design of the rubber section, relatively high degrees of flexibility in the vertical and lateral modes are combined with high stiffness in the longitudinal fore and aft direction, thereby giving good vibration isolation properties and minimum movement under thrust forces.

The design incorporates bump and rebound control features which limit excessive movements under shock loading. The mountings have a high inbuilt tensile strength which renders them suitable for the suspension of power units in lifeboat applications. The top gives protection against oil contamination and the protective finish resists corrosion attack. Two designs and different rubber compounds allow loads between 85 and 1070Kg to be accommodated.

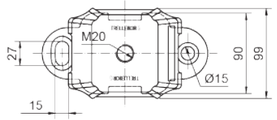
Typical applications:

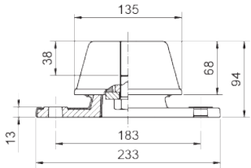
- Marine Engines

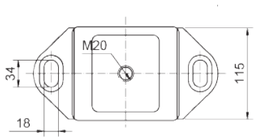
Technical Drawing



17-2182







17-1990

Product Data

TYPE	DRAWING NO.	PRODUCT NO.	MIN VERTICAL LOAD (Kg)	MAX. VERTICAL LOAD (Kg)	STATIC STIFFNESS (kN/mm)	DYNAMIC STIFFNESS (kN/mm)	MIN DEFLECTION (mm)	MAX DEFLECTION (mm)	MAX. BOLT TORQUE (Nm)
35 °IRHD	17-2182-1	10-01143	85	140	0	0	3	5	100
45 °IRHD	17-2182-1	10-01144	125	209	1	1	3	5	100
55 °IRHD	17-2182-1	10-03014	204	339	0.96	1.2	3	5	100
65 °IRHD	17-2182-1	10-02930	301	499	1.53	2.06	3	5	100
45 °IRHD	17-1990-1	10-01150	150	571	1.6	1.85	1	4	100
60 °IRHD	17-1990-1	10-03146	296	1070	3	3.9	1	4	100

DRAWING NO.	VERTICAL	LATERAL	LONGITUDINAL
NOMINAL STIFFNESS RATIOS			
17-2182-1	1	0.85	6
17-1990-1	1	0.25	9

Product images are graphical representations. Actual items may differ in appearance

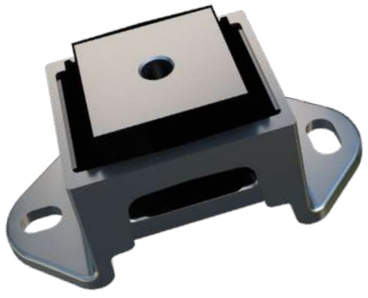
Cushyfloat HD

The latest generation of Cushyfloat is a completely new and innovative design which offers engine manufacturers and boat builders Maximum versatility. This product has multiple performance benefits for customers whose requirements may be varied and challenging for conventional solutions.

The HD Cushyfloat has excellent performance characteristics with: Up to 10mm linear vertical deflection, with low horizontal stiffnesses. This enables improved vibration isolation – even at the low end of the engine speed range. Vertical and lateral buffering within the design limits the movement of the engine in tough service conditions.

The HD Cushyfloat provides simplicity for engines manufacturers and end users with: An interchangeable footprint with existing mountings; minimizing retrofit installation issues.

The entire range can be formulated from just three rubber mixes; therefore reducing inventory requirements and the complexity of product selection.



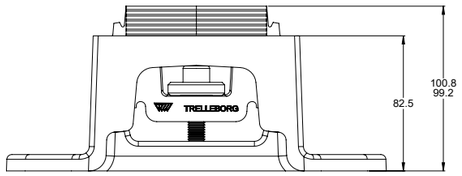
Installation is aided by sighting grooves so that it is easy to align the engine, and ensure the correct load distribution.

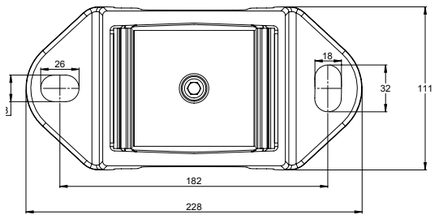
More cost effective product life and serviceability due to its modular design. Upon refurbishment, the outer casting can be re-used.

Typical applications:

- Marine/Industrial vehicle engines
- Generator sets
- Pumps and compressors

Technical Drawing





Product Data

TYPE	DRAWING NO.	PART NO.	MAX. LOAD (kg)	MAX. THRUST LOAD (kg)	MAX. THRUST (kN)		STATIC STIFFNESS (N/mm)	MAX. BOLT TORQUE (Nm)
					CONTINUOUS	INTERMITTENT		
40 °IRHD	17-4726-1	10-02308	220	155	2.45	3.19	270	170
50 °IRHD	17-4726-1	10-02108	320	220	3.67	4.78	390	170
60 °IRHD	17-4726-1	10-02109	470	330	5.51	7.16	575	170
40 °IRHD	17-4792-1	10-02159	530	370	5.33	6.93	650	170
50 °IRHD	17-4792-1	10-02114	735	515	7.96	10.35	900	170
60 °IRHD	17-4792-1	10-02160	980	685	14.7	19.11	1200	170

Product images are graphical representations. Actual items may differ in appearance

Cushyfloat Mini HD

Trelleborg Mini HD Cushyfloat mounts combine 3 way control of suspended equipment with large static deflections where the rubber is loaded in shear and compression. The design incorporates bump and rebound control features which limits excessive movement under shock loading.
The easy to install mount features a prominent use of lightweight engineered plastics which offer greater environmental protection with no compromise in product performance.

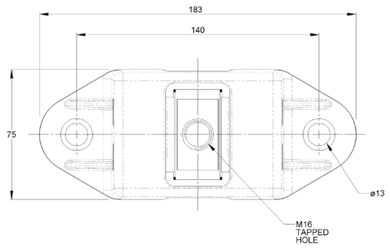
Benefits:

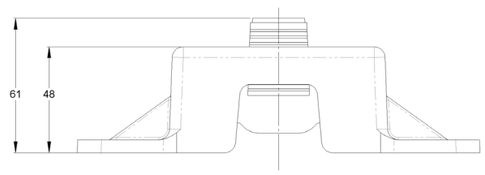
- Large linear vertical deflection
- Similar stiffness ratios to same footprint part (17/1609)
- Corrosion resistant materials
- Lightweight part (0.45kg)
- Modular and failsafe design
- Wide loading capability.

Typical applications:

- Marine, industrial and vehicle engines
- Generator sets
- Pumps
- Compressors
- Refrigeration systems

Technical Drawing





Product Data

TYPE	DRAWING NO.	PART NO.	MAX. LOAD (Kg)	MAX. THRUST LOAD (Kg)	STATIC STIFFNESS (kN)	MAX. TRUST (n)		MAX. BOLT TORQUE (Nm)
						CONTINUOUS	INTERMITTENT	
50 °IRHD	17-4944-1	10-02322	100	91	130	1100	1650	60
60 °IRHD	17-4944-1	10-02036	160	112	210	1650	2450	60
70 °IRHD	17-4944-1	10-02037	220	154	280	2450	3675	60

DRAWING NO.	VERTICAL	LATERAL	LONGITUDINAL
17-4944-1	1	0.3	2.5

Product images are graphical representations. Actual items may differ in appearance

Cushyfoot

Cushyfoot have two rubber elements, used in shear and compression, to provide excellent stiffness characteristics for the isolation of a wide range of vibration frequencies.

Sizes:

- 17-0290 for loads up to 230 kg per mounting
- 17-0213 for loads up to 1250 kg per mounting
- 17-0346 for loads up to 1280 kg per mounting - up to 16 mm static deflection.

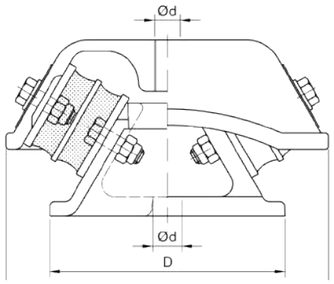
Benefits:

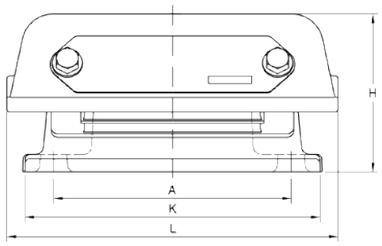
- A wide load range from 50 to 1280 kg
- Strong casting for safety and reliability
- Dissimilar horizontal stiffness gives optimum isolation and motion control

Typical applications:

- Diesel engines
- Generator sets
- Compressors
- Fans
- Hydraulic units
- Lift machinery

Technical Drawing





Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)								MAX. LOAD (kg)
			L	B	A	K	H	D	Ød	G	
45 °IRHD	17-0290-1	20-00689	122	132	90	114	72	82	13	M16	115
45 NR 511	050 18 001	96808	121	127	90	115	72	83	11	M12	150
45 NR 511	050 18 001	49047069	121	127	90	115	72	83	11	M16	150
50 NR 511	050 18 001	96806	121	127	90	115	72	83	11	M12	190
50 NR 511	050 18 001	49041129	121	127	90	115	72	83	11	M16	190
60 °IRHD	17-0290-1	10-04251	122	132	90	114	72	82	13	M16	230
65 NR 511	050 18 001	96809	121	127	90	115	72	83	11	M12	310
65 NR 511	050 18 001	49047070	121	127	90	115	72	83	11	M16	310
70 °IRHD	17-0290-1	10-04116	122	132	90	114	72	82	13	M16	340
45 NR 511	050 18 004	596744	228	203	165	203	120	146	17.5	M16	500
75 NR 511	050 18 001	96807	121	127	90	115	72	83	11	M12	530

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)								MAX. LOAD (kg)
			L	B	A	K	H	D	Ød	G	
75 NR 511	050 18 001	49047071	121	127	90	115	72	83	11	M16	530
45 °IRHD	17-0213	10-04106	230	204	165	205	110	148	18	M16	590
45 NR 511	050 18 002	96802	228	203	165	203	110	146	17.5	M16	650
45 °IRHD	17-0346-1	10-04123	230	204	165	205	123	148	18	M16	630
58 NR 511	050 18 004	96800	228	203	165	203	120	146	17.5	M16	850
58 NR 511	050 18 002	96805	228	203	165	203	110	146	17.5	M16	950
65 NR 511	050 18 004	96920	228	203	165	203	120	146	17.5	M16	950
65 NR 511	050 18 002	96804	228	203	165	203	110	146	17.5	M16	1250
75 NR 511	050 18 004	96801	228	203	165	203	120	146	17.5	M16	1250
60 °IRHD	17-0213	10-04104	230	204	165	205	110	148	18	M16	1250
60 °IRHD	17-0346-1	10-04120	230	204	165	205	123	148	18	M16	1280
75 NR 511	050 18 002	96803	228	203	165	203	110	146	17.5	M16	1600

Product images are graphical representations. Actual items may differ in appearance

EH Mount

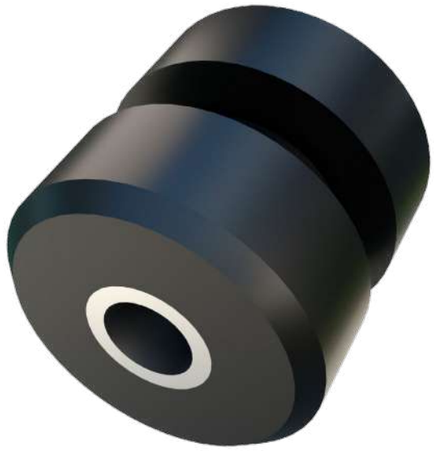
The EH is designed primarily for mobile applications where high dynamic and shock forces are encountered. Dynamic vertical movements in both the directions are restricted and excellent horizontal stability is provided.

Features:

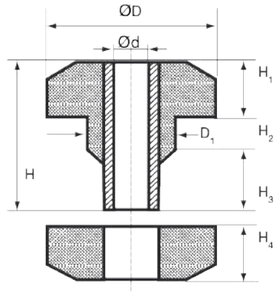
- Dynamic efficiency in all directions
- Attenuation of structure-borne noise
- Accommodation of misalignment and distortion
- Simple design-easy to install
- Fail-safe installation
- Wide load range, 40 to 1200 kg

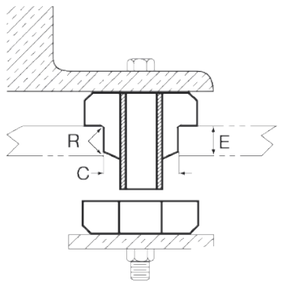
Typical applications:

- Military vehicles
- Agriculture vehicles
- Construction equipment
- Transport machinery
- Industrial mobile machinery



Technical Drawing





MACHINE IN OPERATION

Product Data

TYPE	DRAWING NO.	PART NO.	HARDNESS	DIMENSIONS (mm)												AXIAL STIFF. (N/mm)	MAX. LOAD (kg)	BOLT SIZE	MAX. BOLT TORQUE (Nm)	WASHER PART NO.
				Ød	ØD	$ØD_1$	H	H_1	H_2	H_3	H_4	C	E	R					
EH (M0 Lager)																				
039 18 799/111		60900572	50 NR511	8.1	22	-	17	-	-	-	-	13.5	4	-	400	25	M6 8.8 / M8 5.6	9,9 / 11	-
039 18 799/111		60900531	50 CR 57																	
039 18 799/111		60900533	60 CR 57	8.1	22	-	17	-	-	-	-	13.5	4	-	730	45	M6 8.8 / M8 5.6	9,9 / 11	-
EH 4850	19-0213-1	20-00621	40 °IRHD	13	50	32.6	50	20	10	20	20	31.8	15	1.5	430	60	M12	40	20-00416
EH 4850	19-0213-1	20-01504	40 °IRHD (CR)	13	50	32.6	50	20	10	20	20	31.8	15	1.5	430	60	M12	40	20-00416
039 18 754		49011344	42 CR	13.5	48	33	50	20.5	-	-	19.5	33.5	12	-	200	80	M10 8.8/ M12 5.6	47 / 39	
EH 6463	19-0214-1	20-00619	40 °IRHD	17	64	40	62	23	14	25	23	39	22	2.3	585	90	M16	80	20-01495
039 18 753/111		49031354	40 CR	9	33	20	30	11	-	-	11	20.5	9	-	270	97	M6 6.8 / M8 5.6	7,5 / 11	-
039 18 755		49012351	42 CR	13.5	48	31.5	50	20.5	-	-	19.5	31.5	13	-	335	100	M10 8.8/ M12 5.6	47 / 39	-

TYPE	DRAWING NO.	PART NO.	HARDNESS	DIMENSIONS (mm)												AXIAL STIFF. (N/mm)	MAX. LOAD (kg)	BOLT SIZE	MAX. BOLT TORQUE (Nm)	WASHER PART NO.
				Ød	ØD	$ØD_1$	H	H_1	H_2	H_3	H_4	C	E	R					
EH 4850	19-0213-1	20-00620	60 °IRHD	13	50	32.6	50	20	10	20	20	31.8	15	1.5	865	100	M12	40	20-00416
EH 4850	19-0213-1	20-01510	60 °IRHD (CR)	13	50	32.6	50	20	10	20	20	31.8	15	1.5	865	100	M12	40	20-00416
EH 6463	19-0214-1	20-02499	50 °IRHD	17	64	40	62	23	14	25	23	39	22	2.3	900	130	M16	80	20-01495
039 18 765		49029937	45 CR 57	9	48	33	50	20.5	-	-	19.5	33.5	13	-	340	136	M8 12.9	40	-
039 18 765		49038236	50 CR 57	9	48	33	50	20.5	-	-	19.5	33.5	13	-	420	170	M8 12.9	40	-
EH 4850	19-0213-1	20-02656	75 °IRHD (CR)	13	50	32.6	50	20	10	20	20	31.8	15	1.5	146	175	M12	40	20-00416
039 18 755		2129379	55 CR	13.5	48	31.5	50	20.5	-	-	19.5	31.5	13	-	600	180	M10 8.8/ M12 5.6	47 / 39	-
039 18 754		511454	64 CR	13.5	48	33	50	20.5	-	-	19.5	33.5	12	-	470	190	M10 8.8/ M12 5.6	47 / 39	-
EH 6463	19-0214-1	20-00618	60 °IRHD	17	64	40	62	23	14	25	23	39	22	2.3	1420	200	M16	80	40-05019
EH 9075	19-0727-1	20-00617	40 °IRHD	23	89	58	73	25	19	29	25	57.2	28	3	1056	200	M20	200	20-00533
039 18 768		49038161	45 CR	16.7	64.8	40.1	61.7	22.9	-	-	22.9	40.6	20	-	545	220	M12 5.6	39	-
EH 9075	19-0727-1	20-02835	45 °IRHD (CR)	23	89	58	73	25	19	29	25	57.2	28	3	1330	230	M20	200	20-00533
039 18 773		49043630	50 CR	14	64.8	-	61.7	-	-	-	-	40.6	20	-	650	260	M12 10.9	105	-
039 18 765		49038235	60 CR 57	9	48	33	50	20.5	-	-	19.5	33.5	13	-	730	290	M8 12.9	40	-
EH 9075	19-0727-1	20-02836	50 °IRHD (CR)	23	89	58	73	25	19	29	25	57.2	28	3	1800	295	M20	200	20-00533
EH 6463	19-0214-1	20-01860	70 °IRHD	17	64	40	62	23	14	25	23	39	22	2.3	2087	300	M16	80	20-01495
039 18 755		511452	64 CR	13.5	48	31.5	50	20.5	-	-	19.5	31.5	13	-	1030	310	M10 8.8/ M12 5.6	47 / 39	-
EH 9075	19-0727-1	20-02837	55 °IRHD (CR)	23	89	58	73	25	19	29	25	57.2	28	3	2200	370	M20	200	20-00533
039 18 755		49003069	75 CR	13.5	48	31.5	50	20.5	-	-	19.5	31.5	13	-	1300	390	M10 8.8/ M12 5.6	47 / 39	-
039 18 766		49042472	45 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	980	390	M16 5.8/ M20 4.6	126 / 147	-
039 18 766		49033624	45 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	980	390	M16 5.8/ M20 4.6	126 / 147	Included
039 18 773		60905067	60 CR	14	64.8	-	61.7	-	-	-	-	40.6	20	-	1000	400	M12 10.9	105	-
039 18 766		49042473	50 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	1060	420	M16 5.8/ M20 4.6	126 / 147	-
039 18 766		49036771	50 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	1060	420	M16 5.8/ M20 4.6	126 / 147	Included
EH 9075	19-0727	20-00616	60 °IRHD	23	89	58	73	25	19	29	25	57.2	28	3	2400	450	M20	200	20-00533
EH 9075	19-0727	20-01508	60 °IRHD (CR)	23	89	58	73	25	19	29	25	57.2	28	3	2400	450	M20	200	20-00533
039 18 765		49038234	75 CR 57	9	48	33	50	20.5	-	-	19.5	33.5	13	-	1160	460	M8 12.9	40	-
039 18 768		49038160	60 CR	16.7	64.8	40.1	61.7	22.9	-	-	22.9	40.6	20	-	1230	490	M12 5.6	39	-
039 18 753/111		49044363	75 CR	9	33	20	30	11	-	-	11	20.5	9	-	1450	522	M6 6.8 / M8 5.6	7,5 / 11	-
039 18 766		49042474	60 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	1600	640	M16 5.8/ M20 4.6	126 / 147	-
039 18 766		49036770	60 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	1600	640	M16 5.8/ M20 4.6	126 / 147	Included
EH 1127	13-4109-1	20-02876	70 °IRHD	37.8	124	64.8	85.9	31.8	22.3	31.8	31.8	64	31.8	4	6497	1750	M24	300	Contact for details
039 18 766		49042475	75 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	5200	2000	M16 5.8/ M20 4.6	126 / 147	-
039 18 766		49036769	75 CR 57	21	89	58.4	73	25.4	-	-	23	58.9	29	-	5200	2000	M16 5.8/ M20 4.6	126 / 147	Included
039 18 774		49045418	60 CR	25	124	-	87	-	-	-	-	64.5	28	-	5612	2250	M20 5.6/ M24 4.6	184 / 255	-

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

Equi-frequency Small

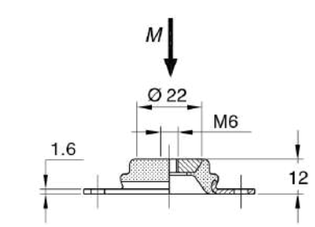
This is a general purpose low-profile mount for use where space is restricted. Best suited for stationary applications. May also be used to protect delicate or sensitive equipment from shock or disturbances.

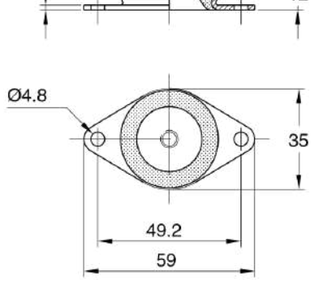
Each design has the same stiffness in vertical and horizontal directions and can be used as small anti-shock mounting when static loadings are derated.

Typical applications:

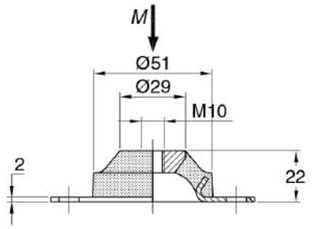
- Instrumental panels
- Small fan sets
- Small vacuum pumps
- Small reciprocating engines

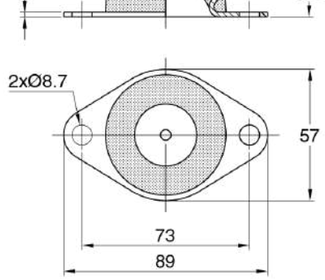
Technical Drawing





17-1566





17-0389

Product Data

DRAWING NO.	PART NO.	TYPE	MAX. LOAD (kg)	STIFFNESS (N/mm)	MAX. BOLT TORQUE (Nm)
17-1566	10-00529	45 °IRHD	11	75	7
17-1566	10-00530	60 °IRHD	22	130	7
17-0389-5	10-00406	45 °IRHD	27	100	20
17-0389-5	10-00407	60 °IRHD	54	180	20

Product images are graphical representations. Actual items may differ in appearance

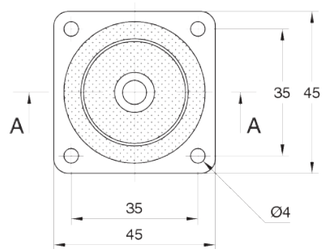
Flanged Instrumounting

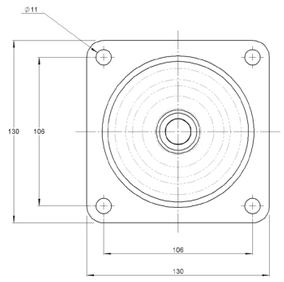
This mount is suitable for both mobile and static applications, for the protection of sensitive equipment from external vibration or for vibration isolation. Flanged instrumountings can become fail-safe if fitted with a washer to the top and bottom of the rubber section.

