

OUR CURRENT RANGE OF INDUSTRIAL PRODUCTS INCLUDE:

- **MULTICUSHIONS**
- **BUFFERS**
- **FLANGED ISOLATORS**
NON-INTERLOCKED
- **FLANGED ISOLATORS SAFETY INTERLOCKED**
- **RECESSED FLANGED ISOLATORS**
- **CENTRE FIXING ISOLATORS**
- **SHEAR TYPE ISOLATORS**
- **SUSPENSION & HVAC RANGE**
- **FREE STANDING ISOLATORS**
- **PLATE ISOLATORS**
- **HY-DEFLECTION ISOLATORS**
- **INSTRUMENT ISOLATORS**
- **FLEXIBLE BUSHES METAL**
- **FLEXIBLE BUSHES PLAIN**
- **MISCELLANEOUS RUBBER PRODUCTS**
- **SAFETY PROTECTION**
- **AUTO UNIVERSAL PRODUCTS AND HOSES**



INDUSTRIAL

Mackay is a major supplier of a diverse range of engineered rubber and bonded metal/rubber & composite products for the automotive, mining, rail, construction and industrial markets. Our products are exported worldwide.

Our technical expertise, customer-responsive service and commitment to continuous improvement ensure that Mackay's reputation for reliable high-quality products will continue.

Design and development of optimal engineered rubber product solutions requires advanced design technologies and skills, breadth and depth of expertise, advanced rubber development expertise, and a variety of manufacturing processes.

- **CAE design capabilities across a wide range of materials**
- **Long history of providing Australia with off the shelf vibration and noise isolation solutions.**
- **100% Australian owned**

Mackay offers an extensive range of Vibration Isolators and Motor Mounts for a wide array of applications, including those with loads up to 17,000 kg. With over 50 years of experience, Mackay supports industries and the automotive sector across Australia and internationally. Unique in the market, Mackay not only supplies but also designs and manufactures vibration isolators, providing expert recommendations tailored to specific needs. Their broad selection and unmatched product support set them apart in the industry.

CAPABILITIES

- **Process types: injection moulding, compression-transfer moulding, and extrusion.**
- **In-house compound development, mixing and certification of compounds.**
- **Assembly of rubber-metal mouldings into associated forged or cast components.**
- **Moulding press capacity up to 1,000 tonnes, capable of moulding parts up to 2.4m x 1.5m**
- **Shaped low-pressure hoses for water, air, and fluid for industrial custom equipment.**
- **Moulding Press Capacity up to 1000 ton. Capable of moulding up to 2.4m x 1.5m**

MULTICUSHIONS

MULTICUSHIONS

The Multicushions system is a new approach to isolator selection. The large range of sizes and durometers combined with interchangeable metric and imperial studs allows selection of the most appropriate cushion isolator for the application.

First choose the best cushion for the application and then choose the desired stud combination.



MULTICUSHION KITS

A flexible water hose (Not suitable for oil, fuel) MULTICUSHION® isolators are made from high-grade natural rubber and all metal surfaces are passivated to automotive OEM standards.

The studs are easily inserted with a screw driver whilst the microBOND™ 'fastener adhesive system' provides secure thread locking.



BUFFERS

CYLINDRICAL RUBBER BUFFERS

The aim of any cylindrical rubber buffers Mackay's Cylindrical Rubber Buffers are designed for optimal energy absorption, using a special high-hysteresis rubber compound bonded to a steel base plate. The substantial rubber content ensures high efficiency, and Mackay can also provide simpler, cost-effective designs for applications with lower force requirements in new machine developments.



BONDED RUBBER BUFFERS

As a leading supplier of bonded rubber buffers in Australia, Mackay focuses on creating buffers that integrate seamlessly into equipment, reducing shock transmission and supporting economic design. These buffers are particularly useful in vehicle suspension systems, providing effective stiffening under increasing loads. For optimal performance, users should first select the appropriate cushion for their application, followed by the desired stud combination.



CONICAL BUFFERS

Our conical buffer Australia supply provides effective control of vibrations in machines and mechanical noise.



MULTI BUFFER

AMackay, a leading manufacturer and supplier of multi buffers in Australia, designs these buffers to provide superior control over vibration, shocks, and sound, while effectively absorbing impacts. The multi buffer face profile is carefully crafted to feature a simple slip-resistant surface, ensuring optimal impact absorption and static properties.



FLANGED ISOLATORS NON-INTERLOCKED

FLANGED CONFLEX ISOLATORS

Conflex isolators are designed to meet almost all machinery installations within the load range. available in four rubber hardnesses they are the versatile answer to your mobile or static vibration problems.



SLIMLINE ISOLATORS

Our SlimLine isolators are built to offer increased protection to rubber inclusions in machine applications. They provide high isolation efficiency with the same load capacity in both compression and shear applications.



Our SlimLine isolators are ideal for practical applications where constraints in horizontal motion are permissible but a good amount of vibrational isolation is required during vertical motion.

FLANGED STABIFLEX ISOLATORS

Our flanged STABIFLEX isolators offer a metal protection shield for the rubber in a wide variety of applications.



The STABIFLEX isolators are designed to provide excellent isolation in both compression and shear loadings.

These are suitable in applications wherein both the horizontal and vertical planes require vibrational isolation.

BECA VIBRO-ISOLATORS

Beca Vibro-Isolators are flexible both horizontally and vertically. They are particularly suitable for machines producing horizontal vibration forces. The horizontal deflections are approximately the same as the vertical deflections.



The isolator is effective against all vibrations, irrespective of the direction in which they act.

GENERAL MACHINERY ISOLATORS

General machinery isolators have been engineered to meet various vibrational problems found within any industry and are easily applicable to a wide variety of applications.



The features of these isolators include:

- All angle flexibility
- Ease of installation
- Maximum durability
- Designed for stability
- Ease of selection
- Increased service life on equipment

FLANGED ISOLATORS NON-INTERLOCKED

DOUBLE V-SHAPED FLANGE

The V-shaped flange isolators are suitable for marine mount working at shear compression. Two metal parts facilitate the installation through a screw at the top and two holes for securing it to the chassis.

Our V-shaped flange isolators are designed to make provision for major deflections at low loads. As such, the natural frequencies are inherently low and consequently ideal for engines.



SINGLE V-SHAPED FLANGE

The single V-shaped flange is suitable for small engines and consists of two symmetrically-tilted metal parts with a screw-on one side. Its generator mounts make it possible for installations that possess a high magnitude of elasticity, allowing for lower frequencies and enhanced vibration isolation.

Our V-shaped flanged isolators are ideal for low-load engines that require high levels of vibration isolation. Effective control of vibrations in machines and mechanical noise.



FLANGED ISOLATORS SAFETY INTERLOCKED

BRB FLANGE ISOLATORS

The BRB type mounts are anti-vibration elements which work the rubber in shear and compression. Their tall height profiles produce large deflections, low natural frequencies, and excellent vibration isolation results.

This range of mounts is suitable for applications where high vibration isolation in the 85-95% range is a priority.



FLANGE PEDESTAL ISOLATORS

The Mackay pedestal mounting combines excellent isolation characteristics with convenient installation features, making it ideal for a wide variety of common installations.

It is typically employed for mounting pumps, compressors, fans, and other machinery, in static and some mobile applications.