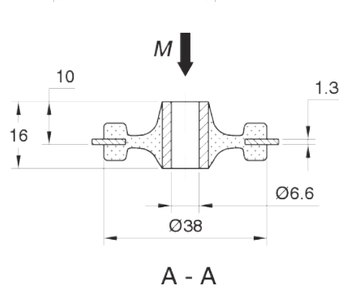
Typical applications:

- Small fan sets
- Transformers
- Sensitive equipment

Technical Drawing

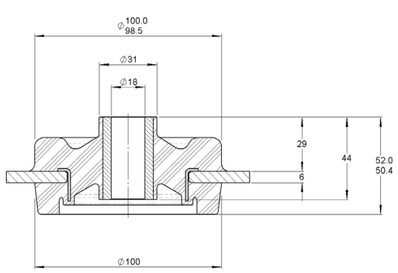






A - A

17-1801



17-4573

Product Data

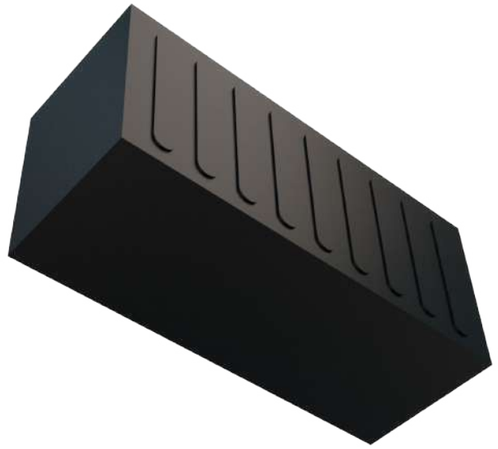
DRAWING NO.	PART NO.	TYPE	MAX. LOAD (kg)
17-1801	10-00583	45 °IRHD	2.7
17-1801	10-00584	60 °IRHD	5.4
17-4573	10-04819	45 °IRHD	75
17-4573	10-04820	60 °IRHD	150

Product images are graphical representations. Actual items may differ in appearance

GK Mount

The GK Mount is specifically designed for isolation of heavy machinery with low interfering frequencies. It is widely used under concrete foundations supporting heavy machinery.

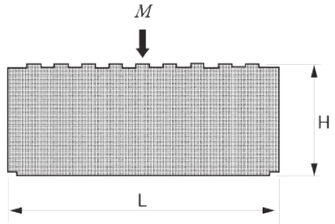
The long narrow section enables the GK to be suitable for fitting under a universal structural framing. Type GK is a heavy duty mounting with excellent flexible characteristics in both vertical and lateral planes. Deflection up to 30mm is possible, making the GK suitable for installations with low disturbing frequencies. Installation is simple, eliminating traditional methods of attachment to machinery or support structure.

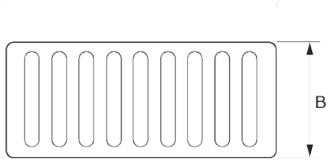


Typical applications:

- Mixers
- Converters
- Paper mills
- Gearboxes
- Industrial fans
- Sound enclosures
- Floating structures

Technical Drawing





Product Data

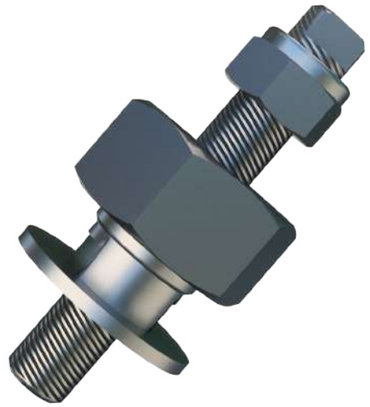
TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)			MAX. LOAD (kg)
			L	B	H	
GK0-40	15-4041	10-00085	195	175	150	1800
GK0-60	15-4041	10-00101	195	175	150	3800
GK1-40	15-4042	10-00008	400	175	150	4000
GK1-60	15-4042	10-00009	400	175	150	8000

Height Adjusters

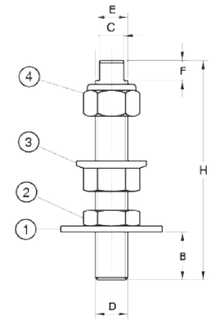
Height Adjusters (HA) are available in various sizes to suit the small and medium range of Trelleborg AVS mountings. It allows mounts to be retrofitted to existing installations where original spares are unobtainable.

The HA range are made in corrosion protected grade 8 steel. The steel is zinc plated. The Height Adjuster is supplied complete with washer and nut for fastening to the mounting and two nuts and a lock washer for the engine foot fastening. The Height Adjusters allow ease of aligning when installing equipment.

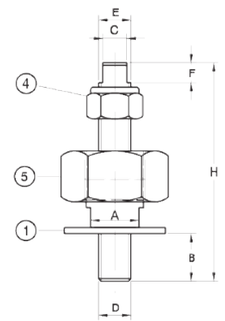
When installing secure the bolt into the mounting, it is recommended to apply thread lock adhesive. For optimum solutions where close coupling Tolerances are required, allow the mountings to settle for 48 hours before final alignment of the engine installation.



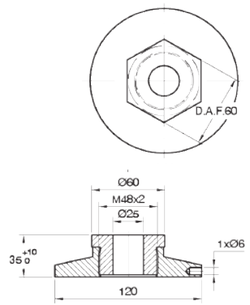
Technical Drawing



HA



HAD



HAD 24/24

Product Data

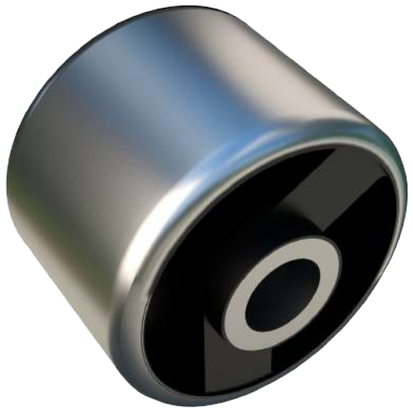
TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)							WASHER (1)	HEXAGON THIN NUT (2)	HEXAGON FLANGE NUT (3)	LOCK NUT PLASTIC INSERT (4)	FINE THREAD ADJUSTING UNIT (5)
			H	D	E	A	B	C	F					
HA 12/12	18-2210A	40-04704	95	M12	M12	-	20	D.A.F.8	8	37*12*3	M12	M12	M12	-
HA 12/16	38-1600H	40-06068	105	M12	M16	-	20	D.A.F.12	10	44*15*3	M16	M16	M16	-
HA 16/16	18-2210C	40-04705	110	M16	M16	-	24	D.A.F.12	10	50*15*3	M16	M16	M16	-
HA 16/20	18-2210D	20-00511	130	M16	M20	-	24	D.A.F.12	10	56*20*4	M20	M20	M20	-
HA 20/20	18-2210E	40-02515	135	M20	M20	-	30	D.A.F.12	10	60*21*4	M20	M20	M20	-
HAD 12/16	18-2210F	20-00513	105	M12	M16	D.A.F.24	20	D.A.F.12	10	44*15*3	-	-	M16	M30*1.5
HAD 16/16	18-2210G	20-00514	110	M16	M16	D.A.F.24	24	D.A.F.12	10	50*15*3	-	-	M16	M30*1.5
HAD 16/20	18-2210H	20-00515	130	M16	M20	D.A.F.27	24	D.A.F.12	10	56*20*4	-	-	M20	M36*2
HAD 20/20	18-2210J	20-00516	135	M20	M20	D.A.F.27	30	D.A.F.12	10	60*21*4	-	-	M20	M36*2
HAD 24/24	18-2210K	20-00517	SEE DRAWING											
-	033 18 710	49018052	135	M12	M20x1,5	-	15	SW8	10	B13 DIN 9021	SW19	-	SW18	SW30
-	033 18 709	49039256	135	M16	M24x1,5	-	20	SW12	10	B17 DIN 9021	SW22	-	SW24	SW36
-	033 18 708	49011255	135	M20	M33x2	-	25	SW15	10	B22 DIN 9021	SW27	-	SW30	SW50
-	033 18 707	49039258	160	M24	M36x1,5	-	30	SW18	10	B26 DIN 9021	SW27	-	SW36	SW55

Hydro Bush

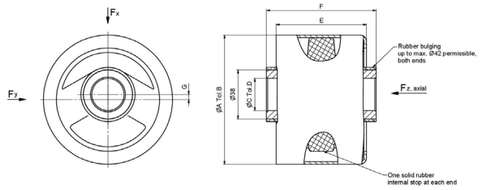
Hydro bushes are elastomer springs with integrated hydraulic damping. Suitable for mountings of combustion engines, cabs, pumps and compressors, mainly in agricultural machines and construction machinery. They are specifically suited when low frequencies occur as excitation frequency in the mount system. They achieve a high damping in the natural frequency range of the system as well as gut isolation properties above this range. All Hydro Bushes are galvanised to give extra resistance against corrosion.

Typical applications:

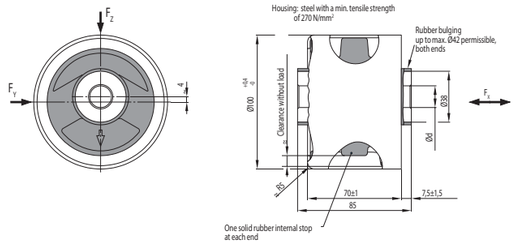
- Engine mounts
- Cab mount
- Pumps
- Compressors
- Industrial fans
- Sound enclosures
- Floating structures



Technical Drawing



HYDRO BUSH



HD-RATED HYDRO BUSH

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)				AXIAL		RADIAL (Z)		RADIAL (Y)	
			Housing		Ød	Tolerance for Ød	STIFFNESS (N/mm)	MAX. LOAD (kg)	STIFFNESS (N/mm)	MAX. LOAD (kg)	STIFFNESS (N/mm)	MAX. LOAD (kg)
			ØD	Tolerance for ØD								
HYDRO BUSH												
35 NR 11	046 18 013	95573	100	+0.4/ -0	25	+0.087/ -0	110	55	220	110	300	150
45 NR 11	046 18 708	507315	100	+0.4/ -0	32	+0.087/ -0	220	110	320	160	600	300
45 NR 11	046 18 014	595574	100	+0.4/ -0	25	+0.087/ -0	220	110	320	160	600	300
55 NR 11	046 18 015	595575	100	+0.4/ -0	25	+0.087/ -0	330	165	500	250	830	415
55 NR 11	046 18 714	49022864	100	+0.4/ -0	32	+0.087/ -0	330	165	500	250	830	415
62 NR 11	046 18 016	595576	100	+0.4/ -0	32	+0.087/ -0	425	215	685	345	1070	535
68 NR 11	046 18 017	95676	100	+0.4/ -0	32	+0.087/ -0	520	260	840	420	1300	650
35 NR 11	046 18 711	49022801	100	+0.4/ -0	32	+0.087/ -0	110	550	220	110	300	150
HD-RATED HYDRO BUSH												
45 NR 11	046 18 713	49022863	100	+0.4/ -0	32	+0.087/ -0	220	110	320	160	600	300
55 NR 11	046 18 705	477895	100	+0.4/ -0	32	+0.087/ -0	330	165	500	250	830	415
62 NR 11	046 18 715	49022865	100	+0.4/ -0	32	+0.087/ -0	425	215	685	345	1070	535
68 NR 11	046 18 702	600984	100	+0.4/ -0	32	+0.087/ -0	520	260	840	420	1300	650
35 NR 11	046 18 712	49022862	100	+0.4/ -0	32	+0.087/ -0	110	550	220	110	300	150

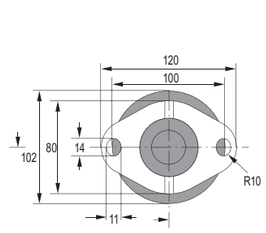
Hydro Mount DL

The Hydro Mount DL, as a hydraulically damping rubber mount, solved the designer's conflict of how to mount a mass that is excited by wide frequency spectrum. Particularly if low frequencies – between 5 Hz and 15 Hz – can occur as the excitation frequency, on the one hand high damping in the natural frequency range of the system, and on the other, a good isolation property above this natural frequency (supercritical mounting) is necessary.

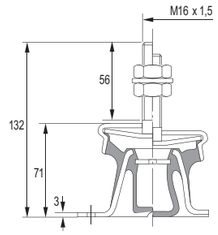
Typical applications:

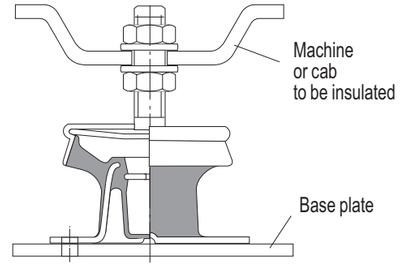
- Pumps
- Compressors
- Utility vehicle engine mount
- Marine engine mount
- Driver cab mount

Technical Drawing



HYDRO MOUNT DL / HD





TYPICAL FITTING ARRANGEMENT

Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL		RADIAL	CORROSION PROTECTION
			STIFFNESS AT SZ=2.5 mm (N/mm)	MAX. LOAD (kg)	STIFFNESS AT SZ=5 mm (N/mm)	
HYDROMOUNT DL						
50 NR 11	036 18 026	93638	142	70	143	Black Coated
55 NR 11	036 18 028	93639	243	120	200	Black Coated
60 NR 11	036 18 029	93640	350	170	230	Black Coated
HYDROMOUNT DL (HD*)						
50 NR 11	036 18 702	49022858	142	70	143	Black Coated
55 NR 11	036 18 701	2129442	243	120	200	Black Coated
60 NR 11	036 18 700	511065	350	170	230	Black Coated

*HD stands for High durability at high amplitudes.

Hydro Mount VL

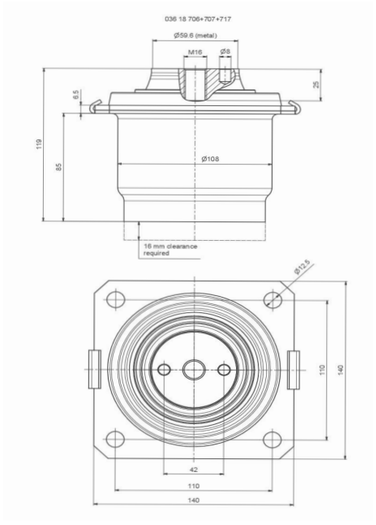
The mount design, the chosen fluid and the hydraulic mechanism provide the characteristic wide-band damping. In cases with remote excitation frequencies in the lower frequency range, the use of this hydro mount permits an optimal mounting. By precise reduction of the fluid chamber stiffness of one of the chambers, a significantly improved compromise of effective vibration reduction and structure-borne sound isolation is achieved as opposed to the hydro mounts without this design.

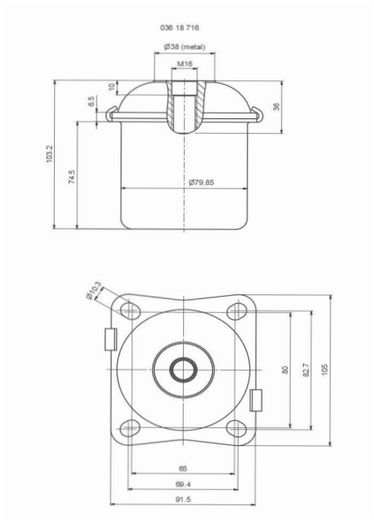
Typical applications:

- Agriculture engines
- Construction vehicle engines
- Industrial vehicles
- Forest machinery
- Pumps and compressors

TYPE	DRAWING NO.	PART NO.	AXIAL		RADIAL (X)
			STIFFNESS (N/mm)	MAX. LOAD (kg)	STIFFNESS (N/mm)
65 NR 11	036 18 707	49039085	570	570	1100
70 NR 11	036 18 707	60901160	650	650	1450*
40 NR 11	036 18 706	49039034	300	300	500
45 NR 11	036 18 706	49039035	390	390	650
50 NR 11	036 18 706	49039036	460	460	800
55 NR 11	036 18 706	49039037	550	550	1100
60 NR 11	036 18 706	49039038	700	700	1500
65 NR 11	036 18 706	49039039	880	880	1950

Technical Drawing





Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL		RADIAL (X)
			STIFFNESS (N/mm)	MAX. LOAD (kg)	STIFFNESS (N/mm)
40 NR 11	036 18 716	60901792	380	305	900 (at Sz=-4mm, Sx=1,5mm)
50 NR 11	036 18 716	60900463	640	510	1700 (at Sz=-4mm, Sx=1mm)
60 NR 11	036 18 716	60901793	970	780	2850 (at Sz=-4mm, Sx=1,5mm)
70 NR 11	036 18 716	60901794	1420	1130	3560 (at Sz=-4mm, Sx=1,5mm)
40 NR 11	036 18 707	49039040	210	210	270
45 NR 11	036 18 707	49039041	270	270	350
50 NR 11	036 18 707	49039082	300	300	450
55 NR 11	036 18 707	49039083	360	360	600
60 NR 11	036 18 707	49039084	480	480	830

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

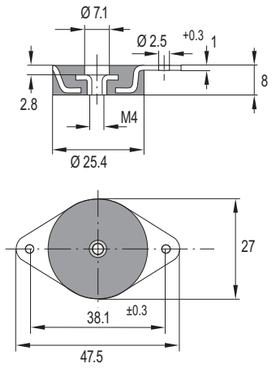
Instrument Mount

Instrument mounts are utilised for vibration insulation of electronic components, measuring devices and precise mechanical apparatuses and for instrument panels or control panels in industrial applications. A common requirement of these mounts is that they keep vibrations or shock loads introduced via the anchorages away from the instrument or device. The mounts help to protect sensitive instruments from external shock loads in mobile and non mobile use.

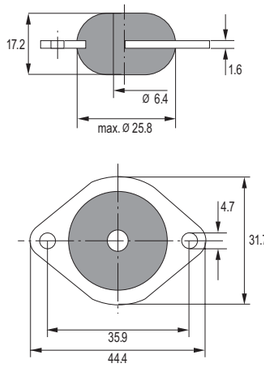
Typical applications:

- Small electrical engines
- Electrical pumps

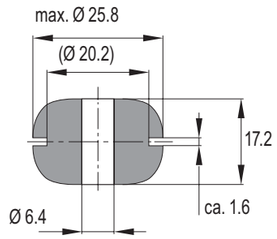
Technical Drawing



039 18 022
PLATE FIXED INSTRUMENT MOUNT



039 18 023
PLATE FIXED INSTRUMENT MOUNT



039 18 023
GROMMET STYLE INSTRUMENT MOUNT

Product Data

DRAWING NO.	PART NO.	TYPE	AXIAL		RADIAL	
			STIFFNESS (N/mm)	MAX. LOAD (kg)	STIFFNESS (N/mm)	MAX. LOAD (kg)
PLATE FIXED INSTRUMENT MOUNT						
039 18 022	93657	40 NR511	240	12	200	20
039 18 023	93658	40 NR511	40	8	20	4.5
039 18 023	93659	50 NR511	65	13	40	7.5
039 18 023	93660	65 NR511	130	26	70	13
GROMMET STYLE INSTRUMENT MOUNT						
039 18 751	49039880	40 NR511	40	8	20	4.5
039 18 751	49039881	50 NR511	65	13	40	7.5
039 18 751	49039902	65 NR511	130	26	70	13

Product images are graphical representations. Actual items may differ in appearance

Level Mount TF/ TFE

TFE

The Level Mount is installed in minutes by following the instructions provided. There is no need to fix the machine to the floor since the rubber base of the mounting keeps the machines in place. Whenever necessary, the machine can be easily re-positioned. The level is adjusted with load applied.

The rubber element of the level mount is oil and chemical resistant. All metal parts are zinc-plated and chromated for protection against corrosion.

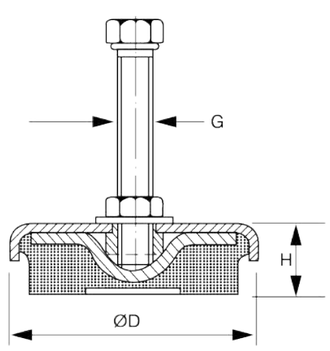
Models TF 250, TF 600 and TF 1200 are also available in S/S (ISO 2604/11, BS 3605:1).

The mount, with level adjuster, is suitable for a wide range of free standing workshop machines.

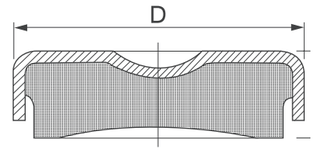
Typical applications:

- Lathes and Milling machines
- Grinding machines
- Presses
- Plate shears
- Nibbling machines
- Punches and cutters

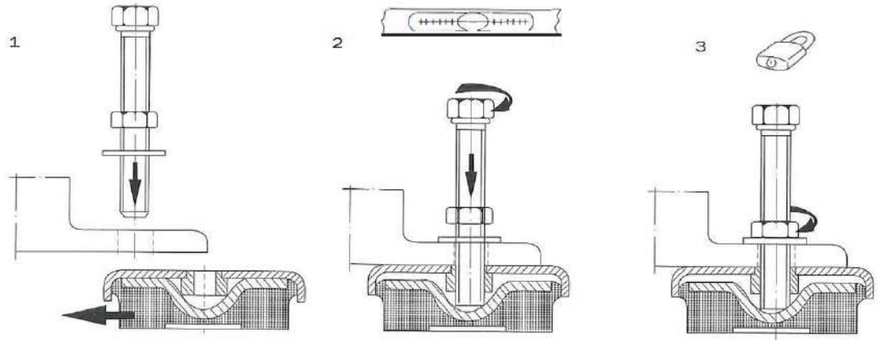
Technical Drawing



TF



TFE

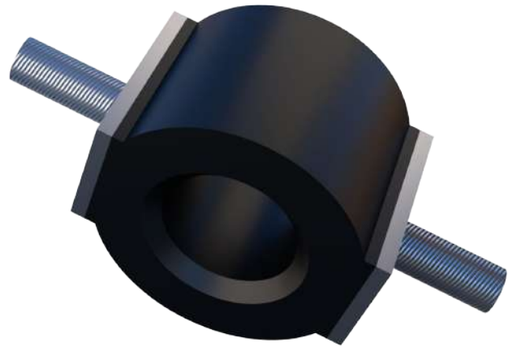


INSTALLATION INSTRUCTIONS

Product Data

TYPE	DRAWING NO.	PART NO.	COMPOUND	DIMENSIONS (mm)			OVERALL BOLT LENGTH (mm)	MAX. LOAD (Kg)
				ØD	H	G		
TF MOUNT								
M80	050 18 023	96504	45 NBR 68	80	30	M12	80	80
M80	050 18 023	96505	60 NBR 68	80	30	M12	80	80
TF 250	19-0588	20-00623	-	69	23	M12	100	100
TF 250 S/S	19-0589	20-00678	-	69	23	M12	100	100
M80	050 18 023	96506	70 NBR 68	80	30	M12	80	80
M80	050 18 023	96507	75 NBR 68	80	30	M12	80	80
M120	050 18 020	96496	45 NBR 68	120	37	M12	100	100
M120	050 18 020	96497	55 NBR 68	120	37	M12	100	100
TF 600	19-0583	20-00624	-	81	25	M12	100	100
TF 600 S/S	19-0585	20-00679	-	81	25	M12	100	100
M120	050 18 020	96498	65 NBR 68	120	37	M12	100	100
TF 1200	19-0578	20-00625	-	108	29	M16	100	100
TF 1200 S/S	19-0578	20-00680	-	108	29	M16	100	100
M160	050 18 021	96499	45 NBR 68	160	41	M16	120	120
M160	050 18 704	49039496	45 NBR 68	160	41	M16	140	140
M160	050 18 021	96500	65 NBR 68	160	41	M16	120	120
M160	050 18 704	49039497	65 NBR 68	160	41	M16	140	140
M160	050 18 021	96501	70 NBR 68	160	41	M16	120	120
M160	050 18 704	49014539	70 NBR 68	160	41	M16	140	140
M185	050 18 022	96502	75 NBR 68	185	48	M20	160	160
TF 3000	19-0591	20-00626	-	151	35	M20	120	120
TF 4000	19-0596	20-00627	-	170	39	M20	120	120
M185	050 18 022	96503	85 NBR 68	185	48	M20	160	160
TF 6000	19-0598	20-00628	-	205	44	M24	150	150
TFE MOUNT								
TFE 601	19-0571	20-00629	-	80	25	-	-	800

Low Frequency



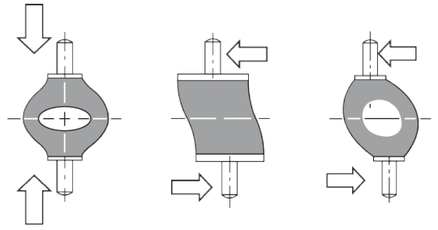
The Low Frequency mounts are designed for shear as well as compressive loads. Continual tensile load should be avoided.