Design features include security against excessive overload and rebound movement, a protective stainless steel cover, and an attractive lightweight cast aluminium base. .



FLANGE ISOMOUNTS

The flange Isomount is ideal for marine applications. These general-purpose vibration isolators.

Available in three different sizes, the Isomount comes with a mechanically galvanised base and various options for rubber hardnesses. In addition, they can also be supplied with two types of specialist height adjusters for better functionality.



RECESSED FLANGED ISOLATORS

Suitable for transmission cooler & power steering return hose applications

An In-Line filter that can be installed on the return line of any hydraulic Power Steering system or Automatic Transmission Cooler Line.



CENTRE FIXING ISOLATORS

TWO-PIECE COMBINATION ISOLATORS

The centre fixing two-piece isolator is made of two parts of elastomer bonded to a central tube:

Interior reinforced: cylindrical tube
Elastomer: Neoprene. Range of three different stiffnesses.



COMBINATION ISOLATORS

Combination isolators provide the excellent shock-absorbing properties of rubber in shear and compression with good dynamic cushioning under rugged operating conditions.

These isolators are designed to be used as an assembly. The rebound unit limits the free movement of the equipment to some extent, but this restriction is very desirable in mobile installations.



DUAL COMPRESSION ISOLATOR

The Mackay dual compression isolators have been engineered to isolate vibration, control shock and reduce noise due to structure-borne vibrations.

They have a high load-carrying capacity with improved multi-directional resilience and built-in rebound protection.



SHEAR TYPE ISOLATORS

U-FLEX SHEAR ISOLATOR

Mackay Heater Valves are a premium Mackay U-Flex isolators are a general-purpose isolator which offers excellent protection against vibration and shock to a wide range of applications including electronic apparatus, vibratory feeders, general machinery as well as equipment in packing cases during transit.



U-Flex isolators are most flexible along the X and Y planes when the rubber is used in shear and offer greater stiffness along the Z plane where the rubber is used in compression. This characteristic is particularly useful when constrained motion is required in one direction.

SUSPENSION & HVAC RANGE

SPRING MOUNTS

Spring mounts are crucial components that help to isolate vibrational energy and shock from machinery. These vibration isolators are particularly prevalent in machinery equipped with reciprocating or rotating parts, as any imbalances in the moving parts generate vibrations.



SYLOMER PADS

Sylomer pads are super-effective in avoiding vibrational energies and mechanical noise through a solid material by introducing elastic isolators.



TRAXIFLEX SUSPENSION ISOLATOR

Traxiflex suspension isolators effectively eliminate noise from piping and suspended equipment.



The typical applications include:

- Suspension and insulation of single pipe against vibrations
- Insulation of acoustic false ceilings
- Suspension of overhead hot air heating ducts.

SUSPENSION SPRING ISOLATOR

Used for suspension in air-handling, pipework, or similar applications. An extra rubber element is included to provide a substantial improvement in the isolation of mechanical noise from the system



FREE STANDING ISOLATORS

SIMPLE MACHINERY FOOT ISOLATORS

One of the most simplistic yet effective foot isolators that can provide stable vibrational isolation and support in applications such as small generators, small compressors, and portable equipment.



MINIFIX ISOLATORS

MINIFIX is mechanical support that is composed of a rubber foot with a grooved anti-slip base and a threaded stud which allows the equipment to be accurately adjusted.



ADJUSTABLE RUBBER FEET ISOLATORS

The adjustable rubber isolators offer a wide variety of variable isolator setups wherein dimensional values, hardness, and load capacity are the parameters that combine to give extensive adjustability and versatility in operation.



SURE FOOT LEVELING ISOLATORS

Mackay Sure Foot Leveling Isolators are designed for cost-effective machine leveling for isolator loads up to 6000 kg.



PLATE ISOLATORS

Where you require a isolator of straight forward design to provide an uncomplicated solution to controlling vibration and shock , the range of Mackay Plate Mountings provide the answer. These isolators are designed to protect equipment and machinery from damaging vibration and shock and have an excellent capacity for energy control.



HY-DEFLECTION ISOLATORS

TWO-PIECE COMBINATION ISOLATORS

Hy-Deflection Isolators provide flexible support for mechanical apparatus which is subject to intermittent or continuous, low frequency, high amplitude vibration. The design provides soft spring rate quality in all directions with exceptional horizontal stability.



INSTRUMENT ISOLATORS

The Mackay range of instrument isolators are widely used to isolate steady static vibration and the control of occasional shock. These mountings are easy to install and are in configurations to suit a variety of design requirements. It is generally recommended that snubbing washers be used to provide an interlocking system of metal parts which act to prevent damage from overload or excessive shock impact.



FLEXIBLE BUSHES

PLAIN RUBBER



METAL TUBE & RUBBER



MISCELLANEOUS RUBBER PRODUCTS

BONNET CLAMP

A very strong and rugged bonnet and hatch safety clamp specially designed to secure against accidental opening.



Stoutly molded-in heavy-duty black rubber and is complete with mounting plates.

MACHINERY MOUNTING PADS AUSTRALIA

Used for suspension in air-handling, pipework, or similar applications. An extra rubber element is included to provide a substantial improvement in the isolation of mechanical noise from the system.



MULTICUSHION

The MULTICUSHION system is a new approach to isolator selection. The large range of sizes and durometers combined with interchangeable metric and imperial studs allows selection of the most appropriate cushion isolator for the application

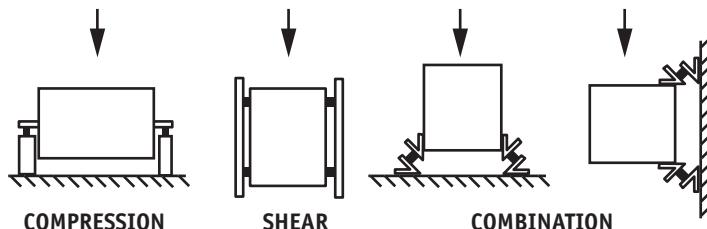
First choose the best cushion for the application and then choose the desired stud combination.

MULTICUSHION isolators are made from high-grade natural rubber and all metal surfaces are passivated to automotive OEM standards. The interchangeable studs are easily inserted with a screw driver whilst the microBOND™ 'fastener adhesive system' provides secure thread locking.



Note! Multicushions are not recommended for use under permanent tension loading.
Ensure load is applied to full face and not just on the thread.

Suggested Methods of Mounting



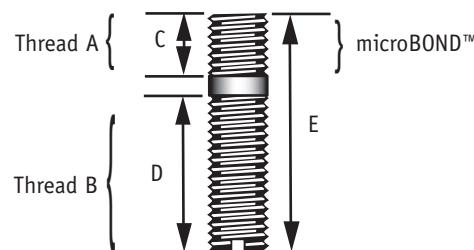
STUD DETAILS

MULTICUSHION Stud Part No.	THREADS		DIMENSIONS		
	A mm	B mm	C mm	D mm	E mm
M4M4	M4 x 0.7	M4 x 0.7	4	15	19 *
M4M5	M4 x 0.7	M5 x 0.8	4	15	20.5
M6M6	M6 x 1.0	M6 x 1.0	6	15	21 *
M6M8	M6 x 1.0	M8 x 1.25	6	20	28
M8M8	M8 x 1.25	M8 x 1.25	8	20	28 *
M8M10	M8 x 1.25	M10 x 1.5	8	25	35
M10M10	M10 x 1.5	M10 x 1.5	10	25	37 *
M10M12	M10 x 1.5	M12 x 1.75	10	35	49
M16M16	M16 x 2.0	M16 x 2.0	16	40	56 *

* Denotes continuous thread

MICROBOND™ THREAD SECURITY

Thread	Prevailing on-torque (max) Nm	Breakaway off-torque (min) Nm	Prevailing off-torque (min) Nm
M4	-	-	-
M6	1.8	1.5	0.8
M8	2.8	4	2
M10	5.5	11	4
M16	14	33	16



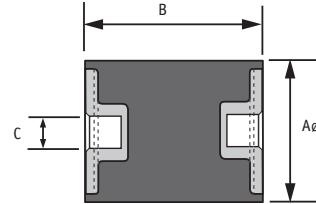
microBOND™ is a trade mark of W.A Deutsher Pty Ltd

CUSHION DETAILS

Part No.	Dimensions		Duro	C metric	Compression		Shear		Weight Kg
	Diameter A mm	Height B mm			Maximum Load Kg	Maximum Deflection mm	Maximum Load Kg	Maximum Deflection mm	
M10131540	13	15	40	M4	13.0	2.5	2.5	3.0	
M10131555	13	15	55	M4	25	2.5	4.5	3	0.01
M10131570	13	15	70	M4	40	2.5	8.5	3	
M10162040	16	20	40	M6	20.5	3	4.5	4	
M10162055	16	20	55	M6	42.5	3	9	4	0.01
M10162070	16	20	70	M6	76	3	12	4	
M10202540	20	25	40	M6	30.5	6	5	6	
M10202555	20	25	55	M6	65	6	11	6	0.02
M10202570	20	25	70	M6	89.5	6	15	6	
M10252040	25	20	40	M6	36	2.5	7	3	
M10252055	25	20	55	M6	54	2.5	12	3	0.02
M10252070	25	20	70	M6	100	2.5	23	3	
M10253040	25	30	40	M6	41	8	7	8	
M10253055	25	30	55	M6	75	8	13	8	0.03
M10253070	25	30	70	M6	120	8	24	8	
M10302040	30	20	40	M6	34.5	2.5	8	3	
M10302055	30	20	55	M6	62	2.5	13	3	0.03
M10302070	30	20	70	M6	112	2.5	27	3	
M10303040	30	30	40	M8	44	4	10	5	
M10303055	30	30	55	M8	77	4	18	5	0.05
M10303070	30	30	70	M8	138	4	33	5	
M10304040	30	40	40	M8	49.5	8	9	10	
M10304055	30	40	55	M8	86	8	17.5	10	0.06
M10304070	30	40	70	M8	155	8	41	10	
M10403040	40	30	40	M8	60.5	4	17.5	5	
M10403055	40	30	55	M8	114	4	28.5	5	0.08
M10403070	40	30	70	M8	195	4	49.5	5	
M10404040	40	40	40	M8	78	8	17.5	10	
M10404055	40	40	55	M8	148	8	34	10	0.09
M10404070	40	40	70	M8	233	8	71	10	
M10503540	50	35	40	M10	150	6	26	6	
M10503555	50	35	55	M10	270	6	49	6	0.14
M10503570	50	35	70	M10	500	6	104	6	
M10504540	50	45	40	M10	111.5	8	25	10	
M10504555	50	45	55	M10	195	8	54	10	0.16
M10504570	50	45	70	M10	360	8	100	10	
M10755040	75	50	40	M10	390	12	76	13	
M10755055	75	50	55	M10	702	12	140	13	0.4
M10755070	75	50	70	M10	1300	12	208	13	
M101006040	100	60	40	M16	510	10	100	10	
M101006055	100	60	55	M16	955	10	180	10	0.8
M101006070	100	60	70	M16	2000	10	306	10	
M101507540	150	75	40	M16	1500	18	277	20	
M101507555	150	75	55	M16	3200	18	525	20	2.2
M101507570	150	75	70	M16	6000	18	760	20	

COLOUR CODE

DURO	COLOUR
40	RED
55	YELLOW
70	Marked 70



All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

STAINLESS STEEL MULTICUSHION

Stainless steel Multicushion isolators are manufactured in the most popular sizes from high grade natural rubber and stainless steel (type 304) metal components.

Available in two rubber hardnesses the cushions are supplied without fixing studs. Mackay recommends fixing with appropriate stainless steel hexagonal socket set screws used with an appropriate locking compound



*** Consult with Mackay Technical staff to ensure natural rubber is suitable for use in corrosive environments or solvents.**

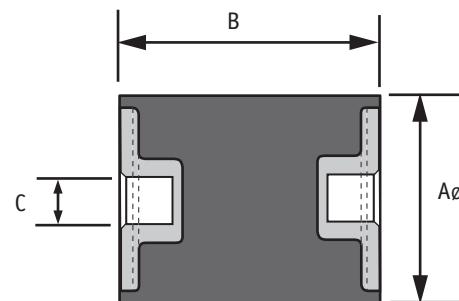
Note! Multicushions are not recommended for use under permanent tension loading.
Ensure load is applied to full face and not just on the thread.

CUSHION DETAILS

Part No.	Dimensions		Duro	C metric	Compression		Shear		Weight Kg
	Diameter A mm	Height B mm			Maximum Load Kg	Maximum Deflection mm	Maximum Load Kg	Maximum Deflection mm	
M11202540	20	25	40	M6	30.5	6	5	6	0.02
M11202555	20	25	55	M6	65	6	11	6	0.02
M11252040	25	20	40	M6	36	2.5	7	3	0.02
M11252055	25	20	55	M6	54	2.5	12	3	0.02
M11253040	25	30	40	M6	41	8	7	8	0.03
M11253055	25	30	55	M6	75	8	13	8	0.03
M11302040	30	20	40	M6	34.5	2.5	8	3	0.03
M11302055	30	20	55	M6	62	2.5	13	3	0.03
M11303040	30	30	40	M8	44	4	10	5	0.05
M11303055	30	30	55	M8	77	4	18	5	0.05
M11304040	30	40	40	M8	49.5	8	9	10	0.06
M11304055	30	40	55	M8	86	8	17.5	10	0.06
M11403040	40	30	40	M8	40.5	4	17.5	5	0.09
M11403055	40	30	55	M8	114	4	28.5	5	0.09
M11404040	40	40	40	M8	78	8	20	10	0.1
M11404055	40	40	55	M8	148	8	34	10	0.1
M11503540	50	35	40	M10	150	6	26	6	0.14
M11503555	50	35	55	M10	270	6	49	6	0.14
M11504540	50	45	40	M10	111.5	8	25	10	0.16
M11504555	50	45	55	M10	195	8	54	10	0.16

COLOUR CODE

DURO	COLOUR
40	RED
55	YELLOW



CYLINDRICAL BUFFERS

FEATURES

Buffer 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.



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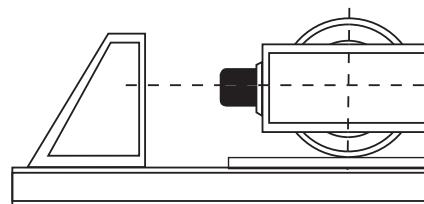
The shockbuffer is used to effectively limit movement of equipment or machine components.