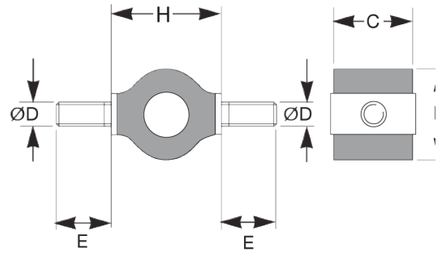
These antivibration mounts are designed to give large deflection for small loads and are used to protect suspended equipment against vibration and impact.

Typical applications:

- Light instruments
- Light fans and compressors
- Computer and electronic units
- Shock mounting for light applications

Technical Drawing





DIRECTIONAL LOADING

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)					MAX. LOAD (Kg)			MAX. TORQUE (Nm)
			H	B	C	ØD	E	COMPRESSION	SHEAR	ROLLING SHEAR	
LOW FREQUENCY MOUNT (O-SHAPED)											
60 °IRHD	17-1394	20-00018	17	14	13	M4	10	1.8	0.5	0.4	1.6
40 NR511	055 18 001	96740	18	14	15	M4	7	2	0.95	0.45	1.3
45 NR511	055 18 001	96741	18	14	15	M4	7	2.5	1.2	0.6	1.3
45 °IRHD	17-1395	20-00020	30	25	19	M5	14	3.1	1.0	0.8	3.2
40 NR511	055 18 002	96757	30	25	22	M5	10	3.2	2	1.3	2.7
45 NR511	055 18 002	96755	30	25	22	M5	10	4	2.5	1.7	2.7
60 °IRHD	17-1395	20-00021	30	25	19	M5	14	5.6	1.5	1.2	3.2
60 NBR 68	055 18 001	49023642	18	14	15	M4	7	6	2.8	1.5	1.3
60 EPDM 22	055 18 001	49023643	18	14	15	M4	7	6	2.8	1.5	1.3
65 NR511	055 18 001	96761	18	14	15	M4	7	6	2.8	1.5	1.3
45 °IRHD	17-1396	20-00022	38	35	25	M6	15	8.7	3.1	2.5	8.3
45 NR511	055 18 003	96743	38	36	28	M6	9.5	9.5	5	2.7	4.7
60 EPDM 22	055 18 703	477967	30	25	22	M5	10	11	7	3.5	2.7
65 NR511	055 18 002	96742	30	25	22	M5	10	11	7	3.5	2.7
60 °IRHD	17-1396	20-00023	38	35	25	M6	15	12.7	4.6	3.6	8.3
65 NR511	055 18 003	96750	38	36	28	M6	9.5	21.5	11	5.5	4.7
65 NR511	055 18 700	500640	38	36	28	M6	15	21.5	11	5.5	4.7
60 EPDM 22	055 18 700	49002215	38	36	28	M6	15	21.5	11	5.5	4.7

M Mount

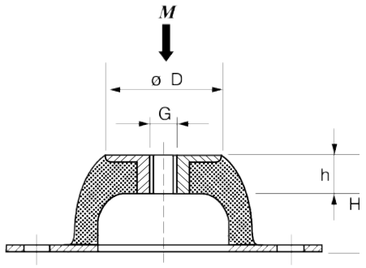
The M-Mount is ideal for applications involving isolation of low frequency vibration on all planes. Also suitable for shock attenuation due to the designed ability to offer large deflections. Provides passive vibration isolation on electronic instruments, measuring equipment and test cells.

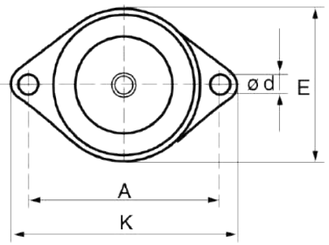
The M mount is specifically designed to give large deflection at low loads. Although the mount design allows high deflection, the mountings are compact in weight and easy to install.

Advantages:

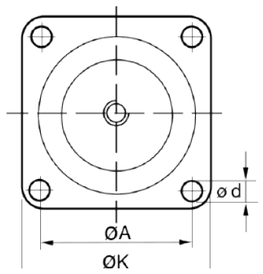
- Tight Tolerance on dynamic stiffness rates for accurate vibration calculations
- Wide load rating options, 3.5-2500 kg
- Corrosion protected to cope with arduous environments on land or marine applications (ISO 2081)

Technical Drawing





M7, M25, M50, M100, M200



M400, M600, M1500

Product Data

TYPE	DRAWING NO.	PART NO.	HARDNESS	DIMENSIONS (mm)								MAX. LOAD (Kg)	MAX. BOLT TORQUE (Nm)
				ØD	E	A	K	H	h	Ød	G		
M 7	17-4056	10-00139	40 °IRHD	18	43	50	64	20	7	7	M6	3.5	7
M 7	17-4057	10-00140	60 °IRHD	18	43	50	64	20	7	7	M6	9	7
M 25	17-4047	10-00094	40 °IRHD	33	56	66	85	25	11	8	M8	20	15
M 25	17-4048	10-00095	60 °IRHD	33	56	66	85	25	11	8	M8	50	15
M 50	17-4052	10-00096	40 °IRHD	45	76	92	114	35	14	10	M10	40	20
M 50	17-4053	10-00097	60 °IRHD	45	76	92	114	35	14	10	M10	80	20
M 100	17-4041	10-00100	40 °IRHD	53	96	110	136	40	15	11.5	M10	70	20
M 100	17-4042	10-00099	60 °IRHD	53	96	110	136	40	15	11.5	M10	150	20
M 200	174044	10-00102	40 °IRHD	58	101	124	151	45	13	11.5	M10	130	20
M 200	17-4045	10-00103	60 °IRHD	58	101	124	151	45	13	11.5	M10	220	20
M 400	17-4050	10-00104	40 °IRHD	78	-	120	150	63	18	14.5	M12	280	25
M 400	17-4051	10-00105	60 °IRHD	78	-	120	150	63	18	14.5	M12	500	25
M 600	17-4054	10-00080	40 °IRHD	100	-	160	200	85	25	14.5	M16	380	50
M 600	17-4055	10-00081	60 °IRHD	100	-	160	200	85	25	14.5	M16	750	50
M 1500	17-4043	10-00082	40 °IRHD	186	-	250	310	160	43	18	M24	1400	200
M 1500	17-4049	10-00083	60 °IRHD	186	-	250	310	160	43	18	M24	2500	200

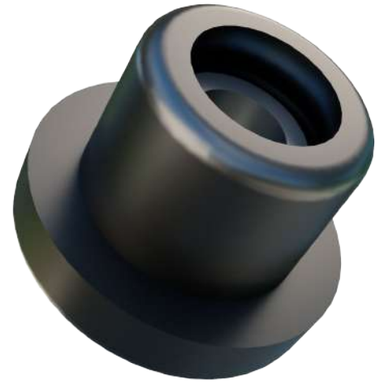
Product images are graphical representations. Actual items may differ in appearance

MCR Mount

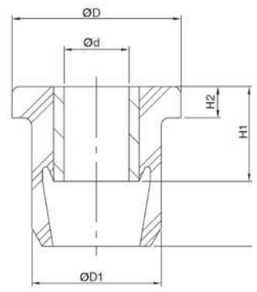
MCR mountings are designed for mobile applications where the disturbing frequencies are high and restricted movement is needed. The MCR mount is an easy to install single part mount that can be used to take up small bracket and chassis misalignments, it provides isolation of high frequency vibration and offers shock protection of vehicle mounted equipment.

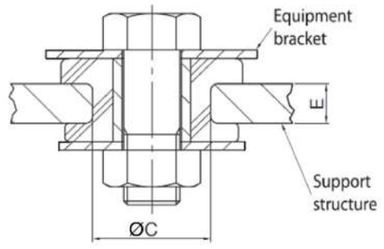
Typical applications:

- Exhaust system
- Radiator mounting
- Ancillary pumps



Technical Drawing





Product Data

TYPE	DRAWING NO.	PART NO.	TYPE	DIMENSIONS (mm)									MAX. LOAD (Kg)	BOLT SIZE	MAX. BOLT TORQUE (Nm)	WASHER PART NO.
				ØD	Ød	$ØD_1$	H	H_1	H_2	E	ØC	R				
MCR 27-1908	19-0266	20-00832	40 °IRHD	27.5	10	20	25.5	15.5	5	8	19	1.5	35	M10	30	20-00531
MCR 27-1908	19-0266	20-01129	45 °IRHD	27.5	10	20	25.5	15.5	5	8	19	1.5	40	M10	30	20-00531
MCR 27-1908	19-0266	20-00831	60 °IRHD	27.5	10	20	25.5	15.5	5	8	19	1.5	55	M10	30	20-00531
MCR 45-2810	11-1196	20-00782	45 °IRHD	45	13	31.5	32	25	10	10	28.5	1.5	80	M12	50	20-00416
MCR 45-2810	11-1196	20-01137	60 °IRHD	45	13	31.5	32	25	10	10	28.5	1.5	150	M12	50	20-00416
MCR 45-2810	11-1196-00	20-02904	70° (EPDM)	45	13	31.5	32	25	10	10	28.5	1.5	220	M12	50	20-00416
MCR 45-2810	11-1196-01	20-02905	70° (Silicone)	45	13	31.5	32	25	10	10	28.5	1.5	220	M12	50	20-00416
MCR 51-3216	13-4285	20-01133	45 °IRHD	51.8	13.5	34	41	35	13.5	16	31.8	1.5	80	M12	50	20-00536
MCR 51-3216	13-4285	20-01134	60 °IRHD	51.8	13.5	34	41	35	13.5	16	31.8	1.5	180	M12	50	20-00536
MCR 64-3820	19-0277	20-00833	45 °IRHD	64	16	41	50	43	16	20	38	3	190	M16	135	20-01495
MCR 64-3820	19-0277	20-01130	60 °IRHD	64	16	41	50	43	16	20	38	3	380	M16	135	20-01495
MCR 75-4624	19-0292	20-01135	45 °IRHD	75	16	50	56	50	21	23.5	46	3	200	M16	135	20-00532
MCR 75-4624	19-0292	20-01136	60 °IRHD	75	16	50	56	50	21	23.5	46	3	400	M16	135	20-00532
MCR 95-5119	11-1018	20-01131	45 °IRHD	95	21	57	63	51	25	19.1	50.8	3	320	M20	135	20-00533
MCR 95-5119	11-1018	20-01132	60 °IRHD	95	21	57	63	51	25	19.1	50.8	3	625	M20	135	20-00533

Product images are graphical representations. Actual items may differ in appearance

MDS Mount

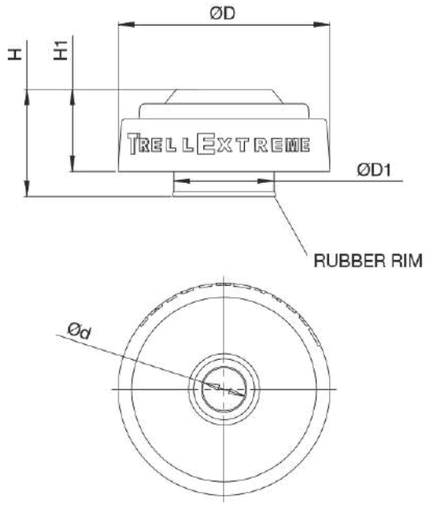
The MDS Mount is easy to install based on a 2 part single bolt installation. There is no requirement for radius or chamfered installation hole and a steel flange prevents rubber wear at the bracket interface. The bonded steel snubbing cup limits vertical movements and prevents excessive strain in rubber. The cup is encapsulated in rubber to prevent corrosion.

The MDS mounting is designed to take high dynamic shock loads but to limit mount movements in all directions, MDS= Multi Directional Snubbing.
In the static working load range, the MDS mounts have linear stiffness characteristics allowing easy prediction of mount deflection and isolation performance.

Typical applications:

- Engines
- Small cabs on Off-Highway vehicles

Technical Drawing



SECTION VIEW

Product Data

TYPE	DRAWING NO.	PART NO.	TYPE	DIMENSIONS (mm)								MAX LOAD (kg)	AXIAL STIFFNESS (N/mm)	BOLT SIZE	BOLT TORQUE (Nm)
				Ød	ØD	ØD1	H	H1	C	E (+/- 0.5mm)	F *				
MDS 55	17-4967	10-02182	40 °IRHD	13	55.5	29.8	22	29	28.8-30.2	15	26.5	35	165	M12	125
MDS 55	17-4967	10-02183	45 °IRHD	13	55.5	29.8	22	29	28.8-30.2	15	26.5	40	186	M12	125
MDS 55	17-4967	10-04834	45 CR	13	55.5	29.8	22	29	28.8-30.2	15	26.5	40	186	M12	125
MDS 55	17-4967	10-04797	55 °IRHD	13	55.5	29.8	22	29	28.8-30.2	15	26.5	65	300	M12	125
MDS 55	17-4967	10-04817	65 °IRHD	13	55.5	29.8	22	29	28.8-30.2	15	26.5	95	450	M12	125
MDS 66	17-2280	10-01802	45 °IRHD	18.8	66	39.8	39	29.5	40.0-40.3	19.5	35	70	320	M16	240
MDS 66	17-2280	10-04792	45 °IRHD (CR)	18.8	66	39.8	39	29.5	40.0-40.3	19.5	35	70	320	M16	240
MDS 66	17-2280	10-01803	55 °IRHD	18.8	66	39.8	39	29.5	40.0-40.3	19.5	35	120	540	M16	240
MDS 66	17-2280	10-04793	55 °IRHD (CR)	18.8	66	39.8	39	29.5	40.0-40.3	19.5	35	120	540	M16	240
MDS 66	17-2280	10-01804	65 °IRHD	18.8	66	39.8	39	29.5	40.0-40.3	19.5	35	170	800	M16	240
MDS 80	17-2243	10-01799	45 °IRHD	16.2	80	37.8	41.5	32	37.9-38.2	19.5	37.5	90	350	M16	240
MDS 80	17-2243	10-04791	45 °IRHD (CR)	16.2	80	37.8	41.5	32	37.9-38.2	19.5	37.5	90	350	M16	240
MDS 80	17-2243	10-04778	50 °IRHD	16.2	80	37.8	41.5	32	37.9-38.2	19.5	37.5	115	450	M16	240
MDS 80	17-2243	10-01800	55 °IRHD	16.2	80	37.8	41.5	32	37.9-38.2	19.5	37.5	140	550	M16	240
MDS 80	17-2243	10-01801	65 °IRHD	16.2	80	37.8	41.5	32	37.9-38.2	19.5	37.5	200	800	M16	240
MDS85	17-2241	10-03705	45 °IRHD	16.2	88	41.8	40	32	42.0-42.3	16	35	90	400	M16	240
MDS85	17-2241	10-02176	55 °IRHD	16.2	88	41.8	40	32	42.0-42.3	16	35	140	700	M16	240
MDS85	17-2241	10-04818	65 °IRHD	16.2	88	41.8	40	32	42.0-42.3	16	35	200	1065	M16	240
MDS95	17-4474	10-04816	45 °IRHD	16.2	98	46.6	40	32	47.5-48.3	16	35	190	580	M16	333
MDS95	17-4474	10-02256	55 °IRHD	16.2	98	46.6	40	32	47.5-48.3	16	35	240	745	M16	333
MDS95	17-4474	10-02255	65 °IRHD	16.2	98	46.6	40	32	47.5-48.3	16	35	370	1135	M16	333
MDS95	17-4474	10-02259	70 °IRHD	16.2	98	46.6	40	32	47.5-48.3	16	35	450	1365	M16	333
MDS 110	17-2285	10-03853	45 °IRHD	22.5	110	56.9	51.5	39	57.2-57.5	25	46.5	230	724	M20/M22	502/685
MDS 110	17-2285	10-03854	55 °IRHD	22.5	110	56.9	51.5	39	57.2-57.5	25	46.5	360	976	M20/M22	502/685
MDS 110	17-2285	10-03855	65 °IRHD	22.5	110	56.9	51.5	39	57.2-57.5	25	46.5	510	1382	M20/M22	502/685
MDS 110	17-2285	10-04094	75 °IRHD	22.5	110	56.9	51.5	39	57.2-57.5	25	46.5	765	2000	M20/M22	502/685
MDS 130	17-4196	10-01984	45 °IRHD	30.2	128	69.2	58	43	70.75-71.25	40	57	230	700	M30	750
MDS 130	17-4196	10-01985	55 °IRHD	30.2	128	69.2	58	43	70.75-71.25	40	57	500	1160	M30	750
MDS 130	17-4196	10-01986	65 °IRHD	30.2	128	69.2	58	43	70.75-71.25	40	57	600	1600	M30	750
MDS 130	17-4196	10-04613	70 °IRHD	30.2	128	69.2	58	43	70.75-71.25	40	57	735	1830	M30	750
MDS 130	17-4196	10-05003	70 °IRHD (CR)	30.2	128	69.2	58	43	70.75-71.25	40	57	735	1830	M30	750

Product images are graphical representations. Actual items may differ in appearance

Metacone

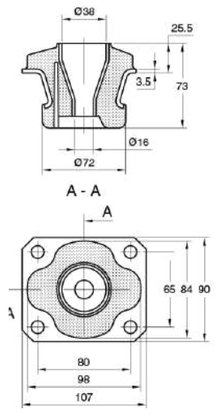
The metacone product range is designed for high load capacity with relatively large static deflections. The high loading for a given size is achieved by utilizing the rubber to best advantage in shear and compression. Typically the mountings are assembled with overload and rebound washers to control and limit movement of the suspended equipment under shock loads. Centre fixing bolts should be torque tightened to the recommended values.

Their compact fail-safe design is available for a wide range of loadings, with in some cases, alternative fixings. Cut-outs in rubber sections on various sizes provide different vertical/horizontal stiffness ratio.

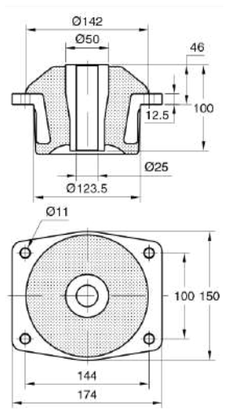
Typical applications:

- Off-highway and road vehicle engines
- Vehicle cabs
- Oil tanks/ tankers

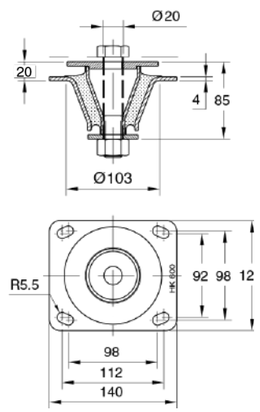
Technical Drawing



11-1009



17-1550



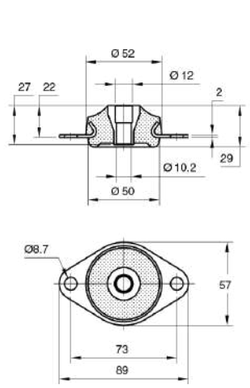
HK 600

Product Data

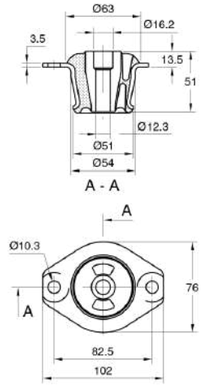
TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 °IRHD	11-1009	10-00192	196	140	192	30	520	85	M16	75	20-00532	20-00532
55 °IRHD	11-1009	10-00193	300	200	295	45	875	145	M16	75	20-00532	20-00532
45 °IRHD	17-1550	10-02605	588	720	1400	315	1400	315	M24	260	20-00534	20-00534
60 °IRHD	17-1550	10-02271	995	1250	2630	590	2630	590	M24	260	20-00534	20-00534
HK 600-40 °IRHD	17-4040	10-00190	1500	940	2750	305	2750	305	M20	160	20-00643	20-00644
HK 600-60 °IRHD	17-4040	10-00191	2650	1700	4700	525	4700	525	M20	160	20-00643	20-00644
HK 600-70 °IRHD	17-4040	10-00064	3900	2300	6900	775	6900	775	M20	160	20-00643	20-00644

Product images are graphical representations. Actual items may differ in appearance

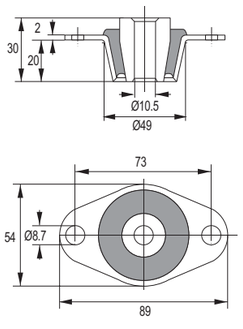
Technical Drawing

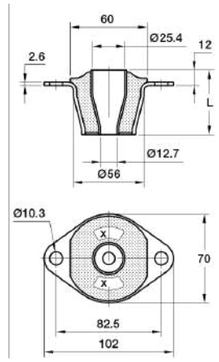


17-0379



17-1691





17-0248 (solid)
17-0241 (x cut out)
17-0189 (solid)

Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 °IRHD	17-0379	10-00402	97	35	300	32	300	32	M10	25	20-00531	20-00531
60 °IRHD	17-0379	10-00404	190	70	520	65	520	65	M10	25	20-00531	20-00531
45 °IRHD	17-1691	10-00566	215	72	626	60	1400	130	M12	90	20-00535	20-00536
60 °IRHD	17-1691	10-00567	450	144	1252	115	2800	260	M12	90	20-00535	20-00536
45 NR 11	057 18 001	90905	160	55	1000	100	1000	100	M10-5.6	25	49056605	49056605
60 NR 11	057 18 001	90810	260	90	1800	180	1800	180	M10-5.6	25	49056605	49056605
60 AEM 33	057 18 001	49018563	260	90	1800	180	1800	180	M10-5.6	25	49056605	49056605
70 NR 11	057 18 001	91056	310	110	2200	220	2200	220	M10-5.6	25	49056605	49056605
75 NR 11	057 18 001	93602	370	130	2600	260	2600	260	M10-5.6	25	49056605	49056605
45 °IRHD	17-0241	10-00374	166	62	460	50	920	95	M12	40	20-00529	10-03666
60 °IRHD	17-0241	10-00375	333	122	920	95	1840	190	M12	40	20-00529	10-03666
45 °IRHD	17-0248	10-00379	250	95	1600	195	1600	195	M12	40	20-00529	10-03666
60 °IRHD	17-0248	10-00380	500	190	3250	400	3250	400	M12	40	20-00529	10-03666
45 °IRHD	17-0189	10-00365	428	145	1205	125	1205	125	M12	40	20-00529	10-03666
70 °IRHD	17-0189	10-00367	1180	400	3550	360	3550	360	M12	40	20-00529	10-03666

Product images are graphical representations. Actual items may differ in appearance

Metacone

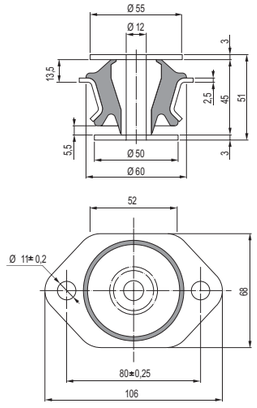
The metacone product range is designed for high load capacity with relatively large static deflections. The high loading for a given size is achieved by utilizing the rubber to best advantage in shear and compression. Typically the mountings are assembled with overload and rebound washers to control and limit movement of the suspended equipment under shock loads. Centre fixing bolts should be torque tightened to the recommended values.

Their compact fail-safe design is available for a wide range of loadings, with in some cases, alternative fixings. Cut-outs in rubber sections on various sizes provide different vertical/horizontal stiffness ratio.

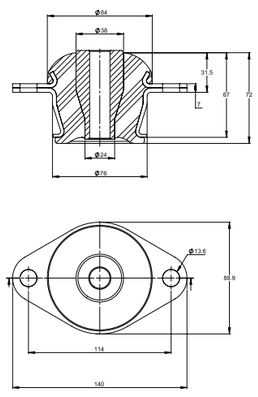
Typical applications:

- Off-highway and road vehicle engines
- Vehicle cabs
- Oil tanks/ tankers

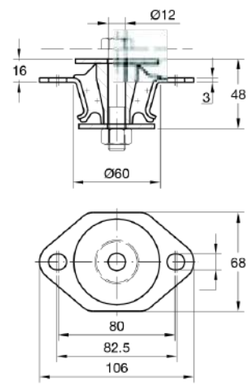
Technical Drawing



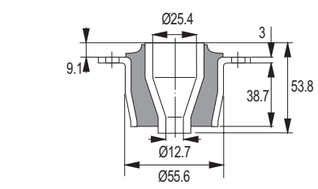
057 18 816

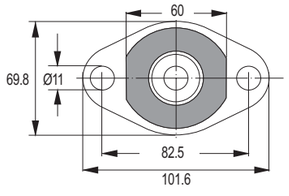


17-1032

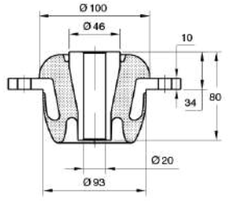


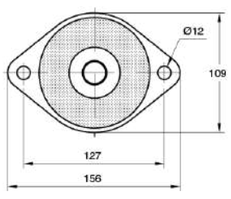
HK 60





057 18 226





17-1843

Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 NR	057 18 816	49047034	240	70	640	100	640	100	M12–6.8	65	included	included
55 NR	057 18 816	49029370	370	110	960	145	960	145	M12–6.8	65	included	included
60 NR	057 18 816	49047035	460	140	1200	180	1200	180	M12–6.8	65	included	included
70 NR	057 18 816	49047036	720	220	1800	270	1800	270	M12–6.8	65	included	included
70 SiliconE	057 18 816	60900823	720	220	1800	270	1800	270	M12–6.8	65	included	included
45 EPDM	17-1032	10-02194	492	250	490	75	975	75	M16	135	20-00532	20-00532
45 °IRHD	17-1032	10-02905	492	250	490	75	975	75	M16	135	20-00532	20-00532
60 °IRHD	17-1032	10-02977	860	470	975	150	1950	150	M16	135	20-00532	20-00532
HK 60-40 °IRHD	17-4039	10-01119	200	90	520	90	520	90	M12	40	20-01103	20-00416
HK 60-50 °IRHD	17-4039	10-01122	256	115	760	115	760	115	M12	40	20-01103	20-00416
HK 60-60 °IRHD	17-4039	10-01120	405	180	1200	180	1200	180	M12	40	20-01103	20-00416
HK 60-70 °IRHD	17-4039	10-01121	560	250	1760	250	1760	250	M12	40	20-01103	20-00416
45 NR 511	057 18 226	93947	480	230	1900	120	1900	120	M12–5.6	40	97138	93950 / 93127
45 NR 39	057 18 226	2129296	480	230	1900	120	1900	120	M12–5.6	40	97138	93950 / 93127
55 NBR 68	057 18 226	49019621	670	340	2600	170	2600	170	M12–5.6	40	97138	93950 / 93127
65 NR 511	057 18 226	93948	950	420	3700	200	3700	200	M12–5.6	40	97138	93950 / 93127
75 NR 511	057 18 226	93949	1330	520	5000	300	5000	300	M12–5.6	40	97138	93950 / 93127
45 °IRHD	17-1843	20-02529	520	320	870	140	870	140	M24	160	20-00533	20-00533
50 °IRHD	17-1843	10-03505	660	380	1100	180	1100	180	M24	160	20-00533	20-00533
60 °IRHD	17-1843	10-00610	1060	600	2800	450	2800	450	M24	160	20-00533	20-00533
60 Low creep nr	17-1843	20-02533	1060	600	2800	450	2800	450	M24	160	20-00533	20-00533
36X60	17-1843	10-03002	1060	600	2800	450	2800	450	M24	160	20-00533	20-00533
60 High temp nr	17-1843	10-02254	1060	600	2800	450	2800	450	M24	160	20-00533	20-00533

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

Metacone

The metacone product range is designed for high load capacity with relatively large static deflections. The high loading for a given size is achieved by utilizing the rubber to best advantage in shear and compression. Typically the mountings are assembled with overload and rebound washers to control and limit movement of the suspended equipment under shock loads. Centre fixing bolts should be torque tightened to the recommended values.

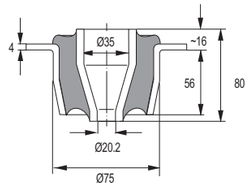
Their compact fail-safe design is available for a wide range of loadings, with in some cases, alternative fixings. Cut-outs in rubber sections on various sizes provide different vertical/horizontal stiffness ratio.

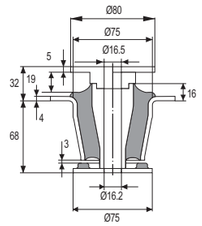
Typical applications:

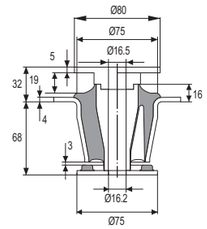
- Off-highway and road vehicle engines
- Vehicle cabs
- Oil tanks/ tankers

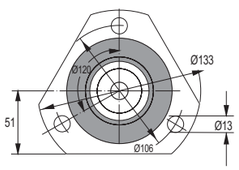
TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
70 NBR 68	057 18 013	511079	1820	1000	5000	1250	5000	1250	M20 - 6.6	220	97141	511081 / 90819 / 90831
76 NR 39	057 18 013	480534	2000	1110	5500	13800	5500	13800	M20 - 6.6	220	97141	511081 / 90819 / 90831
45 NR 511	057 18 756	511906	600	480	1800	550	1800	550	M16 - 8.8	200	511927	511928
50 NR 511	057 18 756	2129305	800	640	2500	750	2500	750	M16 - 8.8	200	511927	511928
58 NR 511	057 18 756	2129306	1000	800	3200	950	3200	950	M16 - 8.8	200	511927	511928
65 NR 511	057 18 756	2129307	1250	1000	3800	1150	3800	1150	M16 - 8.8	200	511927	511928
70 NR 511	057 18 756	2129308	1550	1240	4500	1350	4500	1350	M16 - 8.8	200	511927	511928
75 NR 511	057 18 756	2129309	1950	1560	5200	1550	5200	1550	M16 - 8.8	200	511927	511928
45 NR 511	057 18 757	511926	350	280	2100	620	950	280	M16 - 8.8	200	511927	511928
50 NR 511	057 18 757	2129310	550	440	2900	880	1600	480	M16 - 8.8	200	511927	511928
58 NR 511	057 18 757	2129311	800	640	3600	1080	2300	680	M16 - 8.8	200	511927	511928
65 NR 511	057 18 757	2129312	1150	920	4300	1280	3000	880	M16 - 8.8	200	511927	511928
70 NR 511	057 18 757	2129313	1450	1160	5000	1480	3600	1080	M16 - 8.8	200	511927	511928
75 NR 511	057 18 757	2129314	1800	1440	5600	1680	4300	1280	M16 - 8.8	200	511927	511928

Technical Drawing

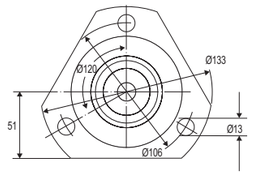




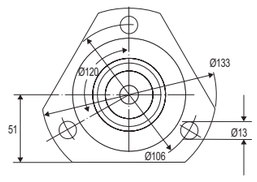




057 18 013



057 18 756



057 18 757

Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 NR 11	057 18 013	90697	600	330	2960	740	2960	740	M20 - 6.6	220	97141	511081 / 90819 / 90831
45 NR 39	057 18 013	49029143	690	380	3400	850	3400	850	M20 - 6.6	220	97141	511081 / 90819 / 90831
55 AEM 23	057 18 013	500857	920	500	5400	1350	5400	1350	M20 - 6.6	220	97141	511081 / 90819 / 90831
50 NR 11	057 18 013	91201	1180	650	3900	980	3900	980	M20 - 6.6	220	97141	511081 / 90819 / 90831
60 NR 39	057 18 013	49029144	1300	720	4600	1160	4600	1160	M20 - 6.6	220	97141	511081 / 90819 / 90831
60 NR 11	057 18 013	90877	1300	720	4800	1200	4800	1200	M20 - 6.6	220	97141	511081 / 90819 / 90831
65 NBR 68	057 18 013	2129417	1450	800	4800	1150	4800	1150	M20 - 6.6	220	97141	511081 / 90819 / 90831
70 NR 11	057 18 013	90849	1820	1000	5000	1250	5000	1250	M20 - 6.6	220	97141	511081 / 90819 / 90831

Product images are graphical representations. Actual items may differ in appearance

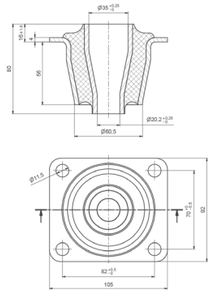
Metacone

The metacone product range is designed for high load capacity with relatively large static deflections. The high loading for a given size is achieved by utilizing the rubber to best advantage in shear and compression. Typically the mountings are assembled with overload and rebound washers to control and limit movement of the suspended equipment under shock loads. Centre fixing bolts should be torque tightened to the recommended values. Their compact fail-safe design is available for a wide range of loadings, with in some cases, alternative fixings. Cut-outs in rubber sections on various sizes provide different vertical/horizontal stiffness ratio.

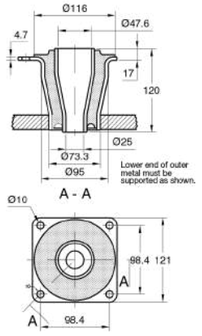
Typical applications:

- Off-highway and road vehicle engines
- Vehicle cabs
- Oil tanks/ tankers

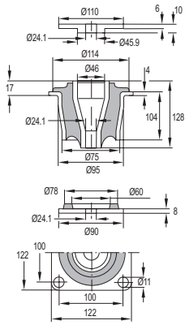
Technical Drawing



057 18 143



17-0146



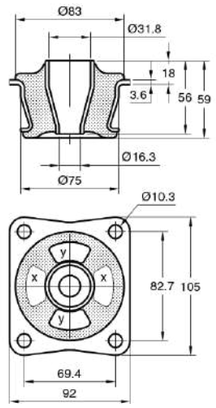
057 18 019

Product Data

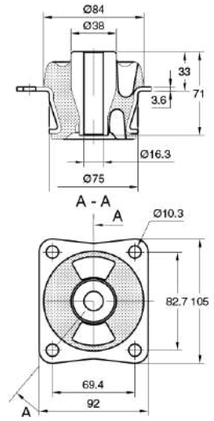
TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 NR 511	057 18 143	92792	600	330	3000	740	3000	740	M20 - 6.6	220	97141	90819 / 90831
65 NR 511	057 18 143	92793	1300	720	4800	1200	4800	1200	M20 - 6.6	220	97141	90819 / 90831
45 °IRHD	17-0146	10-00360	1400	950	5900	840	5900	840	M24	200	20-00527	10-03862
60 °IRHD	17-0146	10-00361	2860	1700	11800	1680	11800	1680	M24	200	20-00527	10-03862
D NR	057 18 019	49031009	1300	890	6500	430	6500	430	M24 - 6.8	535	97142	90501
50 NR 511	057 18 019	91430	1420	1000	6400	960	6400	960	M24 - 6.8	535	97142	90501
C NR	057 18 019	49031008	1500	1030	7500	500	7500	500	M24 - 6.8	535	97142	90501
B NR	057 18 019	49031007	2100	1450	10500	700	10500	700	M24 - 6.8	535	97142	90501
A NR	057 18 019	49016406	2300	1560	11500	770	11500	770	M24 - 6.8	535	97142	90501
65 NR 511	057 18 019	90491	2850	2000	12800	1920	12800	1920	M24 - 6.8	535	97142	90501
E NR	057 18 019	49031010	3400	2340	17000	1130	17000	1130	M24 - 6.8	535	97142	90501
75 NR 511	057 18 019	91009	4000	3000	20000	3000	20000	3000	M24 - 6.8	535	97142	90501
F NR	057 18 019	49055303	4200	3090	21000	1400	21000	1400	M24 - 6.8	535	97142	90501
G NR	057 18 019	49055304	5800	4080	29000	1930	29000	1930	M24 - 6.8	535	97142	90501

Product images are graphical representations. Actual items may differ in appearance

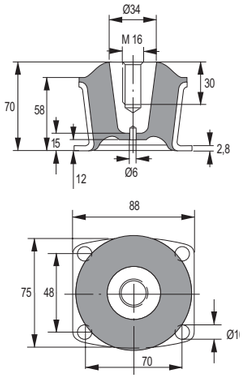
Technical Drawing



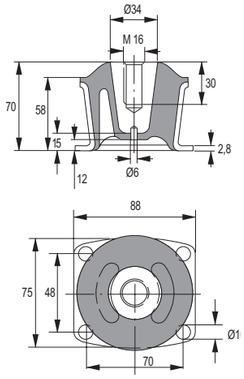
17-0277 (x cut out)
17-0311 (y cut out)
17-0341 (solid)



17-1865



057 18 123



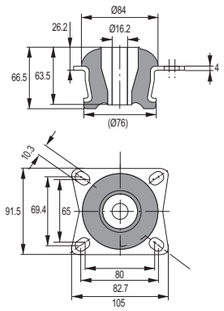
057 18 065

Product Data

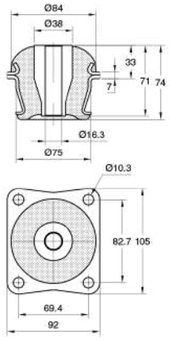
TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 °IRHD	17-0277	10-00385	207	143	620	95	410	65	M16	75	20-00773	20-00532
60 °IRHD	17-0277	10-00387	378	230	1470	225	740	115	M16	75	20-00773	20-00532
45 °IRHD	17-0311	10-00391	207	125	325	55	655	105	M16	75	20-00773	20-00532
60 °IRHD	17-0311	10-00392	378	220	650	105	1310	215	M16	75	20-00773	20-00532
55 °IRHD	17-1865	10-00615	300	180	1200	185	600	90	M16	135	20-00532	20-00532
45 °IRHD	17-0341	10-00394	266	160	866	140	866	140	M16	75	20-00773	20-00532
60 °IRHD	17-0341	10-00395	540	300	1732	280	1732	280	M16	75	20-00773	20-00532
70 °IRHD	17-0341	10-00396	758	430	2300	375	2300	375	M16	75	20-00773	20-00532
50 NR 511	057 18 123	93270	520	350	1000	150	1000	150	M16 - 3.6	63	49032678	-
45 NR 511	057 18 123	49011343	430	300	860	130	860	130	M16 - 3.6	63	49032678	-
70 NR 511	057 18 123	91790	1000	700	1700	260	1700	260	M16 - 3.6	63	49032678	-
45 CR 57	057 18 065	49068632	180	120	760	110	360	55	M16 - 3.6	63	49032678	-
50 CR 57	057 18 065	49006133	220	150	950	140	450	70	M16 - 3.6	63	49032678	-
45 NR 511	057 18 065	90822	240	170	650	100	330	50	M16 - 3.6	63	49032678	-
45NBR68	057 18 065	49068835	310	220	840	120	430	65	M16 - 3.6	63	49032678	-
75 NR 511	057 18 065	92448	880	620	1750	260	1100	170	M16 - 3.6	63	49032678	-

Product images are graphical representations. Actual items may differ in appearance

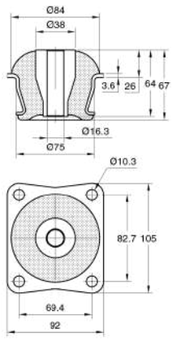
Technical Drawing



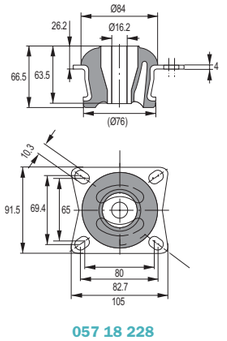
057 18 075



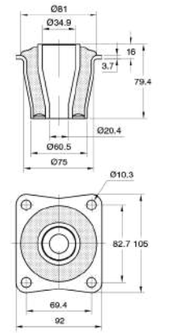
17-0391



17-0566



057 18 228



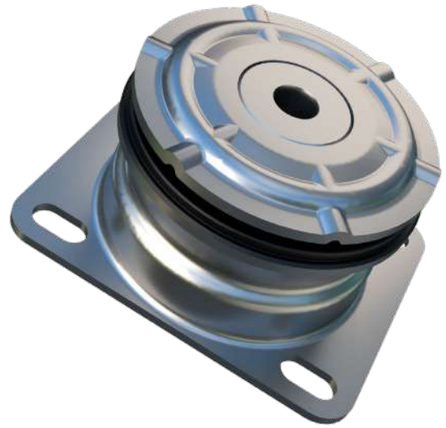
17-1227

Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
40 NR 511	057 18 228	93641	210	210	440	65	180	30	M16 - 5.8	126	49032678	49026836
50 NR 511	057 18 228	93642	340	330	890	135	360	55	M16 - 5.8	126	49032678	49026836
70 NR 511	057 18 228	91405	600	610	1600	240	700	105	M16 - 5.8	126	49032678	49026836
45 NR 511	057 18 075	93385	400	340	800	120	800	120	M16 - 5.8	126	49032678	49026836
65 NR 511	057 18 075	91829	670	620	1400	210	1400	210	M16 - 5.8	126	49032678	49026836
75 NR 511	057 18 075	90863	1070	950	2240	336	2240	336	M16 - 5.8	126	49032678	49026836
76 NR 39	057 18 075	510004	2100	1840	4300	645	4300	645	M16 - 5.8	126	49032678	49026836
45 °IRHD	17-0566	10-00433	389	200	750	125	750	125	M16	135	20-00532	20-00532
60 °IRHD	17-0566	10-00434	690	380	1500	245	1500	245	M16	135	20-00532	20-00532
70 °IRHD	17-0566	10-00435	905	525	2300	375	2300	375	M16	135	20-00532	20-00532
35 °IRHD	17-0391	10-00409	328	195	737	115	737	115	M16	135	20-00532	20-00532
45 °IRHD	17-0391	10-00411	492	290	1105	170	1105	170	M16	135	20-00532	20-00532
60 °IRHD	17-0391	10-00414	765	500	2185	335	2185	335	M16	135	20-00532	20-00532
70 °IRHD	17-0391	10-00415	1325	610	3470	530	3470	530	M16	135	20-00532	20-00532
50 °IRHD	17-1227	10-00723	990	635	7600	850	7600	850	M20	180	20-00528	10-03707
60 °IRHD	17-1227	10-00460	1562	1000	12000	1350	12000	1350	M20	180	20-00528	10-03707
70 °IRHD	17-1227	10-02575	2300	1470	17640	1970	17640	1970	M20	180	20-00528	10-03707

Product images are graphical representations. Actual items may differ in appearance

Metacone



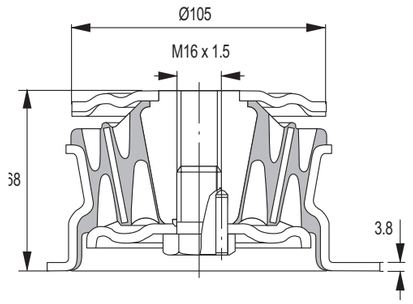
The metacone product range is designed for high load capacity with relatively large static deflections. The high loading for a given size is achieved by utilizing the rubber to best advantage in shear and compression. Typically the mountings are assembled with overload and rebound washers to control and limit movement of the suspended equipment under shock loads. Centre fixing bolts should be torque tightened to the recommended values.

Their compact fail-safe design is available for a wide range of loadings, with in some cases, alternative fixings. Cut-outs in rubber sections on various sizes provide different vertical/horizontal stiffness ratio.

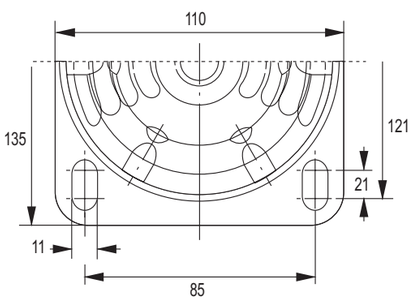
Typical applications:

- Off-highway and road vehicle engines
- Vehicle cabs
- Oil tanks/ tankers

Technical Drawing



057 18 224 (VOIDS)
057 18 220 (SOLID)



Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
40 NR 511	057 18 224	91376	140	70	600	120	300	60	M16x1.5 - 8.8	230	included	-
50 NR 511	057 18 224	91076	220	110	900	180	450	90	M16x1.5 - 8.8	230	included	-
65 NR 511	057 18 224	91491	330	160	1400	280	700	140	M16x1.5 - 8.8	230	included	-
75 NR 511	057 18 224	91381	500	240	2200	440	1100	220	M16x1.5 - 8.8	230	included	-
40 NR 511	057 18 220	91067	210	110	750	150	750	150	M16x1.5 - 8.8	230	included	-
50 NR 511	057 18 220	91374	430	220	1100	220	1100	220	M16x1.5 - 8.8	230	included	-
65 NR 511	057 18 220	93876	580	300	1700	340	1700	340	M16x1.5 - 8.8	230	included	-
75 NR 511	057 18 220	91230	1070	560	2600	520	2600	520	M16x1.5 - 8.8	230	included	-
84 NR 511	057 18 220	49018753	1500	710	3900	780	3900	780	M16x1.5 - 8.8	230	included	-

Product images are graphical representations. Actual items may differ in appearance

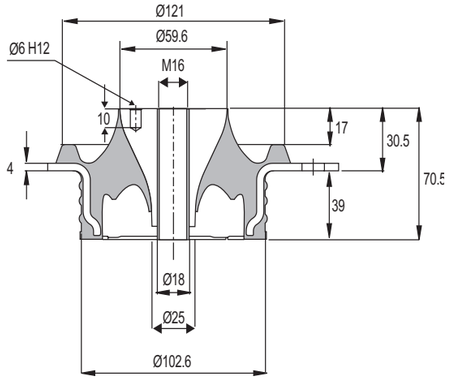
Metacone

The metacone product range is designed for high load capacity with relatively large static deflections. The high loading for a given size is achieved by utilizing the rubber to best advantage in shear and compression. Typically the mountings are assembled with overload and rebound washers to control and limit movement of the suspended equipment under shock loads. Centre fixing bolts should be torque tightened to the recommended values.

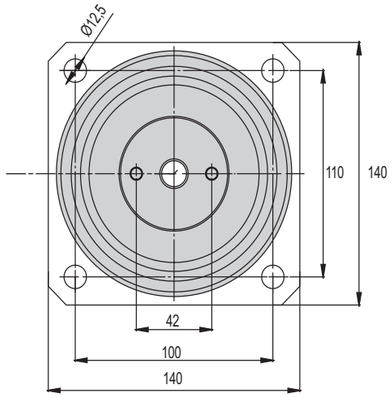
Their compact fail-safe design is available for a wide range of loadings, with in some cases, alternative fixings. Cut-outs in rubber sections on various sizes provide different vertical/horizontal stiffness ratio.