TYPICAL FIELD APPLICATIONS WOULD BE:

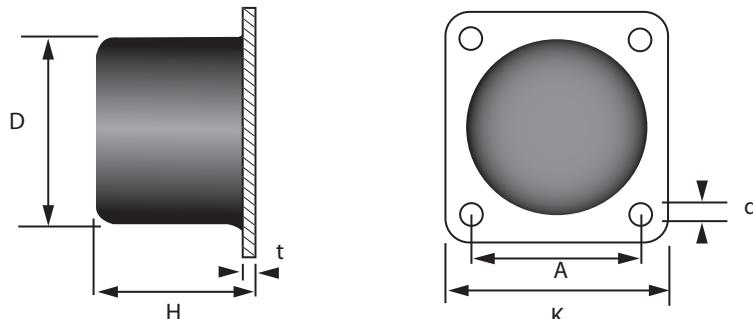
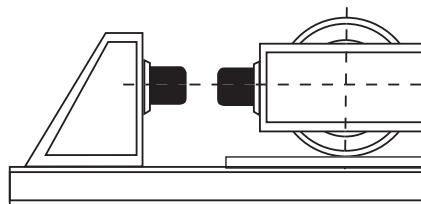
- Wagons
- Cabinets
- Traversing cranes
- Forestry vehicles
- Lifting cranes
- Off-road material handling equipment
- Working beams
- Container handling equipment
- Falling goods

Through the low resilience 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.

Traverse crane with shock Buffer



Traverse crane with 2 Buffers
connected in series



MA185150

Part No.	Dimensions						Compression		Weight Kg
	K	A	D	d	H	t	Load Kg-F	Def mm	
M2255290	70	50	50	7	43	3	816	21	0.2
MA2255300	100	75	75	9	63	3	2000	30	0.5
MA2255310	130	100	100	11	84	4	4100	40	1.2
M117001	185	150	160	14	125		5000	50	
MA185150	185	150	150	13.5	126	6	9100	60	3.9
MA240168	240	200	200	13.5	168	8	18300	82	9.1
* M117002	315	250	250	14.5	208		40000	100	

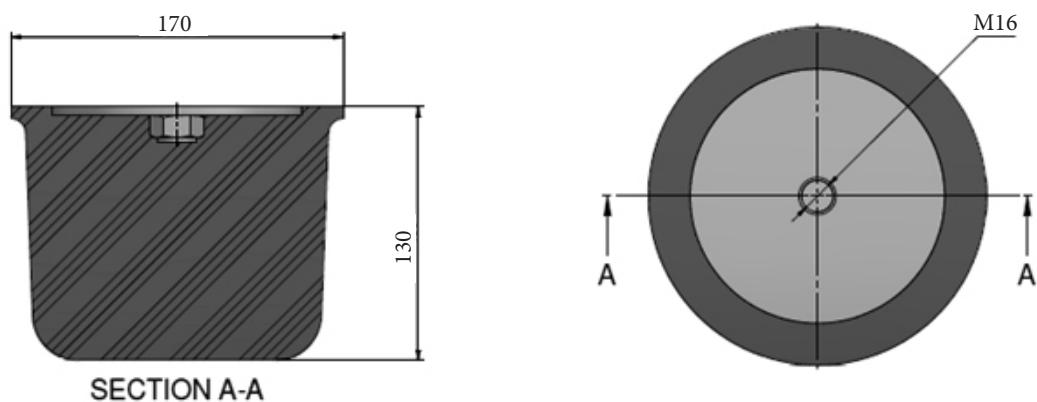
* Special order Only

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

LARGE BUFFERS

Special order Only



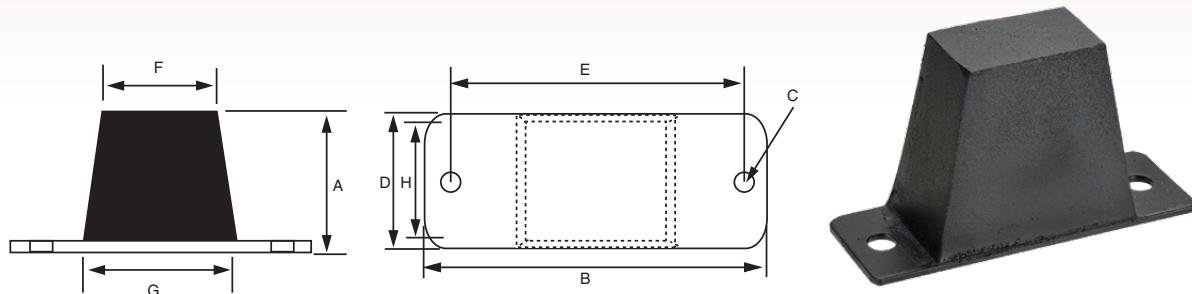
Part No.	Compressions		Weight Kg
	Load Kg-F	Def mm	
M113232	5000	50	2.73

All Dimensions in Millimetres

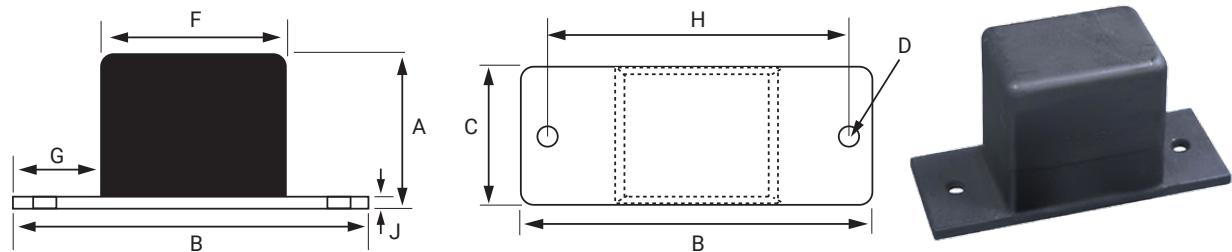
All properties nominal, contact Mackay for Technical advice

VIBRATION ISOLATORS

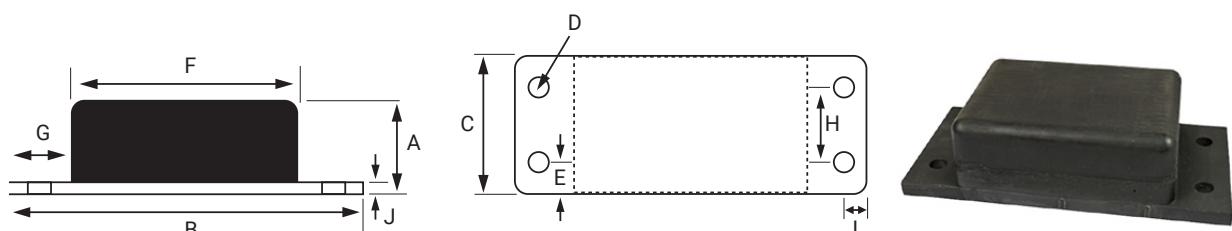
IMPACT BUFFERS



Part No.	A	B	C	D	E	F	G	H	STATIC LOAD Kg	DEF mm	BUFFING LOAD Kg	DEF mm	Weight Kg
M176	73	127	10	44	101	51	76	32	87	10	200	20	0.3