Typical applications:
- Off-highway and road vehicle engines
- Vehicle cabs
- Oil tanks/ tankers

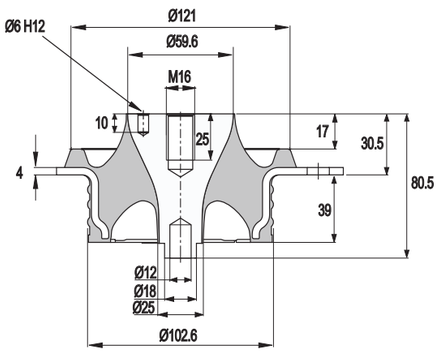
Technical Drawing



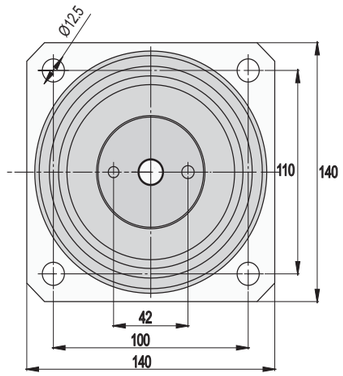
BOLT STYLE: THROUGH



057 18 799 (INTERLEAVED)
057 18 801 (SOLID)



BOLT STYLE: BLIND



Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT STYLE	BOLT SIZE	MAX BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX LOAD (Kg)	STIFFNESS (N/mm)	MAX LOAD (Kg)	STIFFNESS (N/mm)	MAX LOAD (Kg)					
40 NR 511	057 18 801	60901350	200	210	270	140	270	140	THRO'	M16 - 8.8	230	-	-
40 NR 511	057 18 801	49038287	200	210	270	140	270	140	BLIND	M16 - 8.8	230	-	-
40 NR 511	057 18 801	60901357	200	210	270	140	270	140	BLIND	M16 - 8.8	230	-	included
45 NR 511	057 18 801	60901351	220	230	350	180	350	180	THRO'	M16 - 8.8	230	-	-
45 NR 511	057 18 801	49038288	220	230	350	180	350	180	BLIND	M16 - 8.8	230	-	-
45 NR 511	057 18 801	60901358	220	230	350	180	350	180	BLIND	M16 - 8.8	230	-	included
50 NR 511	057 18 801	60901352	270	290	450	230	450	230	THRO'	M16 - 8.8	230	-	-
50 NR 511	057 18 801	49038289	270	290	450	230	450	230	BLIND	M16 - 8.8	230	-	-
50 NR 511	057 18 801	60901359	270	290	450	230	450	230	BLIND	M16 - 8.8	230	-	included
55 NR 511	057 18 801	60901353	330	360	600	300	600	300	THRO'	M16 - 8.8	230	-	-
55 NR 511	057 18 801	49038290	330	360	600	300	600	300	BLIND	M16 - 8.8	230	-	-
55 NR 511	057 18 801	60901360	330	360	600	300	600	300	BLIND	M16 - 8.8	230	-	included
60 NR 511	057 18 801	60901354	420	500	830	420	830	420	THRO'	M16 - 8.8	230	-	-
60 NR 511	057 18 801	49038291	420	500	830	420	830	420	BLIND	M16 - 8.8	230	-	-
60 NR 511	057 18 801	60901361	420	500	830	420	830	420	BLIND	M16 - 8.8	230	-	included
65 NR 511	057 18 801	60901355	520	630	1040	520	1040	520	THRO'	M16 - 8.8	230	-	-
65 NR 511	057 18 801	49038302	520	630	1040	520	1040	520	BLIND	M16 - 8.8	230	-	-
65 NR 511	057 18 801	60901362	520	630	1040	520	1040	520	BLIND	M16 - 8.8	230	-	included
70 NR 511	057 18 801	60901356	610	720	1100	550	1100	550	THRO'	M16 - 8.8	230	-	-
70 NR 511	057 18 801	60901415	610	720	1100	550	1100	550	BLIND	M16 - 8.8	230	-	-
70 NR 511	057 18 801	60901363	610	720	1100	550	1100	550	BLIND	M16 - 8.8	230	-	included
40 NR 511	057 18 799	60901634	300	300	500	250	500	250	THRO'	M16 - 8.8	230	-	-
40 NR 511	057 18 799	49038272	300	300	500	250	500	250	BLIND	M16 - 8.8	230	-	-
40 NR 511	057 18 799	60900310	300	300	500	250	500	250	BLIND	M16 - 8.8	230	-	included
45 NR 511	057 18 799	60901635	350	350	650	330	650	330	THRO'	M16 - 8.8	230	-	-
45 NR 511	057 18 799	49038273	350	350	650	330	650	330	BLIND	M16 - 8.8	230	-	-
45 NR 511	057 18 799	60901745	350	350	650	330	650	330	BLIND	M16 - 8.8	230	-	included
50 NR 511	057 18 799	60901636	470	470	800	400	800	400	THRO'	M16 - 8.8	230	-	-
50 NR 511	057 18 799	49038274	470	470	800	400	800	400	BLIND	M16 - 8.8	230	-	-
50 NR 511	057 18 799	60901746	470	470	800	400	800	400	BLIND	M16 - 8.8	230	-	included
55 NR 511	057 18 799	60901637	540	540	1100	550	1100	550	THRO'	M16 - 8.8	230	-	-
55 NR 511	057 18 799	49038275	540	540	1100	550	1100	550	BLIND	M16 - 8.8	230	-	-
55 NR 511	057 18 799	60901747	540	540	1100	550	1100	550	BLIND	M16 - 8.8	230	-	included
60 NR 511	057 18 799	60901638	700	700	1500	750	1500	750	THRO'	M16 - 8.8	230	-	-
60 NR 511	057 18 799	49038276	700	700	1500	750	1500	750	BLIND	M16 - 8.8	230	-	-
60 NR 511	057 18 799	60901748	700	700	1500	750	1500	750	BLIND	M16 - 8.8	230	-	included
65 NR 511	057 18 799	60901639	720	720	1550	780	1550	780	THRO'	M16 - 8.8	230	-	-
65 NR 511	057 18 799	49038277	720	720	1550	780	1550	780	BLIND	M16 - 8.8	230	-	-
65 NR 511	057 18 799	60901749	720	720	1550	780	1550	780	BLIND	M16 - 8.8	230	-	included
70 NR 511	057 18 799	60901640	850	850	1950	980	1950	980	THRO'	M16 - 8.8	230	-	-
70 NR 511	057 18 799	60901381	850	850	1950	980	1950	980	BLIND	M16 - 8.8	230	-	-
70 NR 511	057 18 799	60900072	850	850	1950	980	1950	980	BLIND	M16 - 8.8	230	-	included

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

Metacone

The metacone product range is designed for high load capacity with relatively large static deflections. The high loading for a given size is achieved by utilizing the rubber to best advantage in shear and compression. Typically the mountings are assembled with overload and rebound washers to control and limit movement of the suspended equipment under shock loads. Centre fixing bolts should be torque tightened to the recommended values.

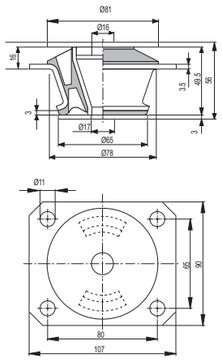
Their compact fail-safe design is available for a wide range of loadings, with in some cases, alternative fixings. Cut-outs in rubber sections on various sizes provide different vertical/horizontal stiffness ratio.

Typical applications:

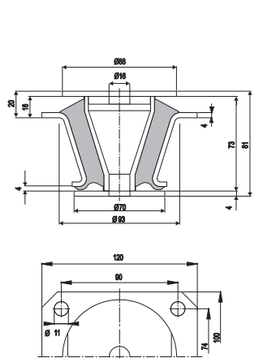
- Off-highway and road vehicle engines
- Vehicle cabs
- Oil tanks/tankers

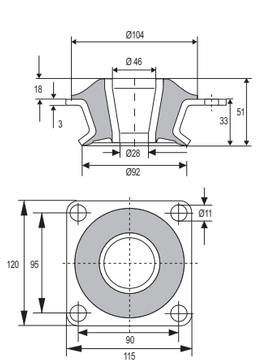
TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 NR	057 18 806	49041365	1200	250	1265	253	1265	253	M16 - 5.6	95	included	included
60 NR	057 18 806	49041366	2100	420	2145	429	2145	429	M16 - 5.6	95	included	included
70 NR	057 18 806	49041367	3800	750	3780	756	3780	756	M16 - 5.6	95	included	included
40 NR 511	057 18 060	93900	230	240	560	220	560	220	M16 - 6.8	150	97140	97139
50 NR 511	057 18 060	91479	400	420	870	340	870	340	M16 - 6.8	150	97140	97139
55 NBR 38	057 18 060	509731	480	500	1100	440	1100	440	M16 - 6.8	150	97140	97139
65 NR 511	057 18 060	90465	520	540	1400	560	1400	560	M16 - 6.8	150	97140	97139
65 NBR 68	057 18 060	479685	600	630	1700	680	1700	680	M16 - 6.8	150	97140	97139
75 NR 511	057 18 060	476214	650	680	2100	840	2100	840	M16 - 6.8	150	97140	97139
45 NR	057 18 807	49041368	1200	600	1430	715	1430	715	M20 - 5.6	185	included	included
60 NR	057 18 807	49041369	2300	1150	2470	1235	2470	1235	M20 - 5.6	185	included	included
70 NR	057 18 807	49041370	3500	1750	4050	2025	4050	2025	M20 - 5.6	185	included	included

Technical Drawing

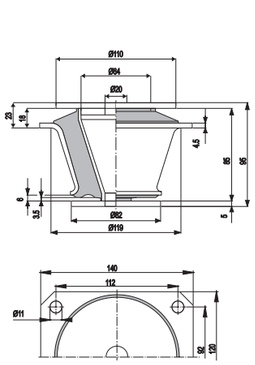


057 18 806





057 18 060



057 18 807

Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL (Z)		RADIAL (X)		RADIAL (Y)		BOLT SIZE	MAX. BOLT TORQUE (Nm)	TOP WASHER PART NO.	BOTTOM WASHER PART NO.
			STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	MAX. LOAD (Kg)				
45 NR	057 18 804	49041359	430	130	1100	330	1100	330	M16 - 5.6	95	included	included
60 NR	057 18 804	49041360	870	260	2200	660	2200	660	M16 - 5.6	95	included	included
70 NR	057 18 804	49041361	1200	360	3300	800	3300	800	M16 - 5.6	95	included	included
40 NR	057 18 805	49075604	220	65	880	270	400	120	M16 - 5.6	95	included	included
45 NR	057 18 805	49041362	270	80	1100	330	500	150	M16 - 5.6	95	included	included
45 NR	057 18 805	60905348	270	80	1100	330	500	150	M16 - 5.6	95	included	included
55 NR	057 18 805	49075605	400	120	1500	480	690	210	M16 - 5.6	95	included	included
60 NR	057 18 805	49041363	500	150	1900	600	860	260	M16 - 5.6	95	included	included
70 NR	057 18 805	49041364	900	200	3300	800	1200	360	M16 - 5.6	95	included	included

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

Metaxentric Bushes

Metaxentric bushes have a large rubber section with the central pin offset towards one radial plane. These bushes can provide a relatively large radial deflection whilst providing excellent motion control characteristics.

Features:

- Three dissimilar translational stiffnesses for the best vibration isolation and motion control.
- Load range from 138 - 464 kg
- Rising rate stiffness characteristics for overload conditions help to limit motion and transmitted acceleration.
- Robust and fail-safe, suitable for ROPS and FOPS cab structures.
- Simple to fit, the Housing lends itself to robust structures.

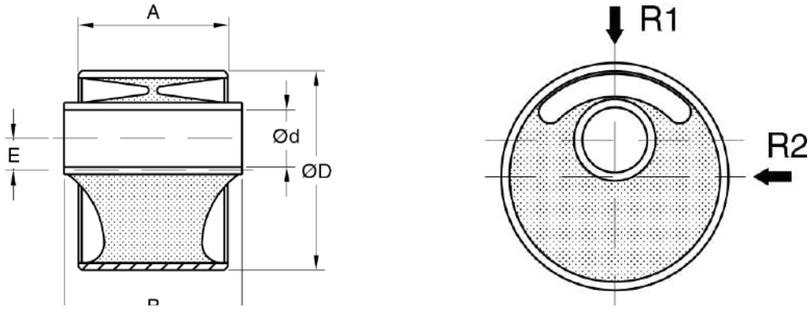
Metaxentric Bushes are similar to conventional UD Bushes but with inner and outer sleeves offset radially. This feature provides a greater rubber thickness and hence increased flexibility in the normal direction of loading, whilst maintaining control in other modes and still allowing torsional movement.
The rubber section is relieved to eliminate harmful tensile stresses.

Typical applications:

- Vehicle spring eye mounting
- Tilt Cab pivot bush
- Engine mounting

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)							DIRECTION R1			DIRECTION R2	AXIAL	
			Housing		Ød	Tolerance for Ød	A	B	E	STIFfNESS (N/mm)	MAX. DEF. (mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	STIFF. (N/mm)	MAX. DEF. (mm)
			ØD	Tolerance for ØD											
70 °IRHD	13-2691	10-02228	75.3	+0.2/-0.1	24	+0.25/-0	20.8	70	10.5	1760	3.5	628	1400	890	7
50 °IRHD	13-1165	10-00244	88.9	+0.15/-0.03	25.4	+0.13/-0	66.7	79.4	14.3	475	3.8	184	640	250	8
65 °IRHD	13-1165	10-00245	88.9	+0.15/-0.03	25.4	+0.13/-0	66.7	79.4	14.3	900	3.8	348	990	460	8
70 °IRHD	13-1165	10-00246	88.9	+0.15/-0.03	25.4	+0.13/-0	66.7	79.4	14.3	972	3.8	377	1200	500	8
40NR11	002 18 937	49041844	100	+0,22	25	+/-0,2	70	85	7	220	5	110	690	130	5
48 NR 11	002 18 937	49026595	100	+0,22	25	+/-0,2	70	85	7	320	5	160	1100	210	5
48 AEM 33	002 18 937	49040286	100	+0,22	25	+/-0,2	70	85	7	340	5	170	1400	220	5
60NR11	002 18 937	49041846	100	+0,22	25	+/-0,2	70	85	7	600	5	300	1760	330	5
70NR11	002 18 937	49041847	100	+0,22	25	+/-0,2	70	85	7	900	5	450	2340	450	5
40 NR 11	002 18 979	49061816	100	+0,22	32	+0.05/ 0	70	85	7	220	5	110	690	130	5
48 NR 11	002 18 979	49061815	100	+0,22	32	+0.05/ 0	70	85	7	320	5	160	1100	210	5
60 NR 11	002 18 979	49061777	100	+0,22	32	+0.05/ 0	70	85	7	600	5	300	1760	330	5
70 NR 11	002 18 979	49061814	100	+0,22	32	+0.05/ 0	70	85	7	900	5	450	2340	450	5
80 NR 11	002 18 979	49062249	100	+0,22	32	+0.05/ 0	70	85	7	1670	5	835	4340	940	5
45 °IRHD	13-1355	10-00262	101.6	+0.25/-0.25	43.7	+0.12/-0.06	63.5	72.4	9.5	682	3.5	243	1150	220	6
75 °IRHD	13-4059	10-00264	101.6	+0.25/-0.25	43.7	+0.12/-0.06	63.5	72.4	9.5	2360	3.5	840	3980	760	6

Technical Drawing



Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)							DIRECTION R1			DIRECTION R2	AXIAL	
			Housing		Ød	Tolerance for Ød	A	B	E	STIFfNESS (N/mm)	MAX. DEF. (mm)	MAX. LOAD (Kg)	STIFFNESS (N/mm)	STIFF. (N/mm)	MAX. DEF. (mm)
			ØD	Tolerance for ØD											
METAXENTRIC BUSH															
50 °IRHD	13-1270	10-00252	47.6	+0.07/-0.02	16	+0.07/-0.06	50.8	63.5	7.1	675	2	138	1350	190	3
60 °IRHD	13-1270	10-00253	47.6	+0.07/-0.02	16	+0.07/-0.06	50.8	63.5	7.1	1040	2	212	2080	290	3
70 °IRHD	13-1270	10-04553	47.6	+0.07/-0.02	16	+0.07/-0.06	50.8	63.5	7.1	1200	2	245	2400	340	3
35 NR 11	002 18 960	49040515	65	-0.09/ -0.2	13	+/-0,2	50	60	5	130	4	49	310	70	2.5
40 NR 11	002 18 960	49040516	65	-0.09/ -0.2	13	+/-0,2	50	60	5	170	4	64	400	95	2.5
45 NR 11	002 18 960	49040517	65	-0.09/ -0.2	13	+/-0,2	50	60	5	230	4	85	560	120	2.5
50 °IRHD	13-2691	10-00296	75.3	+0.2/-0.1	24	+0.25/-0	20.8	70	10.5	750	3.5	268	600	380	7
60 °IRHD	13-2691	10-00297	75.3	+0.2/-0.1	24	+0.25/-0	20.8	70	10.5	1200	3.5	325	910	610	7

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

RA Mount

RA mount uses the rubber profile in shear and compression to obtain good vertical flexibility with the advantage of horizontal stability. For normal speeds of approx. 1500 RPM, the RA provides a degree of isolation of 75-85%. For better isolation, the alternative RAEM or M-Series can be chosen.

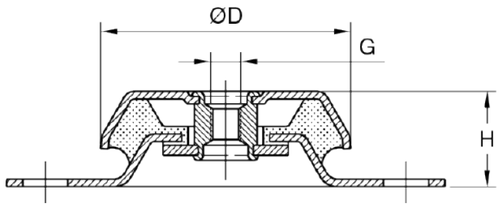
Advantages:

- Rubber features are utilized effectively combining compression and shear wide load rating options, 40-2100 kg
- Corrosion protected to cope with arduous environments on land or marine applications
- Domed shape cover to protect against oil contamination
- Fitted as standard with an integral fail-safe device with resilient stop, making the RA ideal for use in mobile applications
- The RA mounts can accommodate occasional vertical shock loads up to 5G and shock loads up to 2G in other directions

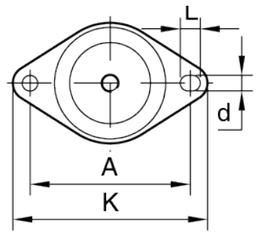
Typical applications:

- Pumps
- Fans
- Converters
- Compressors
- Combustion engines
- Industrial and Marine gensets
- Generators
- Also suitable for use with presses, punches and other work shop machines

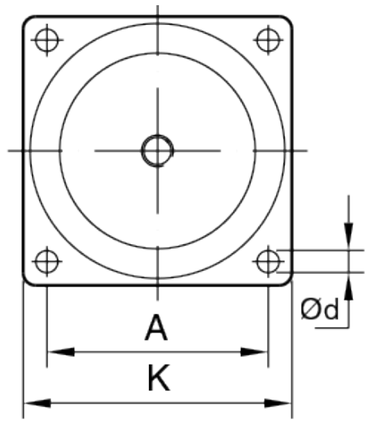
Technical Drawing



RA100, RA200, RA350, RA500, RA800, 17-1463



RA100, RA200, RA350, RA500, RA800, 17-1463



RA1200, RA1800

Product Data

TYPE	HARDNESS	DRAWING NO.	PART NO.	DIMENSIONS (mm)							MAX. LOAD (kg)	MAX. BOLT TORQUE (Nm)	WEIGHT (kg)
				ØD	A	K	H	Ød	L	G			
RA 100	40 °IRHD	17-2320-1	10-00106	79	110	130	30	9	12	M10	105	15	0.33
RA 100	60 °IRHD	17-2321-1	10-00107	79	110	130	30	9	12	M10	240	15	0.33
RA 100	40 °IRHD	17-2322-3	10-00166	79	110	130	30	9	12	M12	105	25	0.33
RA 100	60 °IRHD	17-2323-1	10-00167	79	110	130	30	9	12	M12	240	25	0.33
RA 200	40 °IRHD	17-2326-1	10-00110	94	124	150	35	10	15	M10	180	15	0.47
RA 200	60 °IRHD	17-2327-1	10-00111	94	124	150	35	10	15	M10	280	15	0.47
RA 200	40 °IRHD	17-2328-3	10-00165	94	124	150	35	10	15	M12	180	25	0.47
RA 200	60 °IRHD	17-2329-1	10-00091	94	124	150	35	10	15	M12	280	25	0.47
RA 350	40 °IRHD	17-2330-3	10-00172	101	140-148	175	38	14	18	M12	250	25	0.74
RA 350	60 °IRHD	17-2331-1	10-00173	101	140-148	175	38	14	18	M12	450	25	0.74
RA 350	40 °IRHD	17-2332-2	10-00112	101	140-148	175	38	14	18	M16	250	50	0.74
RA 350	60 °IRHD	17-2333-1	10-00113	101	140-148	175	38	14	18	M16	450	50	0.74
RA 500	40 °IRHD	17-2334-1	10-00116	123	158	192	42	14	18	M16	450	50	1.02
RA 500	60 °IRHD	17-2335-1	10-00117	123	158	192	42	14	18	M16	700	50	1.02
RA 800	40 °IRHD	17-4016-1	10-00118	144	182	216	46	14	18	M16	750	50	1.59
RA 800	60 °IRHD	17-4017-1	10-00119	144	182	216	46	14	18	M16	1300	50	1.59
RA 1200	40 °IRHD	17-4031-1	10-00154	161	140	170	58	14	-	M20	900	100	2.19
RA 1200	60 °IRHD	17-4032-2	10-00155	161	140	170	58	14	-	M20	1600	100	2.19
RA 1800	40 °IRHD	17-4033-2	10-00156	181	160	190	65.5	14	-	M20	1300	100	2.33
RA 1800	60 °IRHD	17-4034-1	10-00157	181	160	190	65.5	14	-	M20	2100	100	2.33
RA 1800	35 °IRHD	17-1463-1	10-00503	65	76.2	35	94	8.5	10	M12	55	25	0.22
RA 1800	45 °IRHD	17-1463-1	10-00504	65	76.2	35	94	8.5	10	M12	80	25	0.22
RA 1800	70 °IRHD	17-1463-1	10-00506	65	76.2	35	94	8.5	10	M12	240	25	0.22

Product images are graphical representations. Actual items may differ in appearance

RAB Mount

Similar in design to the RA and RAEM range, the RAB uses rubber in shear and compression for optimum stiffness characteristics and horizontal stability. Especially effective on small 1, 2 and 3 cylinder diesel engines where the special compound employed provides effective isolation of vibration while eliminating much of the excessive movement normally associated with 1-3 zinc plated cylinder engines.

Advantages:

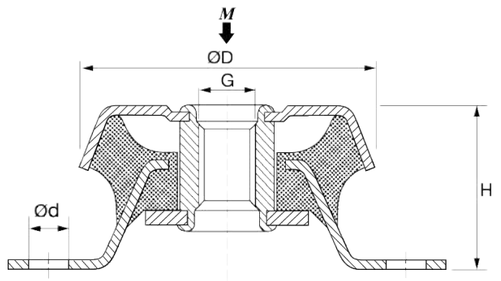
- Rubber features are utilized effectively combining compression and shear
- Tight Tolerances on dynamic stiffness rate for accurate vibration calculations
- Loading rating options, 10-130 kg
- Corrosion protected to cope with arduous environments on land or marine applications
- Fitted as standard with an integral fail-safe device with resilient stop, making the RA ideal for use in mobile applications
- Domed shape cover to protect against oil contamination

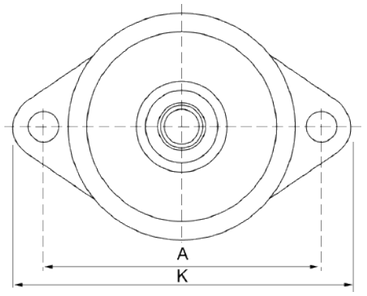
The RAB mounts can accommodate occasional vertical shock loads up to 5G and shock loads up to 2G in other directions.

Typical applications:

- Pumps
- Diesel engines
- Marine and Industrial gensets
- Emergency power packs

Technical Drawing





Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)						MAX. LOAD (kg)	MAX. BOLT TORQUE (Nm)
			ØD	A	H	K	Ød	G		
RAB 3	17-4004-1	10-00180	63	76	35	93.5	8.5	M12	70	25
RAB 2	17-4141-1	10-00179	63	76	35	93.5	8.5	M12	105	25
RAB 0	17-4092-1	10-00178	63	76	35	93.5	8.5	M12	130	25

RAEM Mount

The RAEM is a universal mounting for applications demanding MAX.imum vibration isolation. It is a further development of the RA mount, where EM stands for 'extra movement' and is suitable for both light and heavy machines.

For normal speeds of 1500 RPM the RAEM type provides a degree of isolation of 85-95%, and gives good isolation with low frequency machines.

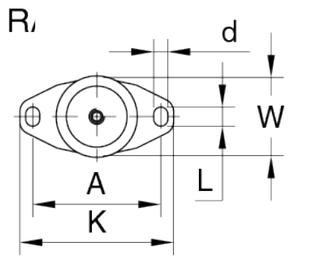
Advantages:

- RAEM offers nominally 70% extra deflection over standard RA mounts
- Wide load rating options, 30-3400 kg
- Corrosion protected to cope with arduous environments on land or marine applications
- Fitted as standard with an integral fail-safe device with resilient stop, making the RA ideal for use in mobile applications
- Domed shape cover to protect against oil contamination
- The RAEM mounts can accommodate occasional vertical shock loads up to 5G and shock loads up to 2G in other directions

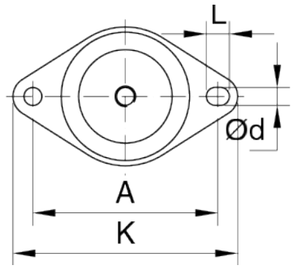
Typical applications:

- HVAC units
- Marine gensets
- Industrial gensets
- Refiners
- Compressors
- Industrial fans
- Large milling machinery

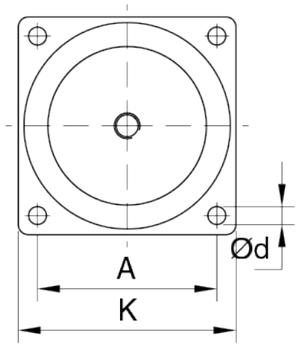
Technical Drawing



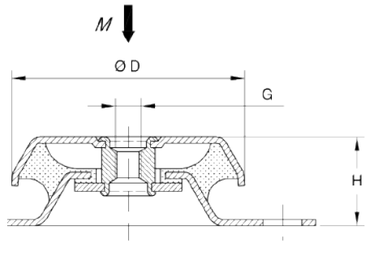
RAEM60



RAEM30 , RAEM40, RAEM125, RAEM350, RAEM800



RAEM1500, RAEM2500



Product Data

TYPE	HARDNESS	DRAWING NO.	PART NO.	DIMENSIONS (mm)							MAX. LOAD (Kg)	MAX. BOLT TORQUE (Nm)
				ØD	A	H	K	Ød	L	G		
RAEM 40	40 °IRHD	17-4023-1	10-00122	64	88	35.5	110	9	12	M10	30	15
RAEM 40	60 °IRHD	17-4024-1	10-00123	64	88	35.5	110	9	12	M10	60	15
RAEM 60	40 °IRHD	17-4025-1	10-00183	63	100	35.5	120	11	15	M12	60	25
RAEM 60	60 °IRHD	17-4026-2	10-00184	63	100	35.5	120	11	15	M12	120	25
RAEM 125	40 °IRHD	17-2336-1	10-00108	84	110	35.5	135	11	15	M10	80	15
RAEM 125	60 °IRHD	17-2338-1	10-00109	84	110	35.5	135	11	15	M10	180	15
RAEM 125	40 °IRHD	17-2336-2	10-00168	84	110	35.5	135	11	15	M12	80	25
RAEM 125	60 °IRHD	17-2338-2	10-00169	84	110	35.5	135	11	15	M12	180	25
RAEM 350	40 °IRHD	17-2341-1	10-00174	110	140-148	42	175	14	18	M12	200	25
RAEM 350	60 °IRHD	17-2342-1	10-00175	110	140-148	42	175	14	18	M12	400	25
RAEM 350	40 °IRHD	17-2341-2	10-00114	110	140-148	42	175	14	18	M16	200	50
RAEM 350	60 °IRHD	17-2342-2	10-00115	110	140-148	42	175	14	18	M16	400	50
RAEM 800	40 °IRHD	17-2347-2	10-00120	155	182	54	216	14	18	M16	450	50
RAEM 800	60 °IRHD	17-2348-1	10-00121	155	182	54	216	14	18	M16	800	50
RAEM 1500	40 °IRHD	17-4020-1	10-00158	182	146	85	180	14	-	M20	900	100
RAEM 1500	60 °IRHD	17-4018-1	10-00159	182	146	85	180	14	-	M20	1700	100
RAEM 2500	40 °IRHD	17-4021-2	10-00160	224	180	105.5	220	17.5	-	M24	1700	200
RAEM 2500	60 °IRHD	17-4022-1	10-00161	224	180	105.5	220	17.5	-	M24	3400	200

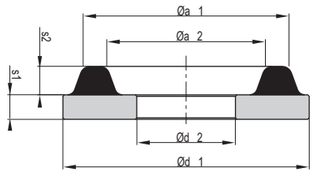
Rubberized Stop Washer

Rubber stop washers are versatile components for effectively limiting movement. They are preferably used for axial path limitation with Conical Mounts or Bushes.These elastomer-coated washers have different stiffnesses and dampening properties.

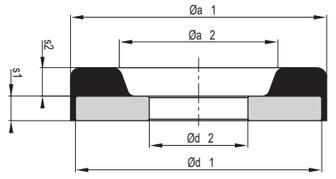
Typical applications:

- Buffers
- Used with the Metacone range for rebound protection
- Universal applicationss

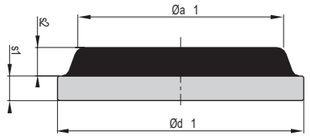
Technical Drawing



TYPE A



TYPE B



TYPE C

Product Data

DRAWING NO.	PART NO.	HARDNESS	DIMENSIONS (mm)						MAX. LOAD (Kg)
			$Ød_1$	$Ød_2$	$Øa_1$	$Øa_2$	S_1	S_2	
TYPE A									
039 18 005/101	93127	80 NR 11	49	12.5	44	28	3	3	-
039 18 005/101	93950	60 NR 11	49	12.5	44	28	3	3	-
077 18 700/101	511928	60 NR 11	75	16.2	65	47	5	4	-
077 18 707/101	49042823	70 NR 13	75	16.3	65	47	5	4	-
040 18 048/101	90819	60 NR 11	75	20.2	65	47	5	6	-
077 18 007/102	90831	60 NR 11	75	20.2	65	47	4	5	-
077 18 007/102	511081	70 NBR 68	75	20.2	65	47	4	5	-
077 18 003/102	90501	60 NR 11	90	24.3	78	60	8	8	-
TYPE B									
077 18 710/101	49035471	70 NR 13	56	16	58	37	5	4	-
077 18 706/101	49042822	70 NR 13	56	21	58	37	5	4	
19-0563	20-00612	SE 75	50	9	55	24	3	12	150
19-0728	20-00631	SE 250	70	11	75	31.5	4	13	400
19-0729	20-00632	SE 750	110	14	115	49	4	20	1100
TYPE C									
077 18 705/101	60900266	70 NR 13	40	-	32.55	-	5	2	-

SAW Mount

SAW mounts are heavy duty mountings for static and shock loads in compression. The mounts provide high isolation in the horizontal shear direction.

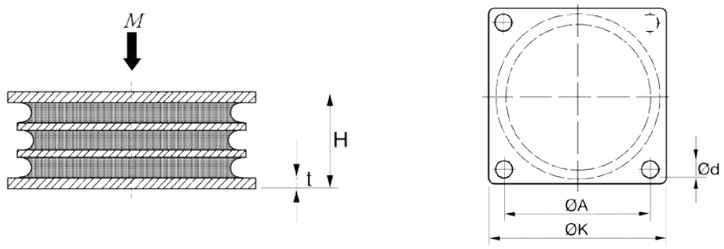
SAW mountings consist of a cylindrical shaped rubber section with integrally bonded interleaf metal plates, bonded between two square heavy duty outer metal fixing plates. Designed for large compressive forces with minimum deformation, while providing low shear stiffness rates. The combination of a stable low installation height, high compressive strength and low shear stiffness makes SAW a versatile high performance antivibration mounting. The 4 clearance holes in each fixing plate allow easy installation.

By connecting 2 SAW- elements in a series, i.e. one on top of the other, an increased isolation efficiency is achieved in both shear and compression planes. Where larger deflections are required in the vertical plane, SAW mountings are mounted at a calculated angle configuration to provide the optimum spring rate.

Typical applications:

- Crushers
- Edge Runners
- Mills
- Hoppers and feeders
- Grinders
- Vibratory rollers
- Screens

Technical Drawing



Product Data

TYPE	HARDNESS	DRAWING NO.	PART NO.	DIMENSIONS (mm)					MAX. LOAD (Kg)
				A	K	H	Ød	t	
SAW 125	40 °IRHD	17-4058	10-00141	118	148	52	13.5	5	2250
SAW 125	60 °IRHD	17-4058	10-00142	118	148	52	13.5	5	4500
SAW 150	40 °IRHD	17-4059	10-00143	136	166	63	13.5	6	3750
SAW 150	60 °IRHD	17-4059	10-00144	136	166	63	13.5	6	7500
SAW 200	40 °IRHD	17-4060	10-00075	184	220	82	17	8	6000
SAW 200	60 °IRHD	17-4060	10-00076	184	220	82	17	8	12000
SAW 300	40 °IRHD	17-4061	10-00077	270	310	120	22	10	15000
SAW 300	60 °IRHD	17-4061	10-00078	270	310	120	22	10	30000

Product images are graphical representations. Actual items may differ in appearance

SAW Mount Rectangular

Rectangular SAW mountings are also known as 'Sandwich' mountings because they feature a rubber section sandwiched between plates of metal.

This arrangement allows a large difference between the compression and shear stiffnesses, thus providing the potential to 'tune' a mounting system by rotating the mountings.

Features:

- Available with plate or stud fixings
- Can be loaded in compression or shear, or a combination of both, for example in a 'Vee' arrangement
- Can be manufactured with or without interleaves to change the ratio of shear to compression stiffness

Typical applications:

- Low frequency machinery
- Vibratory screens
- Crushing equipment
- Engine mounts

Technical Drawing

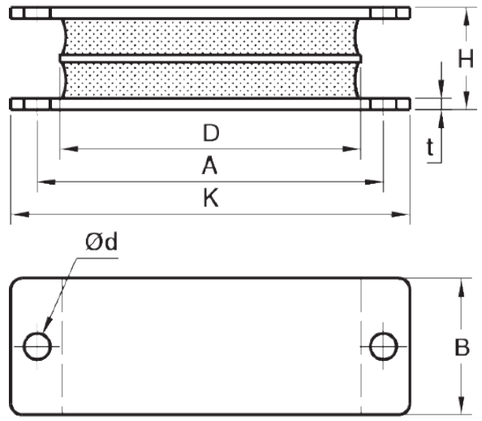
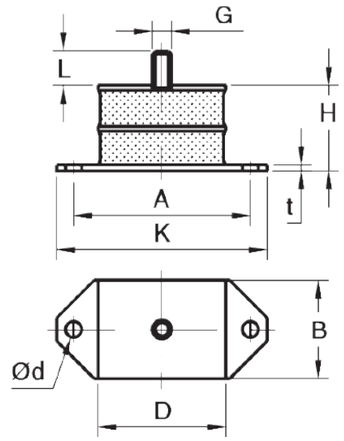


PLATE FIXING



BOLT FIXING

Product images are graphical representations. Actual items may differ in appearance

Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)								MAX. LOAD (Kg)		STIFFNESS (N/mm)	
			A	B	K	H	D	Ød	t	Offsets	COMPRESSION	SHEAR	COMPRESSION	SHEAR
SAW (RECTANGULAR PLATE FIXING)														
45 °IRHD	31-0322	10-00658	89	57	108	43	63.5	11	5	-	180	50	895	36
60 °IRHD	31-0322	10-00659	89	57	108	43	63.5	11	5	-	360	75	1530	72
45 °IRHD	31-0242	10-00648	146	57	168	43	127	11	5	-	450	120	1765	80
60 °IRHD	31-0242	10-00651	146	57	168	43	127	11	5	-	900	150	3408	160
70 °IRHD	31-0242	10-00652	146	57	168	43	127	11	5	-	1050	150	6343	240
45 °IRHD	31-0285	10-00656	14	57	168	43	127	11	5	-	275	150	767	72
60 °IRHD	31-0285	10-00657	14	57	168	43	127	11	5	-	546	150	1655	144
45 NR 11	051 18 004	96787	146	57	168	51	117.5	10.8	4	11	140	110	400	70
55 NR 11	051 18 004	96788	146	57	168	51	117.5	10.8	4	11	280	190	800	130
60 NR 11	051 18 004	96789	146	57	168	51	117.5	10.8	4	11	306	200	870	150
70 NR 11	051 18 004	96790	146	57	168	51	117.5	10.8	4	11	470	220	1340	200
60 NR11	051 18 723	49038296	295	112	322	90	-	14	8	12	800	550	2700	460
45 NR 11	051 18 002	96791	146	57	168	43.2	127	10.8	4	-	740	170	2740	130
55 NR 11	051 18 002	96793	146	57	168	43.2	127	10.8	4	-	900	220	3330	200
65 NR 11	051 18 002	96792	146	57	168	43.2	127	10.8	4	-	1510	240	5590	240
70 NR 11	051 18 002	96794	146	57	168	43.2	127	10.8	4	-	1890	300	7000	380
60 NR 11	051 18 719	49002463	-	110	290	50	240	-	10	-	2500	580	12500	480
45 NR 11	051 18 720	49002649	235	170	255	49	140	9	6	-	4100	400	20500	500
60 NR 11	051 18 720	49002650	235	170	255	49	140	9	6	-	9800	750	49000	940

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)									MAX. LOAD (kg)		STIFFNESS (N/mm)	
			A	B	K	H	ØD	Ød	t	G	L	COMPRESSION	SHEAR	COMPR.	SHEAR
SAW (RECTANGULAR BOLT FIXING)															
45 °IRHD	31-0406	10-00661	74.5	41	89	36	54	6.5	2.5	M8	14	90	40	290	29
60 °IRHD	31-0406	10-00971	74.5	41	89	36	54	6.5	2.5	M8	14	180	70	560	57
70 °IRHD	31-0406	10-00663	74.5	41	89	36	54	6.5	2.5	M8	14	250	90	832	85
45 NR 11	051 18 001	96796	75	41	90	35.8	54	6.5	2.5	M8	14	120	44	500	40
50 NR 11	051 18 001	96797	75	41	90	35.8	54	6.5	2.5	M8	14	150	50	630	50
60 NR 11	051 18 001	96798	75	41	90	35.8	54	6.5	2.5	M8	14	230	60	960	80
70 NR 11	051 18 001	96745	75	41	90	35.8	54	6.5	2.5	M8	14	300	80	1250	110

Product images are graphical representations. Actual items may differ in appearance

Spherical Roller Bearing Tonnenlager

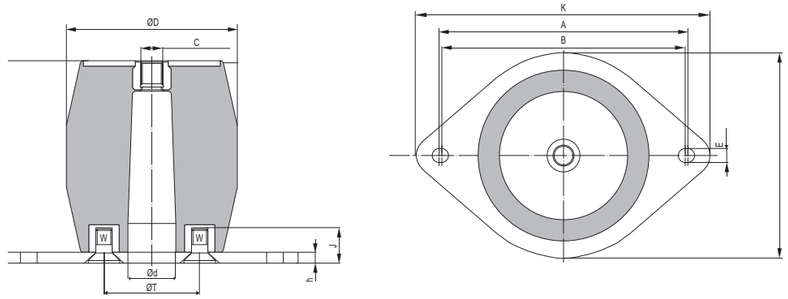
Spherical roller bearings are ideal for their vertical loading and insulation against low-amplitude vibrations.

Masses that experience or themselves cause minor vibration amplitudes according to deflection can be mounted on spherical roller bearings. This makes this mount configuration suitable for selected engines, compressors, units, mounting equipment and also heavy duty switch cabinets, control systems, stationary control panels, measurement equipment.

Typical applications:

- Engine
- Compressors
- Heavy duty switch cabinets
- Control systems
- Stationary control panels
- Measuring equipment

Technical Drawing



Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)										AXIAL		BOLT SIZE	MAX. BOLT TORQUE (Nm)
			ØD	Ød	H	ØT	J	C	W	L	$ØD_1$	E	STIFFNESS (N/mm)	MAX. LOAD (Kg)		
WITHOUT BASE PLATE																
45 NR 511	039 18 756/101	49040061	125	35	142	70	18	M16	M12	-	-	-	180	900	M16 - 5.6	94.5
58 NR 511	039 18 756/101	49002648	125	35	142	70	18	M16	M12	-	-	-	280	1380	M16 - 5.6	94.5
70 NR 511	039 18 756/101	49040132	125	35	142	70	18	M16	M12	-	-	-	400	2000	M16 - 5.6	94.5

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)												AXIAL		BOLT SIZE	MAX. BOLT TORQUE (Nm)
			$ØD_1$	ØD	K	A	B	H	C	Ød	ØT	W	J	E	STIFFNESS (N/mm)	MAX. LOAD (Kg)		
WITH BASE PLATE																		
45 NR 511	039 18 756/111	49040133	150	125	214	182	178	150	M16	35	70	M12	26	10.2	180	900	M16 - 5.6	94.5
58 NR 511	039 18 756/111	49040134	150	125	214	182	178	150	M16	35	70	M12	26	10.2	280	1380	M16 - 5.6	94.5
70 NR 511	039 18 756/111	49040135	150	125	214	182	178	150	M16	35	70	M12	26	10.2	400	2000	M16 - 5.6	94.5

Product images are graphical representations. Actual items may differ in appearance

Spherilastik Bearings

A heavy duty flexible bearing which combines high load capacity with the ability to accommodate torsional and angular movements in all planes without lubrication and metal to metal wear. It is available with center bore or solid member depending on fixing requirements.

General guidance notes for selection:

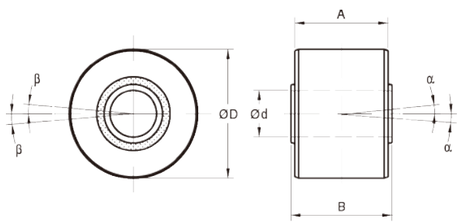
- Properties quoted for the components in this document relate to continuous steading loading or deformation conditions
- For continuous dynamic cyclic loading or deformation, the maximum values should be reduced to approximately 30% of the figures quoted, depending on frequency.

For medium and low incidence loading and deformation, the tabled values may be increased up to 2 to 3 times.
Combined stressing in the different modes and the effects of stress reversals may require a more critical assessment.

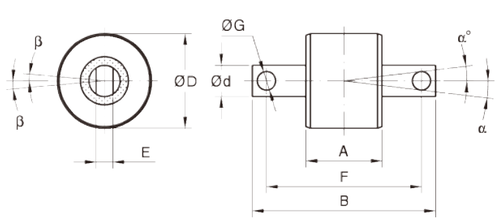
Typical applications:

- Traction and braking reaction rods
- Hydraulic damper fixings

Technical Drawing



SPERILASTIK® BEARINGS, CENTRE BORE TYPE



SPERILASTIK® BEARINGS, TRUNNION TYPE

Product Data

DRAWING NO.	PART NO.	DIMENSIONS (mm)									RADIAL		TORSION		CARDANIC	
		Housing		Ød	Tolerance for Ød	A	B	E	F	ØG	STIFFNESS (kN/mm)	MAX. LOAD (kN)	STIFFNESS (Nm/deg)	±β (degrees)	STIFF. (Nm/deg)	±α (degrees)
		ØD	Tolerance for ØD													
SPHERICAL MOUNT – CENTRE BORE																
054 18 036	90721	45	+0.086/-0.07	16	+0.043/-0	35	42	-	-	-	22	1	4	4	3	1
054 18 068	92525	65	+0.087/-0.04	16	+0.027/-0	32	60	-	-	-	23	18	8	4	4	1
13-1316	10-00257	66.7	+0/-0.04	25.4	+0.08/-0	47.6	54	-	-	-	70	34	16	8	16	6
054 18 191	93644	75	+0.089/-0.04	20	+0.033/-0	46	50	-	-	-	34	20	24	4	20	4
054 18 070	92041	90	+0.1/-0.05	30	+0.033/-0	45	76	-	-	-	85	45	47	3	40	3
13-2106-1	10-00291	90.5	+0.01/-0.03	28.6	+0.12/-0.02	70	76.2	-	-	-	100	58	49	8	49	6
13-1006	10-00237	90.5	+0.02/-0.03	28.6	+0.05/-0.03	70	76.2	-	-	-	93	58	49	8	49	6
13-4089-00	10-01608	45	+0.05/-0.01	30	–	36	105	12	75	13	55	7	6	8	6	8
13-2202-1	10-00302	66.7	+0.1/-0	35	–	47.6	120	20	90	13	70	34	12	8	16	6
054 18 711	462023	66.67	+0.06/-0.03	40	+/- 0,25	47.6	135	16	96	18	76	25	34	3	24	3
054 18 710	465259	66.67	+0.06/-0.03	40	+/- 0,25	47.6	135	16	96	18	31	25	23	3	9	3
054 18 732	479059	66.67	+0.06/-0.03	40	+/- 0,25	47.6	160	18	120	18	76	25	27	3	20	3
13-2033	10-00283	84	+0.05/-0	40	–	65	155	20	120	17	150	75	49	6	49	6
054 18 202	90205	90	+0.18/-0.12	50	+/- 0,1	65	170	30	130	22	85	46	62	3	43	3
13-2192-1	10-00878	90.5	+0.01/-0.03	48	–	71.4	170	30	130	21	90	58	49	8	49	6
13-2400	10-03615	104.8	+0/-0.04	50.5	–	76.2	195	30	152	23	220	150	75	8	71	7
13-2607-1	10-02168	104.8	+0/-0.04	50.5	–	76.2	195	30	152	25	220	150	75	8	71	7
13-2223	10-00304	104.8	+0/-0.04	50.5	–	76.2	170	30	130	19	220	150	79	8	131	6
13-2568	10-02512	104.8	+0/-0.04	50.5	–	76.2	170	30	130	21	220	150	79	8	131	7
054 18 190	92834	110	+0.2/-0.14	54	+/- 0,2	80	200	32	150	26	50	59	66	4	47	4
054 18 702	500742	120	+0.2/-0.14	60	+/- 0,3	90	220	40	170	28	120	82	150	3	110	3
13-4011	10-04047	127	+0.04/-0.02	51.5	–	101.6	232	30	190	26	190	220	150	8	125	7
054 18 735	2123524	140	+0.23/-0.17	60	+/- 0,3	100	240	36	190	25	15	30	52	7	34	7

Product images are graphical representations. Actual items may differ in appearance

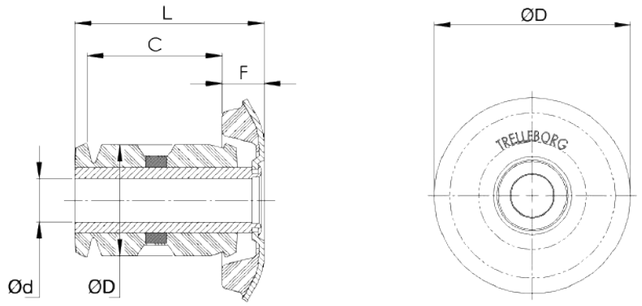
Product images are graphical representations. Actual items may differ in appearance

Tilt Cab Mount (TCM)

The Trelleborg Tilt Cab Mount (TCM) is specially designed for high levels of vibration isolation while simultaneously controlling axial movements with an integral buffer. The combination of isolator and buffer results in the mounting functioning with increased effectiveness over a conventional multi-mount system.