Part No.	A	B	C	D	F	G	H	J	STATIC LOAD Kg	DEF mm	BUFFING LOAD Kg	DEF mm	Weight Kg
MA5925055	70	130	50	8.5	70	30	100	5	120	10	1000	30	0.5



Part No.	A	B	C	D	E	F	G	H	I	J	STATIC LOAD Kg	DEF mm	BUFFING LOAD Kg	DEF mm	Weight Kg
MA5924455	80	200	100	13	25	120	40	50	20	10	700	10	3600	29	2.4
MA5921455	70	250	120	15	30	150	50	60	25	10	1300	9	6000	24	3.4
MA5921055	80	300	150	17	35	200	50	80	25	15	2250	10	10000	25	7.1

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

BONDED BUFFERS



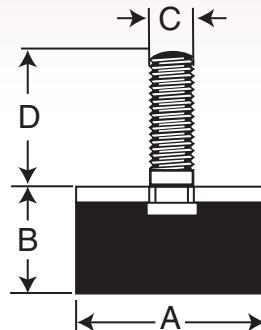
M170



M175



M174
X2747



Standard Part No.	A (mm)	B (mm)	C	Duro	D (mm)	Static		Buffing		Weight Kg
						Load Kg	Def mm	Load Kg	Def mm	
M170	35	22	3/8 W	45	38	64	3	180	8	0.67
M175	63	36	1/2 W	45	33	115	5	400	12	0.21
M174	50	50	3/8 UNF	60	16	125	6	600	20	0.15
X2747	50	50	3/8 UNF	80	16	230	6	1250	20	0.15

Load must be placed on the metal surface and not on the stud.

FEATURES

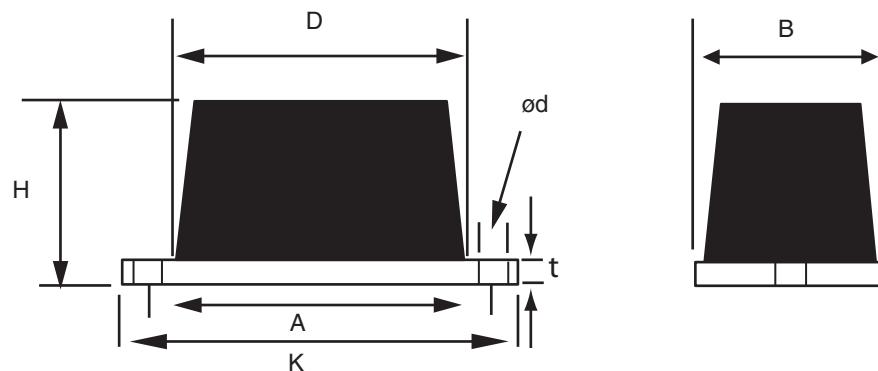
This rectangular buffer is easily fitted. Reduction of transmitted shock loads enables equipment to be designed more economically.

This buffer is designed to protect structures and equipment from impact forces. It is usually fitted as non-metallic stops or incorporated in vehicle suspension systems to provide progressive stiffening under increasing load.



Typical applications:

- Dump trucks
- Off-road vehicles
- Cranes
- Handling equipment
- Vehicle suspensions



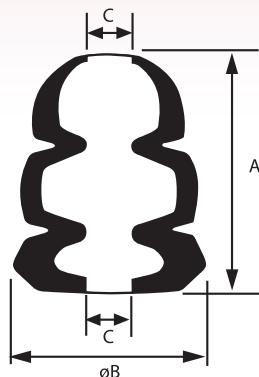
Part No	Dimensions							Compression		Weight Kg
	A	B	D	H	K	d	t	Load Kg	Def mm	
M15260	127	64	89	37	156	13.5	6.3	250	13	0.6

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice



BONDED BUFFERS



*Two Hole Mixing



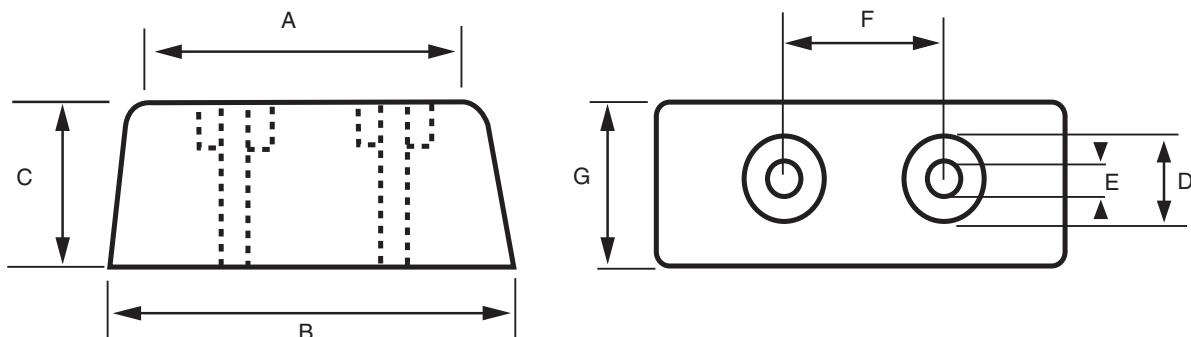
PART No.	A	B	C	Static Load Kg	DEF mm	Buffing Load Kg	DEF mm	Weight Kg
M190	103	79	20	150	25	450	45	0.3

These buffers are equally adaptable when controlling impact or when used as machine feet; they also may be used as snubbing rubbers when excessive shock loads are encountered in resiliently mounted equipment.

A rugged rubber bonded to metal unit ensures simplicity of application and ease of installation.

MOULDED DOCKING BUFFER

Ideally suited to truck trays and loading bays



Part No.	A	B	C	D	E	F	G	Weight Kg
DB15090	145	150	90	40	13.5	75	76	1.2
DB15575	150	155	75	36	14	87	65	0.72
DB19555	185	195	50	32	11	120	55	0.62

CONICAL BUFFER

For inexpensive and effective control of machinery vibration, shock and acoustic noise.

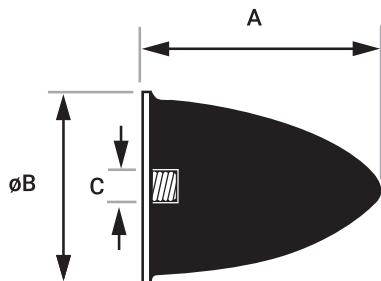
These buffers are used for controlling impact and may be used as snubbing rubbers when excessive shock loads are encountered in resiliently mounted equipment.



FEATURES

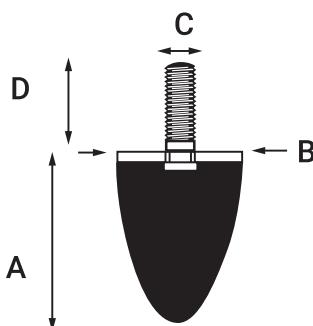
Designed specifically to control impact and torque reaction loads.

Uses Multicushion Studs Refer to Page



PART No.	A	B	C	Max Dynamic Load Kg	Max Dynamic Deflection mm	Max Energy Absorption Joules
M172M8	50	42	M8	220	24	16
M173M10	65	51	M10	1200	29	110
M115008	19	25	M8	100	8	3
M115009	30	30	M6	140	15	6
M115014*	58	72	M12	550	26	50
M115015	80	95	M16	1100	37	120

* M12 Studs are not available from Mackay.