The robust and failsafe design enables suitability for ROPS and FOPS cab structures. The mount offers a load range from 180 to 380kg with a rising-rate stiffness characteristic to help limit motion and transmitted acceleration. It's simple press fit and tapered cap to allow cab/clevis to slip over mount without catching. The TCM also features a built-in vertical motion limiter to prevent excessive cab displacements during a shock input, a feature which also protects the bush from overload therefore ensuring long service life.

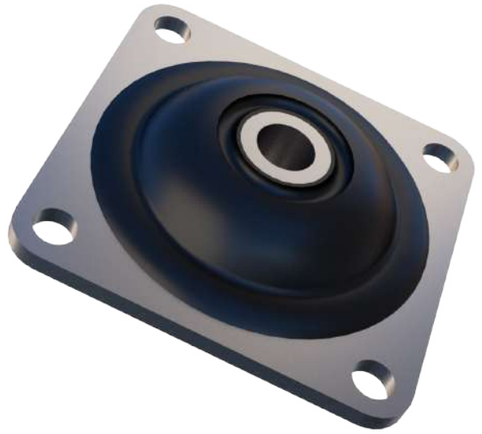
Technical Drawing



Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)						MAX. LOAD (Kg)	STIFFNESS (N/mm)	
			Ød	ØD	F	L	Housing			RADIAL	AXIAL
							$ØD_1$	C			
50 °IRHD	13-4455-1	10-04845	16	75	15.5	70	38	50.5	180	3200	1580
60 °IRHD	13-4455-1	10-02038	16	75	15.5	70	38	50.5	290	5000	2500
70 °IRHD	13-4455-1	10-04846	16	75	15.5	70	38	50.5	380	7350	3670

UH Mount



UH is an antivibration mounting designed to accommodate axial static and shock loads in both directions. The dynamic natural frequency is constant irrespective of the static load.

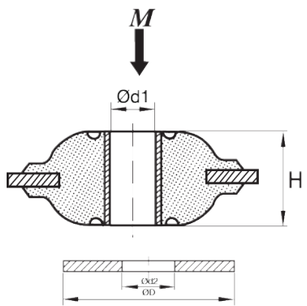
Mounting type UH is particularly suitable for the suspension of both mobile and static cabs as well as platforms on agricultural vehicles. When fitted with overload/rebound washers, a high strength fail-safe installation is provided.

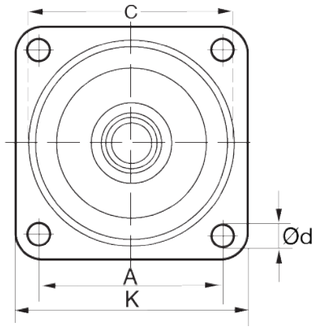
Moreover, it is possible to alter the characteristics of the mounting by providing
a dome-shaped washer at the upper rubber section. This will provide impact resistance to deflection beyond the permissible limit. Effectively isolating vibration and noise, the UH mounting also protects tanks and ancillary equipment against metal fatigue caused by chassis distortion.

Typical applications:

- Tractors
- Excavators
- Lifting cranes
- Forklift trucks
- Forestry vehicles
- Off-road equipment

Technical Drawing





Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)						MAX. LOAD (kg)	MAX. TORQUE (Nm)	WASHER PART NO.
			K	A	H	C	Ød	$Ød_1$			
UH 50	15-4131	10-00086	100.5	80	37	91	10.5	15	250	80	20-00608
UH 70	15-4132	10-00088	100.5	80	37	91	10.5	15	400	120	20-00608

Ultra Bush & VP Bushes

These bushes consist of two concentric sleeves with rubber securely bonded between them. Designed to accommodate torsional movements, axial and radial loads. The rubber is pre-stressed to give maximum dynamic strength and durability.

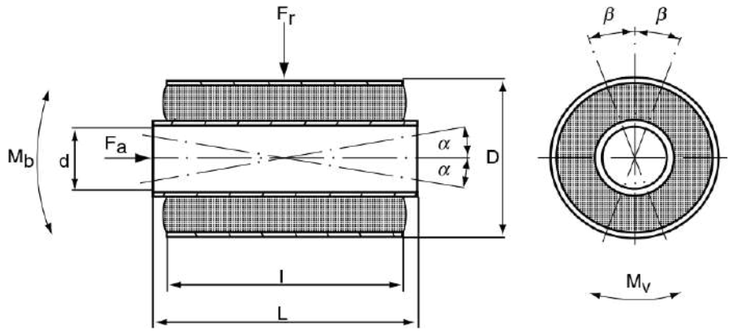
The bonded rubber takes up full movement. Therefore, lubrication or other bearing maintenance is not required. The bush has excellent sound and vibration isolation characteristics, enabling structures fitted with the sleeves to be silent and vibration free.

For vehicle suspension, pivot arms and all types of mechanical linkage, this mount permits oscillating movement through the deflection of rubber in shear. Suitable to replace roller bearings where small motions are required (up to 20 degrees). Reduces shock loads and noise transmission in structures.

Typical applications:

- Vehicle suspension arms
- Vibratory feeders
- Conveyor tracks
- Mechanical linkages
- Pivot bearings

Technical Drawing



Product Data

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)						RADIAL		AXIAL			TORSION		
			Ød	Tolerance for Ød	Housing		l	L	STIFFNESS (N/mm)	MAX. LOAD (N)	STIFF. (N/mm)	MAX. DEFLEC-TION (mm)	MAX. LOAD (N)	MAX. TORQUE (Nm)	STIFF. (Nm/ deg)	±β (degrees)
					ØD	Tolerance for ØD										
60 °IRHD	13-1232	20-01612	8	+0.13/-0	20	0.06/-0.01	15	17	2000	700	205	1.3	147	2	0.17	13
60 NR 11	001 18 168	90122	8	+0.036/-0	20	+0.125/-0.04	35	40	6750	2622	510	13.2	687	3.2	0.5	7
40 NR 11	001 18 156	91089	10	+0.036/-0	20	+0.125/-0.04	18.5	20.5	3670	1068	200	5.8	118	2.7	0.2	12.6
60 NR 11	001 18 036	90007	10	+0.036/-0	20	+0.125/-0.04	20	24	14000	2719	680	5.8	402	2	0.6	3.5
60 NR 11	001 18 305	91237	8	+0.036/-0	22	+0.125/-0.04	12	20	1130	437	140	15.8	226	1.1	0.2	7
60 NR 11	001 18 156	90112	10	+0.036/-0	22	+0.125/-0.04	18.5	20.5	7000	2039	450	6.0	275	2.7	0.5	5.2
60 NR 11	001 18 337	91497	10	+0.036/-0	22	+0.125/-0.04	15	16	4000	1165	280	9.6	275	2	0.6	3.5
60 NR 11	001 18 037	90009	10	+0.036/-0	22	+0.125/-0.04	20	24	7200	1748	530	9.5	515	3	0.6	5
60 NR 11	001 18 040	90014	12	+0.043/-0	22	+0.125/-0.04	24	28	6500	1262	860	6.7	589	4	0.9	4.3
55 °IRHD	13-1230	10-00249	10	+0.13/-0	24	+0.8/-0	15	18	1360	500	170	1.7	275	3	0.24	13
60 NR 11	001 18 287	92683	12	+0.043/-0	24	+0.125/-0.04	36	37	15670	4564	790	11.6	932	6	1.1	5.6
60 °IRHD	13-4127	10-00021	10	+/-0.1	25	+0.05/+0.25	25	20	2000	2300	170	4.4	748	5	0.3	15
60 °IRHD	13-4128	10-00022	10	+/-0.1	25	+0.05/+0.25	40	35	2350	3800	380	3.9	1482	6	0.4	15
40 NR 11	001 18 039	90012	10	+0.036/-0	25	+0.132/-0.05	20	24	1400	680	130	15.5	206	1.2	0.2	6.6
60 NR 11	001 18 039	90011	10	+0.036/-0	25	+0.132/-0.05	20	24	3800	1845	340	15.6	540	2.9	0.4	6.6
60 NR 11	001 18 041	90016	12	+0.043/-0	25	+0.132/-0.05	24	28	8220	3593	540	11.6	638	4.7	0.9	5.4
60 NR 11	001 18 043	90018	12	+0.043/-0	28	+0.132/-0.05	24	28	4500	2622	400	11.5	471	4.2	0.7	6
60 AEM 23	001 18 043	90076	12	+0.043/-0	28	+0.132/-0.05	24	28	4500	2622	400	11.5	471	4.2	0.7	6
40 NR 11	001 18 157	90890	12	+0.043/-0	30	+0.132/-0.05	17	18	580	340	90	13.9	128	1.3	0.2	7.4
40 NR 11	001 18 044	49035877	12	+0.043/-0	30	+0.132/-0.05	24	28	1580	922	160	13.8	226	2.1	0.3	7.2
60 NR 11	001 18 157	90113	12	+0.043/-0	30	+0.132/-0.05	17	18	1500	874	200	14.4	294	3	0.4	7.4
40 NR 11	001 18 169	49035876	12	+0.043/-0	30	+0.132/-0.05	36	40	1670	971	210	14.7	314	2.9	0.4	7.5
60 NR 11	001 18 044	90019	12	+0.043/-0	30	+0.132/-0.05	24	28	2750	1602	300	15.4	471	4.5	0.6	7.2
60 NR 11	001 18 169	90123	12	+0.043/-0	30	+0.132/-0.05	36	40	4000	2330	520	14.4	765	7	0.9	7.5
60 NR 11	001 18 050	90028	16	+0.043/-0	30	+0.132/-0.05	32	38	13410	5341	880	13.1	1177	10	1.9	5.2
60 NR 11	001 18 440	54004068	16	+0.01/-0	30	+0.132/-0.05	25	25	5750	2233	520	12.4	657	13.7	1.2	11
60 °IRHD	13-4273	20-02673	14.3	+0.1/-0.02	30.2	+0.04/-0.04	44.5	50.8	11000	6000	695	1.9	1275	20	1.5	13
60 NR 11	001 18 159	90117	16	+0.043/-0	32	+0.16/-0.06	16	17	1830	1068	380	15.2	589	5	0.9	5.6
60 NR 11	001 18 170	90124	18	+0.043/-0	32	+0.16/-0.06	20	20	10000	3884	540	11.6	638	7.3	1.7	4.4
60 NR 11	001 18 047	90021	14	+0.043/-0	32	+0.16/-0.06	28	32	4000	2330	530	19.2	1040	7	1.0	6.7
60 NR 11	001 18 158	90115	12	+0.043/-0	32	+0.16/-0.06	55	59	8440	7380	750	23.1	1766	11	1.4	7.7
60 °IRHD	13-0797	10-00217	15.9	+0.1/-0.03	33.4	+0/-0.08	60.3	65	18800	9500	960	2.1	1560	31	2.4	13
40 NR 11	001 18 171	93000	18	+0.043/-0	34	+0.16/-0.06	25	25	1420	1651	220	15.3	343	3.8	0.7	5.3
60 NR 11	001 18 171	91567	18	+0.043/-0	34	+0.16/-0.06	25	25	4330	2525	640	15.0	981	9.2	1.7	5.3
60 NR 11	001 18 055	90033	18	+0.043/-0	34	+0.16/-0.06	36	42	12630	4904	1050	11.5	1236	13	2.5	5.3
60 °IRHD	13-4129	10-00023	15	+/-0.1	35	+0.05/+0.25	30	25	3000	3500	220	6.8	1496	9	0.6	15
60 °IRHD	13-4130	10-00024	15	+/-0.1	35	+0.05/+0.25	50	45	6500	6000	520	4.8	2496	15	1	15
40 NR 11	001 18 048	90022	14	+0.043/-0	35	+0.16/-0.06	28	32	1050	612	160	14.4	235	2.9	0.4	7.5
60 NR 11	001 18 048	90023	14	+0.043/-0	35	+0.16/-0.06	28	32	2670	1554	430	14.3	628	6	0.8	7.5
60 NR 11	001 18 060	90035	20	+0.052/-0	38	+0.16/-0.06	40	46	16400	7962	940	17.4	1668	19	3.6	5.3
60 °IRHD	13-1782	10-00277	12.7	+0.18/-0	38.1	+0.13/-0	25.4	31.8	788	1100	163	3.3	471	11	0.52	22
60 °IRHD	13-1657	10-00271	12.7	+0.18/-0	38.1	+0.13/-0	44.5	50.8	2100	2200	300	3.3	932	16	0.73	22
60 NR 11	001 18 054	90032	16	+0.043/-0	40	+0.16/-0.06	32	38	2670	2330	400	24.1	981	10	1.2	8.1
60 NR 11	001 18 049	90026	14	+0.043/-0	40	+0.16/-0.06	28	34	750	874	330	35.0	1177	7	0.8	8.6
60 NR 11	001 18 392	91566	25	+0.052/-0	40	+0.16/-0.06	30	30	21500	6312	1090	10.6	1177	36	5.1	7
60 NR 11	001 18 130	90100	25	+0.052/-0	40	+0.16/-0.06	40	40	27500	10681	1230	10.6	1324	22	5.5	4
60 NBR 68	001 18 130	477724	25	+0.052/-0	40	+0.16/-0.06	40	40	27500	10681	1230	10.6	1324	22	5.5	4
60 NR 11	001 18 288	91270	20	+0.052/-0	40	+0.16/-0.06	36	36	10000	6117	730	21.1	1570	16.6	2.8	6
60 NR 11	001 18 061	90037	20	+0.052/-0	40	+0.16/-0.06	40	46	12540	7671	820	21.1	1766	19	3.2	5.9
60 NR 11	001 18 069	90043	25	+0.052/-0	40	+0.16/-0.06	50	56	57140	19420	2200	8.7	1962	34	9.7	3.5
60 NBR 68	001 18 069	49004699	25	+0.052/-0	40	+0.16/-0.06	50	56	57140	19420	2200	8.7	1962	34	9.7	3.5
60 NR 11	001 18 163	90955	25	+0.052/-0	42	+0.17/-0.07	22	23	5000	2913	750	15.4	1177	15	3.5	4.3
40 NR 11	001 18 224	90137	20	+0.052/-0	44	+0.17/-0.07	38	42	2000	1554	280	28.5	814	7.5	1.1	7
45 NR 39	002 18 919	49040213	20	-0,15	44	+0.17/-0.07	38	42	2000	1554	280	28.5	814	7.5	1.1	7
60 NR 11	001 18 224	91711	20	+0.052/-0	44	+0.17/-0.07	38	42	5000	3884	710	28.5	2060	18	2.6	7
60 NR 11	002 18 919	49040227	20	-0,15	44	+0.17/-0.07	38	42	5000	3884	710	28.5	2060	18	2.6	7
60 NR 11	001 18 564	54004164	25.7	+0.052/-0	44.5	0 / -0,1	38	41.5	9170	5341	640	21.1	1373	42	4.2	10
60 °IRHD	13-4131	10-00025	20	+/-0.1	45	+0.05/+0.25	40	35	4000	6800	330	7.9	2607	24	1.6	15
60 °IRHD	13-4132	10-00026	20	+/-0.1	45	+0.05/+0.25	75	70	8000	13500	820	6.7	5494	48	3.2	15
40 NR 11	001 18 181	2118578	20	+0.052/-0	45	+0.17/-0.07	30	30	1670	1457	230	18.8	441	5.8	0.8	7.1

Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)						RADIAL		AXIAL			TORSION		
			Ød	Tolerance for Ød	Housing		l	L	STIFFNESS (N/mm)	MAX. LOAD (N)	STIFF. (N/mm)	MAX. DEFLEC-TION (mm)	MAX. LOAD (N)	MAX. TORQUE (Nm)	STIFF. (Nm/ deg)	±β (degrees)
					ØD	Tolerance for ØD										
60 NR 11	001 18 181	91034	20	+0.052/-0	45	+0.17/-0.07	30	30	4110	3593	550	19.2	1079	14	2.0	7.1
60 NR 11	001 18 064	90039	20	+0.052/-0	45	+0.17/-0.07	40	46	5400	5243	650	25.9	1717	19	2.6	7.4
60 NR 11	001 18 070	90044	25	+0.052/-0	45	+0.17/-0.07	50	56	18250	11167	1560	17.3	2747	34	6.4	5.3
60 NR 11	001 18 127	90094	20	+0.052/-0	45	+0.17/-0.07	64	70	14580	16993	1130	30.7	3532	30	4.2	7.2
60 °IRHD	13-1004	10-00235	15.9	+0.15/-0.3	47.7	+0.05/-0.08	44.5	50.8	1981	2500	304	4.2	1226	26	1.3	20
60 NR 11	001 18 173	90126	30	+0.052/-0	48	+0.17/-0.07	56	62	47500	18449	1730	14.5	2551	92	11.5	8
60 °IRHD	13-4133	10-00027	25	+/-0.1	50	+0.05/+0.25	45	40	4500	9000	450	8.4	3780	46	3.3	14
60 °IRHD	13-4134	10-00028	25	+/-0.1	50	+0.05/+0.25	85	80	10500	18000	960	7.8	7488	69	4.9	14
40 NR 11	001 18 075	90328	30	+0.052/-0	50	+0.17/-0.07	60	66	14670	8545	750	15.4	1177	25	5.2	4.8
60 NR 11	001 18 065	90040	20	+0.052/-0	50	+0.17/-0.07	40	46	3420	5243	540	40.1	2207	19	2.3	8.1
60 NR 11	001 18 624	93126	24	+0.052/-0	50	+0.17/-0.07	64	70	12500	9710	660	35.4	2384	46	5.1	9
60 NR 11	001 18 072	90045	25	+0.052/-0	50	+0.17/-0.07	50	56	10000	9710	970	28.8	2845	34	5.2	6.6
60 NR 11	001 18 126	90093	24	+0.052/-0	50	+0.17/-0.07	76	82	21250	16507	1110	26.0	2943	92	6.6	14
40 NR 11	001 18 136	92150	24	+0.052/-0	50	+0.17/-0.07	102	115	15170	17672	940	30.7	2943	70	4.4	15.9
60 NR 11	001 18 075	90046	30	+0.052/-0	50	+0.17/-0.07	60	66	3550	1845	1940	15.4	3041	42	3.0	14
60 NR 11	001 18 136	90102	24	+0.052/-0	50	+0.17/-0.07	102	115	31250	36413	2170	23.1	5101	70	10.6	6.6
60 NR 91	002 18 005	49017278	28	+0.052/-0	52	+0.21/-0.087	48	54	10000	9710	800	19.2	1570	40	5.7	7
45 NR 97	002 18 920	49040214	25	-0,15	55	+0.17/-0.07	55	60	4000	3884	380	25.3	981	17	2.5	6.8
60 NR 11	002 18 920	49040228	25	-0,15	55	+0.21/-0.087	55	60	8000	7768	1000	25.0	2551	35	5.1	6.8
60 NR 11	001 18 079	90052	32	+0.062/-0	55	+0.21/-0.087	65	72	50500	19614	2700	19.2	5297	78	19.0	4.1
60 NR 11	001 18 645	54004214	32	-0,15	56	+0.21/-0.087	49	54	13930	9467	1000	25.0	2551	64	8.0	8
60 °IRHD	13-4135	10-00029	30	+/-0.2	60	+0.05/+0.25	55	45	5000	12000	530	9.6	5088	78	5.6	14
60 NR	002 307 649	54004190	30	+0.052/-0	60	+0.21/-0.087	24	26	3550	1845	632	16.7	1079	42	3.0	14
60 NR 11	001 18 078	90051	30	+0.052/-0	60	+0.21/-0.087	60	68	11820	12623	1310	25.0	3335	63	9.0	7
40 NR 11	001 18 117	49004031	38	+0.062/-0	64	+0.21/-0.087	80	88	23130	17964	750	26.9	2060	53	11.0	4.8
60 NR 11	001 18 561	54004244	40	+0.062/-0	64	+0.21/-0.087	43	46	15000	8739	1200	21.3	2600	80	11.4	7
60 NR 11	001 18 117	90089	38	+0.062/-0	64	+0.21/-0.087	80	88	56250	43695	2640	27.0	7259	130	27.1	4.8
60 °IRHD	13-4137	10-00031	35	+/-0.2	65	+0.05/+0.25	60	50	8500	16000	720	9.2	6624	92	7.7	12
40 NR 11	001 18 220	91092	30	+0.052/-0	65	+0.21/-0.087	70	70	5150	6506	380	38.0	1472	23	3.6	6.4
60 NBR 68	001 18 220	95300	30	+0.052/-0	65	+0.21/-0.087	70	70	12230	15439	970	37.7	3728	55	8.6	6.4
60 NR 11	001 18 220	91318	30	+0.052/-0	65	+0.21/-0.087	70	70	10540	13303	1030	37.4	3924	55	8.6	6.4
60 NR 11	002 18 885	49004145	30	+0.052/-0	65	+0.21/-0.087	70	70	10540	13303	1030	37.4	3924	55	8.6	6.4
60 NR 11	001 18 088	90060	40	+0.062/-0	65	+0.21/-0.087	80	88	50000	19420	2260	26.6	6131	130	27.7	4.7
60 NR 11	001 18 084	90057	36	+0.062/-0	65	+0.21/-0.087	72	80	19240	19614	1810	34.6	6377	96	16.6	5.8
60 °IRHD	13-4139	10-00033	40	+/-0.2	70	+0.05/+0.25	65	55	17000	20500	870	9.5	8265	138	11.5	12
60 °IRHD	13-1698	10-00276	35	+0.1/-0.07	71.2	+0.05/-0.08	41.1	45	3800	4500	347	5.1	2158	97	6.9	14
60 NR 11	001 18 716	49012091	57	+0.074/-0	73	+0.021/-0.002	62	71	115000	43307	3500	19.2	6867	200	66.7	3
60 °IRHD	13-4141	10-00035	45	+/-0.2	75	+0.05/+0.25	70	60	20000	24000	1100	9.1	10010	240	20	12
60 NR 11	001 18 090	90061	40	+0.062/-0	75	+0.22/-0.1	80	88	18670	27188	1370	33.7	4709	130	19.4	6.7
60 NR 11	001 18 093	90063	45	+0.062/-0	75	+0.22/-0.1	90	100	55580	64766	2260	34.7	7995	185	36.3	5.1
60 NR 11	001 18 285	91820	42	+0.062/-0	78	+0.22/-0.1	45	45	8480	13594	1070	42.3	4611	85	14.2	6
60 °IRHD	13-4143	10-00037	50	+/-0.2	80	+0.05/+0.25	75	65	30000	28500	1350	8.9	12015	275	25	11
60 NR 11	001 18 297	91424	45	+0.062/-0	80	+0.22/-0.1	45	45	7250	8448	870	28.8	2551	90	15.5	5.8
60 NBR 68	001 18 095	93394	50	+0.062/-0	80.0	+0.22/-0.1	100	110	94440	82535	3750	23.1	8829	300	68.2	4.4
60 NR 11	001 18 095	90066	50	+0.062/-0	80	+0.22/-0.1	100	110	94440	82535	3750	23.1	8829	300	68.2	4.4
45 NR 11	001 18 141	49039427	58	+0.074/-0	93	+0.34/-0.13	85	95	15500	15051	1100	28.9	3237	140	29.8	4.7
60 NR 11	001 18 141	90106	58	+0.074/-0	93	+0.34/-0.13	85	95	33000	32043	2330	28.9	6867	281	59.8	4.7
60 NR 11	001 18 360	90900	50	+0.062/-0	95	+0.26/-0.12	100	110	25450	40782	2180	42.4	9418	255	38.1	6.7