PART No.	A	B	C	D	Max Dynamic Load Kg	Max Dynamic Deflection mm	Max Energy Absorption Joules
M172	50	42	3/8 UNF	16	220	24	16
M173	65	51	3/8 UNF	16	1200	29	110

Load must be placed on the metal surface and not on the stud.

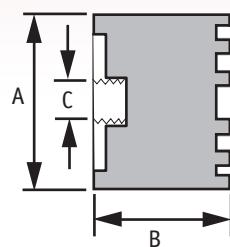
VIBRATION ISOLATORS

MULTIBUFFERS

Including Multibuffer stainless

Multibuffers are designed for inexpensive and effective control of vibration shock and acoustic noise and are equally adaptable in controlling impact or for use as simple machine feet.

The Multibuffer face profile has been designed to provide a simple slip resistant surface whilst maintaining optimum impact and static properties.



Uses Optional Stud System. Refer to Multicushion Page (Stainless Steel Studs Not available)

Standard Part No.	Stainless Type 304 Part No.	A (mm)	B (mm)	C metric	Duro	Static		Buffing		Weight Kg
						Load Kg	Def mm	Load Kg	Def mm	
M12201855	M13201855	20	18	M6	55	26	2.5	57	5	0.01
M12252555	M13252555	25	25	M6	55	25	3	53	6	0.02
M12302055	M13302055	30	20	M8	55	46	2.5	105	5	0.03
M12303055	M13303055	30	30	M8	55	47	3.5	94	7	0.04
M12402055	M13402055	40	20	M8	55	78	2.5	184	5	0.05
M12403055	M13403055	40	30	M8	55	78	3.5	162	7	0.06
M12503540	M13503540	50	35	M10	40	60	4	130	8	0.1
M12503555	M13503555	50	35	M10	55	157	4	316	8	0.1
M12754055		75	40	M10	55	323	4.5	696	9	0.3
M121003055		100	30	M16	55	580	3.5	1555	7.5	0.5
M121004055		100	40	M16	55	509	4.5	1073	9	0.5
M121505555		150	55	M16	55	1382	6	2950	12	1.4

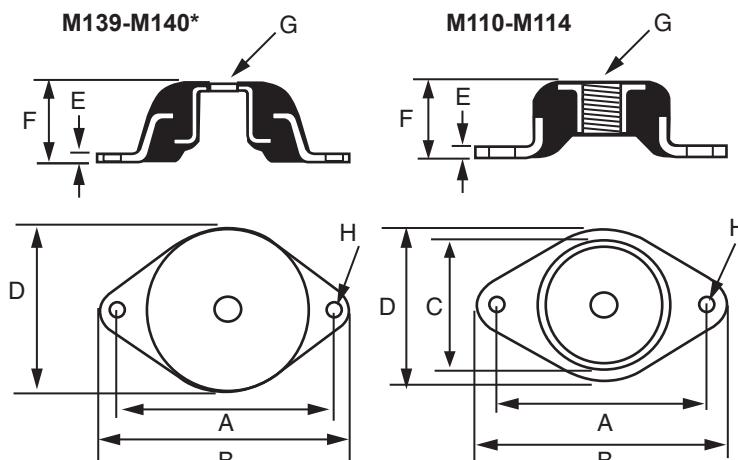


VIBRATION ISOLATORS

FLANGE ISOLATORS

These special isolators were developed to meet almost every type of machinery installation within the loading range, with telescopic metal inserts providing considerable stability in all directions. The two light duty isolators, M110 and M114 are equipped with upper metal inserts, tapped to receive standard bolts or set screws. The isolators can be fastened to the floor or other base, with bolts through the two lugs of the lower metal stamping. When using the heavy duty isolators M139 and M140, loads can be suspended as well as supported.

Interlocking flanges incorporated in M139 and M140 isolators ensure suspension even if the rubber is completely destroyed by fire, etc.



* ALSO AVAILABLE IN STAINLESS STEEL
M13960SS (type 316), M14060SS (type 304)



M189 Shield

Generic No.	A	B	C	D	E	F	G	H	Weight Kg
M110##	60.3	76	41	48	3	22	7/16"-20UNF	8.7	0.1
M114##	76.1	92	57	60	3	29	1/2"-20UNF	8.7	0.2
M140##	110.0	141	--	83	3	41	17/32"	13.5	0.4
M139##	127.0	157	--	102	3	48	13/16"	14.2	0.6

Note ! ## denotes duro refer to the load deflection chart for complete Part Number

BOLT HEAD RECESS DETAILS



Part Nos. M114 and M140 are available with a shield (Part No. M189) to protect the isolators from mechanical and chemical attack. Order if required. M189 = 0.06Kg

COLOUR CODE

DURO	COLOUR
40	Red
50	Yellow
60	White
70	Marked 70

SUGGESTED METHODS OF MOUNTING

Tandem Series



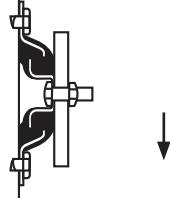
Compression Series



Tension



Shear



All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

To assist the isolation system designer we have provided the approximate deflections of Mackay isolators at various static loadings. It therefore becomes a simple matter to obtain the isolation efficiency by referring to the Mackay graph on "disturbing frequencies/deflections" (Shown in our current Flexible Isolator Catalogue). If you require any further technical data on Mackay isolators, please contact the Mackay Technical Department.

LOAD / DEFLECTION CHART

Part No.	Compression		Shear		Part No.	Compression		Shear	
	Load Kg	DEF mm	Load Kg	DEF mm		Load Kg	DEF mm	Load Kg	DEF mm
M11040	25	2.3	20	2.2	M13960	725	3.6	400	3.4
	30	2.8	25	2.7		750	3.7	425	3.6
	35	3.2	30	3.3		775	3.8	450	3.8
	40	3.7	35	3.8		800	3.9	475	4.0
M11050	40	2.5	35	2.5		825	4.1	500	4.2
	45	2.8	40	2.8		850	4.2	525	4.4
	50	3.2	45	3.2		875	4.3	550	4.6
	55	3.5	50	3.5		900	4.4		
M11060	31	1.0	21	1.0	M13970	1100	3.5	550	3.1
	60	2.0	54	2.0		1125	3.6	575	3.3
	85	3.0				1150	3.7	600	3.5
						1175	3.8	625	3.7
M11440	40	2.4	25	2.3		1200	3.9	650	4.0
	45	2.7	30	2.8		1225	4.0	675	4.2
	50	3.0	35	3.2		1250	4.1	700	4.4
	55	3.3	40	3.7		1275	4.2	725	4.5
M11450	60	3.6			M14040	200	3.3	100	3.3
						210	3.5	110	3.7
	60	2.4	40	2.4		220	3.7	120	4.0
	65	2.6	45	2.7		230	3.9	130	4.3
M11460	70	2.8	50	3.0		240	4.0	140	4.7
	75	3.0	55	3.3		250	4.2		
	80	3.2	60	3.6		260	4.3		
	85	3.4				270	4.5		
M13940					M14050	280	4.7		
	90	2.4	60	2.6		280	3.6	120	3.2
	95	2.6	65	2.8		290	3.7	130	3.5
	100	2.7	70	3.0		300	3.8	140	3.7
M13950	105	2.8	75	3.2		310	3.9	150	4.0
	110	3.0	80	3.4		320	4.1	160	4.3
	115	3.1				330	4.2	170	4.5
	120	3.2				340	4.3	180	4.8
M13950	125	3.4				350	4.4		
	130	3.5			M14060	350	3.3	160	3.6
						375	3.5	170	3.8
	400	3.4	150	3.0		400	3.8	180	4.0
M13950	425	3.6	175	3.5		425	4.0	190	4.2
	450	3.8	200	4.0		450	4.2	200	4.4
	475	4.0	225	4.5		475	4.5		
	500	4.2	250	5.0		500	4.7		
M13950	525	4.4			M14080	650	3.4	200	3.3
	550	4.6				675	3.5	210	3.5
	550	3.5	250	3.1		700	3.7	220	3.7
	575	3.6	275	3.4		725	3.8	230	3.8
M13950	600	3.8	300	3.7		750	3.9	240	4.0
	625	3.9	325	4.0		775	4.1	250	4.2
	650	4.1	350	4.3		800	4.2	260	4.3
	675	4.2	375	4.6		825	4.3	270	4.5
M13950	700	4.4	400	4.9		850	4.5	280	4.7
	725	4.5				880	4.6		