TYPE	DRAWING NO.	PART NO.	DIMENSIONS (mm)						RADIAL		AXIAL			TORSION		
			Ød	Tolerance for Ød	Housing		l	L	STIFFNESS (N/mm)	MAX. LOAD (N)	STIFF. (N/mm)	MAX. DEFLEC-TION (mm)	MAX. LOAD (N)	MAX. TORQUE (Nm)	STIFF. (Nm/ deg)	±β (degrees)
					ØD	Tolerance for ØD										
60 NR 11	001 18 489	54004359	75	+0.074/-0	100	+0,125/-0,025	50	50	56000	27188	2750	19.2	5396	248	91.9	2.7
60 NR 11	001 18 097	90070	50	+0.062/-0	100	+0.26/-0.12	100	110	17250	33500	1650	59.8	10065	255	35.9	7.1
40 NR 11	001 18 102	96921	50	+0.062/-0	125	+0.42/-0.17	138	195	5600	15536	800	66.2	5396	180	17.1	10.5
70 NR 11	001 18 485	54004365	80	+0.074/-0	125	+0.33/-0.17	107	102	52870	56473	2980	41.3	12557	808	144.3	5.6
60 NR 11	001 18 102	96141	50	+0.062/-0	125	+0.42/-0.17	138	195	12600	33985	1700	73.6	12753	550	52.4	10.5
60 NR 11	001 18 318	92770	70	+0.074/-0	126	+0.33/-0.17	111	120	52000	50492	3200	48.1	15696	610	122.0	5
60 NR 11	001 18 772	96165	100	+0.087/-0	140	+0.42/-0.17	110	120	116360	124288	5100	27.9	14519	1045	316.7	3.3
60 NR 11	001 18 641	54004357	75	+0.074/-0	141	+0,2	155	165	73530	121375	2880	64.5	18933	1840	175.2	10.5
60 NR 11	001 18 802	96246	110	+0.087/-0	160	+0.44/-0.19	170	180	110000	160215	6000	48.1	29430	1850	440.5	4.2
60 NR 11	001 18 805	96248	124	+0.01/-0	180	+0.46/-0.21	220	230	440000	388400	10750	38.5	42183	3000	1000.0	3
70 NR 11	001 18 805	96247	124	+0.01/-0	180	+0.46/-0.21	220	230	460000	446660	15000	38.5	58860	4600	1533.3	3
60 NR 11	001 18 531	93059	136	+0.01/-0	218	+0.44/-0.26	201.6	235	130000	252460	7500	6.7	5150	4700	1000.0	4.7
60 NBR 68	001 18 531	480706	136	+0.01/-0	218	+0.44/-0.26	201.6	235	130000	252460	7500	67.4	51503	4700	1000.0	4.7
60 NR 511	002 18 920	49040228	25	-0,15	55	+0.21/-0.087	55	60	8000	7768	1000	2.6	260	35	5.1	6.8

Product images are graphical representations. Actual items may differ in appearance

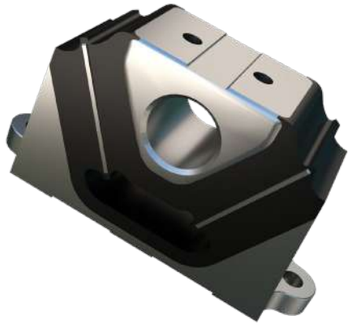
Product images are graphical representations. Actual items may differ in appearance

Vee Mount (Keillager)

Vee Mount have ideal stiffness characteristics for rail vehicle engine suspension. The vertical stiffness rate ensures that when the mounting is properly loaded, the vertical natural frequency does not coincide with the body bending frequency and the high longitundinal stiiffness controls shunting shock motion. The mounting is usually connected to the solebars via the base casting, and a buffer is attached to the Vee section casting to limit tensile loads.

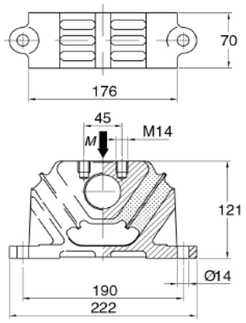
Features:

- Three dissimilar translational stiffness for the best vibration isolation and motion control
- Strong castings for safety and reliability

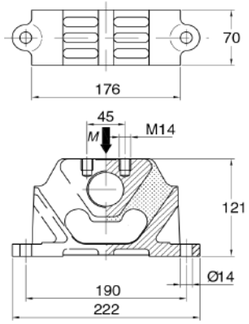


A high load capacity mounting with relatively large rubber volume providing a high degree of vibration and noise isolation and makes it ideally suited for suspending engines installed in public service and goods vehicles.

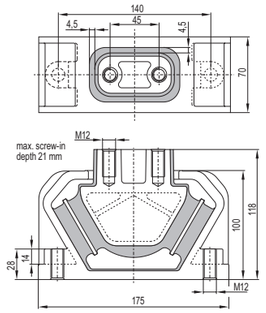
Technical Drawing



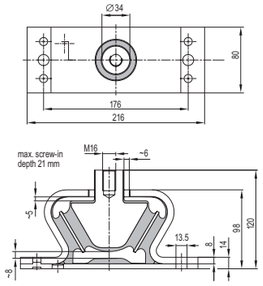
11-1033



11-1082



033 18 700 - Aluminium
033 18 701 - Aluminium, interleaved



033 18 720 - Steel
033 18 730 - Steel, interleaved

Product Data

TYPE	DRAWING NO.	PART NO.	AXIAL		RADIAL STIFFNESS (N/mm)	
			MAX. LOAD (Kg)	STIFFNESS (N/mm)	X	Y
35 °IRHD	11-1082/1	10-00201	90	148	407	29.6
40 °IRHD	11-1082	10-00849	115	172	473	34.4
40 NR 39	033 18 730	49025346	175	350	700	100
55 °IRHD	11-1082	10-00205	210	316	869	63.2
42 NR 39	033 18 700	511470	220	440	1700	500
60 °IRHD (EPDM)	11-1082/1	10-00204	260	450	1200	150
60 °IRHD	11-1082	10-00804	260	440	1210	88
60 °IRHD	11-1082/1	10-00203	260	440	1210	88
50 NR 39	033 18 730	49025347	292	580	1400	200
65 °IRHD	11-1082	10-00206	315	538	1479.5	107.6
50 NR 39	033 18 700	2129315	340	680	2600	770
45 °IRHD (SIL)	11-1033	10-04854	370	680	1870	136
60 NR 39	033 18 730	49025348	400	800	2400	330
75°IRHD (EPDM)	11-1033	10-02379	1290	1900	5225	380
60 NR 39	033 18 701	2129323	1400	2800	10800	3200

Product images are graphical representations. Actual items may differ in appearance

VT Mount

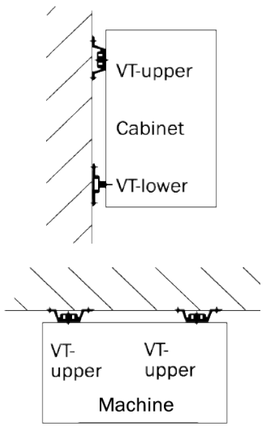
Type VT has been designed so that upon installation the rubber section is subjected to shear loads, thus providing high deflection even at low loads. Two different parts are available. The VT-upper provides for protection against tension preventing the isolated unit from falling down if overloading occurs.

VT-lower is designed to accept horizontal compression loads and allow shear deflection vertically.

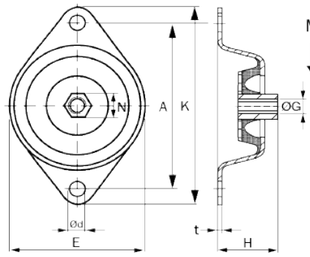
Typical applications:

- Instrument cabinets
- Light machinery
- Fans
- Refrigeration units

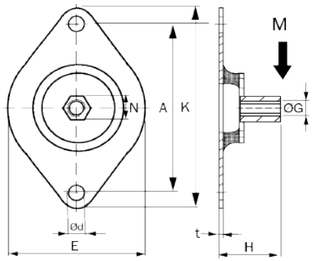
Technical Drawing



MOUNTING INSTRUCTIONS



VT UPPER



VT LOWER

Product Data

TYPE	DRAWING NO.	PART NO.	COMPOUND	DIMENSIONS (mm)								RADIAL (M) MAX. LOAD (kg)	COMPRESSION (F) MAX. LOAD (kg)
				E	K	A	H	Ød	N	t	ØG		
VT UPPER 40 °IRHD	17-4378	10-01369	40 °IRHD	75	114	96	33	9	15	1.5	M8	14	30
VT UPPER 60 °IRHD	17-4378	10-01370	60 °IRHD	75	114	96	33	9	15	1.5	M8	25	70
VT LOWER 40 °IRHD	17-4349	10-01373	40 °IRHD	75	114	96	33	9	15	1.5	M8	14	30
VT LOWER 60 °IRHD	17-4350	10-00015	60 °IRHD	75	114	96	33	9	15	1.5	M8	25	70

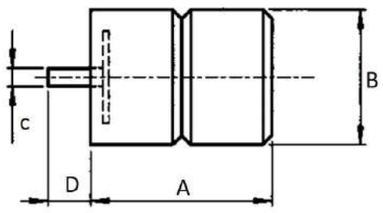
Product images are graphical representations. Actual items may differ in appearance

Zellpuffer

Zellpuffers feature a very robust design. The wide selection of sizes allows for a universal use. Zellpuffers are particularly suited as resilient deflection limiters and for buffering shock loads with mobile and non mobile driven machines and as stops in general.

The Zellpuffer are manufactured from Pu, Diplocell.

Technical Drawing



SHAFT FIXED ZELLPUFFER

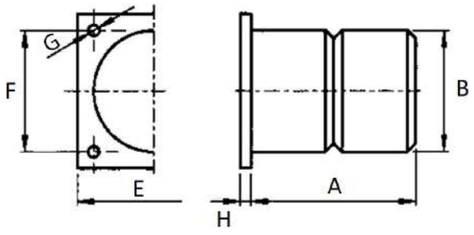


PLATE FIXED ZELLPUFFER

Product Data

DRAWING NO.	PART NO.	DIMENSIONS (mm)							
		A	ØB	C	D	E	F	ØG	H
PLATE FIXED ZELLPUFFER									
70.10031	54006110	40	80	-	-	110	80	12.5	10
70.10032	54006111	80	80	-	-	110	80	12.5	10
70.10033	54006112	120	80	-	-	110	80	12.5	10
70.10013	54006092	100	100	-	-	125	100	12.5	10
70.10014	54006093	150	100	-	-	125	100	12.5	10
70.10015	54006094	63	125	-	-	160	125	17	12
70.10016	54006095	125	125	-	-	160	125	17	12
70.10017	54006096	190	125	-	-	160	125	17	12
70.10018	54006097	80	160	-	-	200	160	17	12
70.10019	54006098	160	160	-	-	200	160	17	12
70.10020	54006099	240	160	-	-	200	160	17	12
70.10021	54006100	100	200	-	-	250	200	21	14
70.10022	54006101	200	200	-	-	250	200	21	14
70.10024	54006103	300	200	-	-	250	200	21	14
70.10025	54006104	250	250	-	-	315	250	21	15
70.10026	54006105	375	250	-	-	315	250	21	15
70.10027	54006106	475	315	-	-	400	315	21	15
70.10029	54006108	400	400	-	-	500	400	25	20
70.10030	54006109	600	400	-	-	500	400	25	20

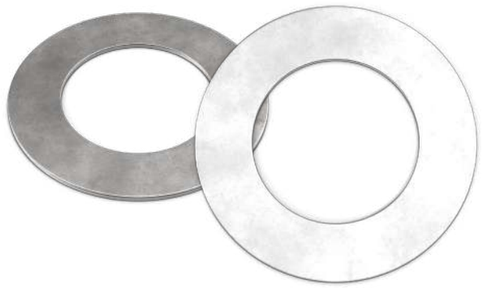
DRAWING NO.	PART NO.	DIMENSIONS (mm)							
		A	ØB	C	D	E	F	ØG	H
SHAFT FIXED ZELLPUFFER									
70.10085	54006164	40	80	M12	35	-	-	-	-
70.10086	54006165	80	80	M12	35	-	-	-	-
70.10087	54006166	120	80	M12	35	-	-	-	-
70.10065	54006144	100	100	M12	35	-	-	-	-
70.10068	54006147	150	100	M12	35	-	-	-	-
70.10069	54006148	63	125	M12	35	-	-	-	-
70.10070	54006149	125	125	M12	35	-	-	-	-
70.10072	54006151	190	125	M12	35	-	-	-	-
70.10073	54006152	80	160	M12	35	-	-	-	-
70.10074	54006153	160	160	M12	35	-	-	-	-
70.10075	54006154	240	160	M12	35	-	-	-	-
70.10076	54006155	100	200	M12	35	-	-	-	-
70.10077	54006156	200	200	M12	35	-	-	-	-
70.10078	54006157	300	200	M12	35	-	-	-	-
70.10080	54006159	125	250	M24	80	-	-	-	-
70.10081	54006160	250	250	M24	80	-	-	-	-
70.10082	54006161	375	250	M24	80	-	-	-	-
70.10083	54006162	315	315	M24	80	-	-	-	-

Product images are graphical representations. Actual items may differ in appearance

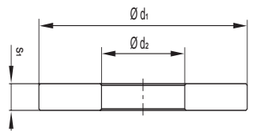
Product images are graphical representations. Actual items may differ in appearance

Washers

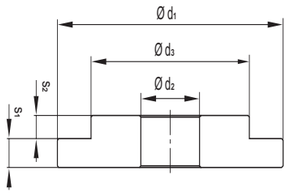
Overload and rebound washers (top and bottom) are necessary to limit maximum movement in the event of shock loading.



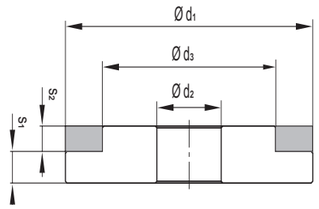
Technical Drawing



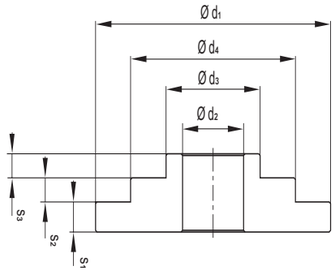
TYPE A



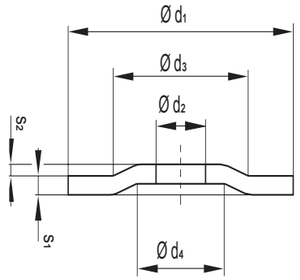
TYPE B



TYPE C



TYPE D



TYPE E

Product Data

DRAWING NO.	PART NO.	DIMENSIONS (mm)					BOLT SIZE	MAX. TORQUE (Nm)
		$Ød_1$	$Ød_2$	S_1	S_2	$Ød_3$		
TYPE A								
039 18 753/212	49041777	40	9	2.5	-	-	M8 5.6	11
18-0379C	20-00531	50	10	4	-	-	M10	25
039 18 755/212	49041776	50	11	2.5	-	-	M10 5.6	23
18-0472D	20-00536	51	16	4	-	-	M16	60
20-0562B	20-00416	52	12	3	-	-	M12	40
18-0472C	20-00535	55	12	5	-	-	M12	40
20-0562D	20-00644	55	20	5	-	-	M20	120
039 18 768/212	49041778	70	13	3	-	-	M12 5.6	39
040 18 922/101	49032678	75	16.2	4	-	-	M16 5.6	90
18-0391C	20-00532	80	16	5	-	-	M16	60
18-1101C	20-00533	100	20	6	-	-	M20	120
039 18 766/212	49041775	100	21	6.3	-	-	M20 5.6	180
18-1550C	20-02818	139	24	10	-	-	M24	200

Product images are graphical representations. Actual items may differ in appearance

DRAWING NO.	PART NO.	DIMENSIONS (mm)							BOLT SIZE	MAX. TORQUE (Nm)
		$Ød_1$	$Ød_2$	$Ød_3$	$Ød_4$	S_1	S_2	S_3		
TYPE E										
057 18 756/223	511927	80	16.5	31	43	5	11	5	M16 5.6	90
040 18 935/101	50032235	92	17	28	34	5	4	2	M16 5.6	90

DRAWING NO.	PART NO.	DIMENSIONS (mm)					BOLT SIZE	MAX. TORQUE (Nm)
		$Ød_1$	$Ød_2$	S_1	S_2	$Ød_3$		
TYPE B								
040 18 038/101	97139	35	17	4	2	28	M16 5.6	90
057 18 001/204	49056605	48	10.5	5	5	15	M10 5.6	23
18-0241D	20-00529	55	12	5	2.5	25	M12	40
20-0562K	20-01103	57	12	3	1.5	22	M12	40
040 18 039/101	97138	60	12.7	5	3	24.5	M12 5.6	39
17.10166	54002459	75	16.2	-	5	32	M16 5.6	90
040 18 036/101	97141	75	20.2	5	3	35	M20 5.6	180
18-0311B	20-00773	80	16	6.5	3	31.5	M16	60
20-0562N	20-00528	80	20	6	3	34.5	M20	120
040 18 037/101	97140	104	17	5	3	46	M16 5.6	90
20-0562C	20-00643	110	20	5	3	52.5	M20	120
040 18 035/101	97142	110	24.3	6	4	45.9	M24 5.6	320
18-0146C	20-00527	116	24	8	4	47	M24	200
TYPE C								
15-0286	10-03666	50	12	3	3	28.5	M12	40
15-3528	20-02894	67.5	20	5	5	30	M20	120
15-3526	10-03862	95	24.5	8	6	38	M24	200
TYPE D								
040 18 917/101	49026836	75	16.5	5	3	45	M16 5.6	90

Product images are graphical representations. Actual items may differ in appearance

Application Questionnaire

Please fax, scan or post the completed questionnaire back to your sales contact or our technical centre.

How to contact us:

- Email: antivibration@trelleborg.com
- Website: www.trelleborg.com/anti-vibration-solutions/contact
- Our app: MountFinder Pro.

CUSTOMER INFORMATION	
Enquiry from	
Telephone NO.	
Fax NO.	
E-mail Address	
End User	

APPLICATION DETAILS	
Application Description	
Mobile or Stationary	
Total Number of Installations	
Minimum temperature @ mountings (°C)	
MAX.imum temperature @ mountings (°C)	
Environmental Conditions	

ENGINE DETAILS					
Manufacturer					
Model					
Weight (kg)					
Spreed Range (rpm)					
NO. of Cylinders					
Cylinder Configuration					
Mass Moments of Inertia (kg/mm^2)	Ixx		Iyy		Izz	
C.O.G from datum RFOB (mm)	X		Y		Z	
Block Sizes (mm)	X		Y		Z	

TRANSMISION DETAILS					
Manufacturer					
Model					
Weight (kg)					
NO. of Cylinders					
Mass Moments of Inertia (kg/mm^2)	Ixx		Iyy		Izz	
C.O.G position from Datum (mm)	X		Y		Z	
Block Size (mm)	X		Y		Z	

MOUNT INFORMATION			
Mount Number	Position from datum (RFOB)		
	X	Y	Z
1			
2			
3			
4			
5			
6			

Further information

Please supply a drawing of proposed layout.

- Have all suspended masses been detailed?
- Are there any mounting point restrictions?

Product images are graphical representations. Actual items may differ in appearance

Notes

Local presence. Global reach.

USA
Trelleborg Industrial Products USA Inc.
200 Veterans Boulevard Suite 3
South Haven,
MI 49090
USA
Tel +1 269 639 9891 (Main)
Tel (800) 424 8857 (Toll-free)
Email industrialavs.usa@trelleborg.com

UK
Trelleborg Antivibration Solutions
1 Hoods Close
Leicester
LE4 2BN
Tel +44 116 2670 455

NETHERLANDS
Trelleborg Antivibration Solutions
Pieter Zeemanweg 133
3316 GZ Dordrecht
The Netherlands
Tel +31 (0) 78 6182844

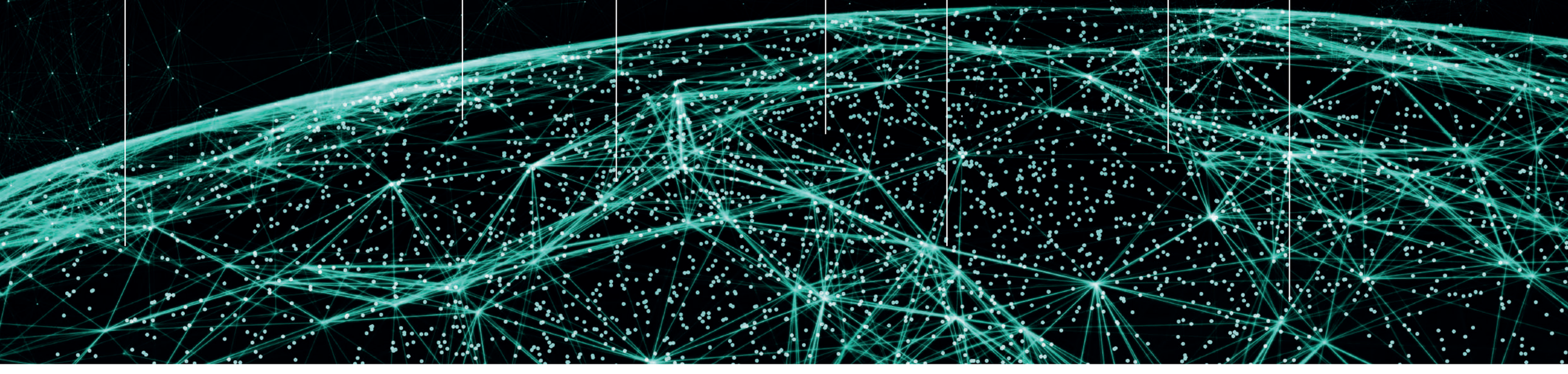
INDIA
Trelleborg Industrial AVS India Pvt Ltd
19/1, Kalena Agrahara Bannerghatta Main Road
Bengaluru – 560 076
Tel +91 80 25189700

GERMANY
Trelleborg Antivibration Solutions
Berliner Straße 17
16727 Velten
Tel +49 3304 365 0

Trelleborg Antivibration Solutions
Dr.-Werner-Freyberg Strasse 7
69514 Laudenbach
Tel +49 (6201) 60 20 30
Fax +49 (6201) 60 20 319

CHINA
Trelleborg Antivibration Solutions (Suzhou) Co., Ltd
Building P, Phase III Plainvim International Suxiang
Science Industrial Park, Chunxing Road 46,
Xiangcheng District
215000 Suzhou
Tel +86 510 853 09428
Fax +86 510 853 09465

SWITZERLAND
Trelleborg Antivibration Solutions
Soodstrasse 57
8134 Adliswil
Tel +41 44 711 17 17
Fax +41 44 710 05 42



Product images are graphical representations. Actual items may differ in appearance

Product images are graphical representations. Actual items may differ in appearance

TRELLEBORG

Trelleborg Antivibration Solutions (AVS) - Leading the Frontier of Innovation in Noise and Vibration Control. With our advanced polymer technology and expertise in rubber-to-metal bonding, we're pioneers in combating noise and vibration. As part of Trelleborg Group's Industrial Solutions, we bring over a century of excellence to various sectors like rail, marine, and industrial. Our focus is on crafting isolation, attenuation, and suspension solutions that redefine quality and reliability. Our new value proposition, "The Frontline of Innovation," signifies our commitment to pushing polymer technology's limits. We enhance comfort, safety, and efficiency while extending product life and optimizing costs. Join us at Trelleborg AVS for innovation-driven excellence.

Website

Linked In

WWW.TRELLEBORG.COM/ANTI-VIBRATION-SOLUTIONS

ANTIVIBRATION@TRELLEBORG.COM