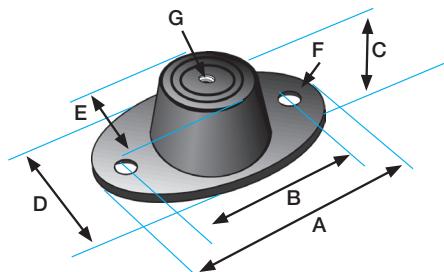
All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

CONFLEX ISOLATORS

Conflex isolators are designed to meet almost all machinery installations within the load range. available in four rubber hardnesses they are the versatile answer to your mobile or static vibration problems.

Available in Neoprene for "NM12" suffix part numbers



Part No.	Duro	A	B	C	D	E	F	G	Load Kg	Deflection mm	Weight Kg
M111135	35	80	60	28	50	31	8.5	M8	38	6.0	0.08
M111145	45	80	60	28	50	31	8.5	M8	47	6.0	0.08
M111155	55	80	60	28	50	31	8.5	M8	60	6.0	0.08
M111165	65	80	60	28	50	31	8.5	M8	83	6.0	0.08
M1111D35	35	80	60	38	50	31	8.5	M8	40	8.0	0.09
M1111D45	45	80	60	38	50	31	8.5	M8	65	8.0	0.09
M1111D55	55	80	60	38	50	31	8.5	M8	80	8.0	0.09
M1111D65	65	80	60	38	50	31	8.5	M8	110	8.0	0.09
M111235	35	100	76	32	60	46	8.5	M10	90	6.0	0.15
M111245	45	100	76	32	60	46	8.5	M10	110	6.0	0.15
M111255	55	100	76	32	60	46	8.5	M10	160	6.0	0.15
M111265	65	100	76	32	60	46	8.5	M10	220	6.0	0.15
M1112D35	35	100	76	48	60	45	8.5	M10	80	10.0	0.17
M1112D45	45	100	76	48	60	45	8.5	M10	120	10.0	0.17
M1112D55	55	100	76	48	60	45	8.5	M10	160	10.0	0.17
M1112D65	65	100	76	48	60	45	8.5	M10	250	10.0	0.17
M111435	35	140	104	44	85	60	14.0	M12	115	6.0	0.43
M111445	45	140	104	44	85	60	14.0	M12	170	6.0	0.43
M111455	55	140	104	44	85	60	14.0	M12	240	6.0	0.43
M111465	65	140	104	44	85	60	14.0	M12	405	6.0	0.43

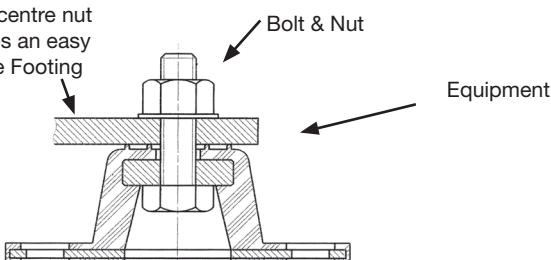
NEOPRENE

M111235NM12-RED	35	100	76	32	60	48	8.5	M12	90	6.0	0.15
M111255NM12-GRN	55	100	76	32	60	48	8.5	M12	160	6.0	0.15
M111265NM12-GRY	65	100	76	32	60	48	8.5	M12	250	6.0	0.15

= hardness (35,45,55,65)

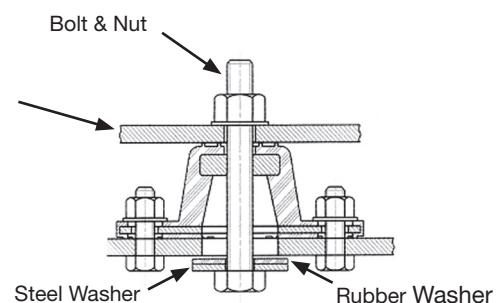
STATIONARY APPLICATION

When used with centre nut & bolt, It becomes an easy to install Machine Footing



Note: Rubber & Steel washer not supplied by Mackay Consolidated

MOBILE APPLICATION

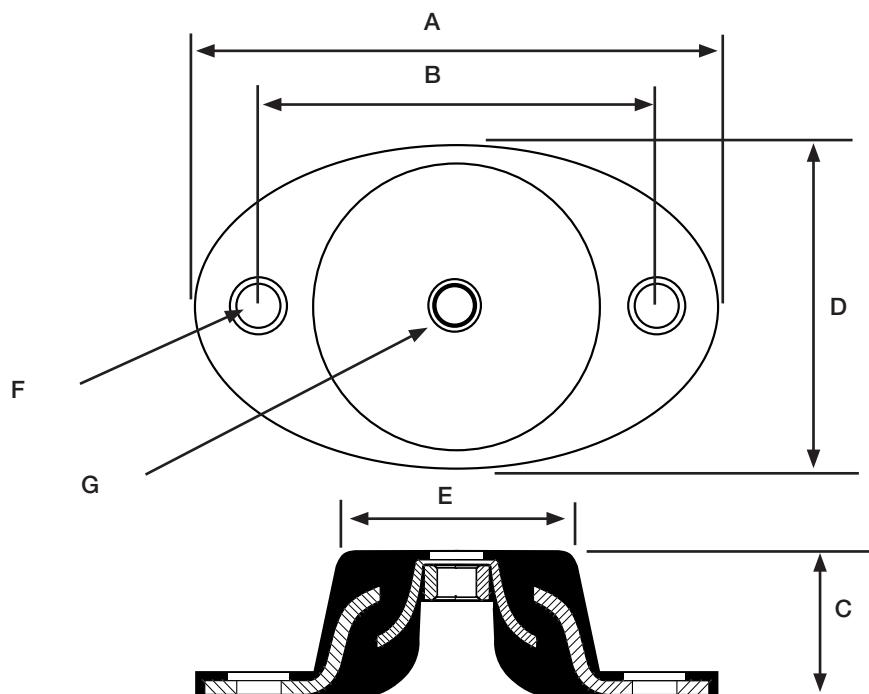


VIBRATION ISOLATORS

STAINLESS STEELCONFLEX SAFETY INTERLOCKED ISOLATOR

Similar dimensions to M1112 ## Isolators with the inclusion of internal safety interlocks for failsafe protection.

Manufactured in high grade oil resisting rubber compound and type 304 stainless steel for marine and corrosive applications.



Part No.	A	B	C	D	E	F	G	Weight Kg
M1113SN30	100	76	28.5	60	46	8.5	M8	0.2
M1113SN40	100	76	28.5	60	46	8.5	M8	0.2
M1113SN50	100	76	28.5	60	46	8.5	M8	0.2
M1113SN60	100	76	28.5	60	46	8.5	M8	0.2
M1113SN70	100	76	28.5	60	46	8.5	M8	0.2

NOMINAL CHARACTERISTICS

Part No.	Max Load Kg	Max Def mm	Colour Code
M1113SN30	70	2.5	Green
M1113SN40	130	2.5	Red
M1113SN50	210	2.5	Yellow
M1113SN60	270	2.5	White
M1113SN70	330	2.5	Silver

All Dimensions in Millimetres

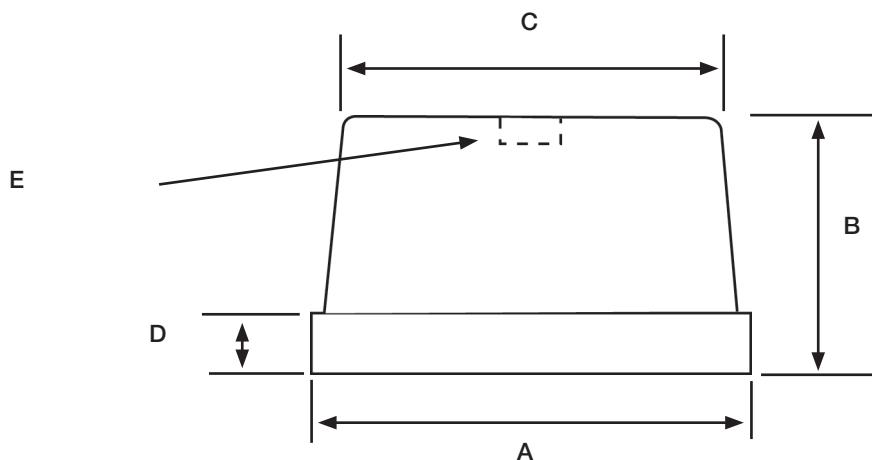
All properties nominal, contact Mackay for Technical advice

CONFLEX FOOT ISOLATOR

The Conflex Foot Isolator is similar in style to our existing range but is supplied minus the two holed fixing flange. Designed as a free standing isolator for use under a wide range of equipment it requires no fixing to the floor, simply attach to the equipment and lower into position.

Typical applications include:

- Small portable Petrol / Diesel driven equipment
- Pumps
- Air conditioning units



DIMENSIONS

A	B	C	D	E	Weight Kg
58	35	46	9	M8	0.12

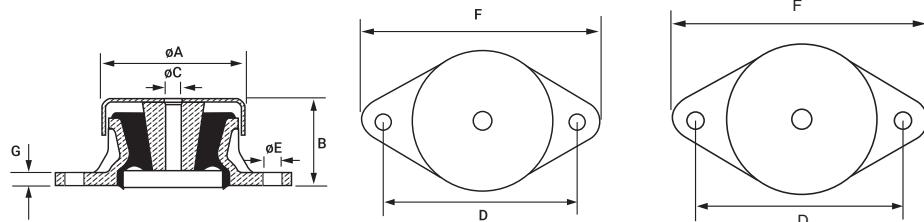
STATIC DEFLECTION AT MAXIMUM LOAD

Part No.	Duro	Load Kg	Def mm
M112235M8	35	80	6

STABIFLEX ISOLATORS

The STABIFLEX flexible isolator offers a metal protection shield for the rubber in applications where this is considered necessary.

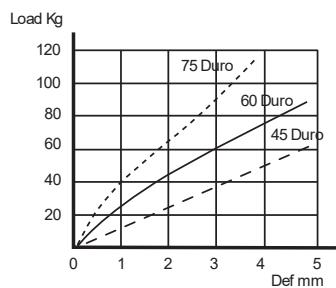
The STABIFLEX isolators provide excellent isolation in both compression and shear loadings and are suitable in applications where isolation in the horizontal plane as well as the vertical plane is required.



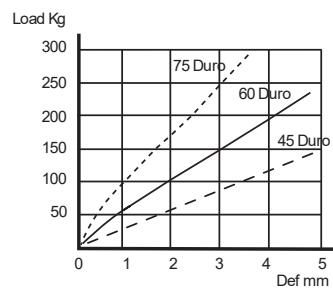
Part No.	A	B	C	D	E	F	G	Weight Kg
M530603	69	41	M12	98	9	114	6	0.3
M530613	84	51	M12	115	11	137	7	0.5
M530642	133	69	M16	114	13	144	9	2.3

Part No.	LOAD RANGE Kg	NOMINAL DEFLECTION mm	DURO	Hardness Colour Codes	
				DURO	COLOUR
M53060345	10 - 42	3.5	45	45	Grey
M53060360	15 - 60	3.0	60	60	Green
M53060375	30 - 125	4.0	75	75	Red
M53061345	20 - 93	3.5	45		
M53061360	40 - 165	3.5	60		
M53061375	65 - 260	3.0	75		
M53064245	110 - 450	8.0	45		

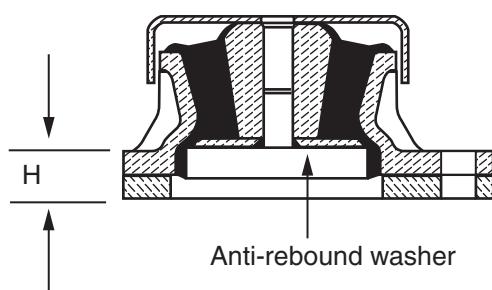
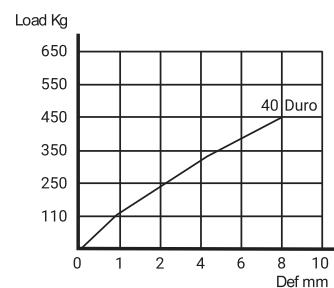
M530603



M530613



M530642



FITTING WITH ANTI-REBOUND WASHER.

An anti-rebound washer must be fitted if tension forces are likely to be exerted on the isolator. (I.E. for equipment mounted on trailers, ships etc.). The washer is fitted under the inner cone to fit the shape of the outer ring. Do not forget to allow for a clearance space under the isolator according to the following table;

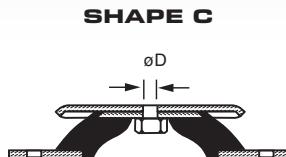
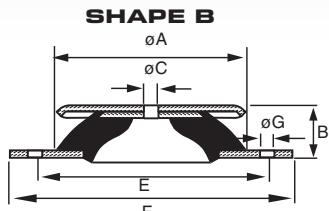
- M530603 H=2mm
- M530613 H=4mm

Note: The anti-rebound washer is not supplied by Mackay Australia Pty Ltd

VIBRATION ISOLATORS

BECA ISOLATORS

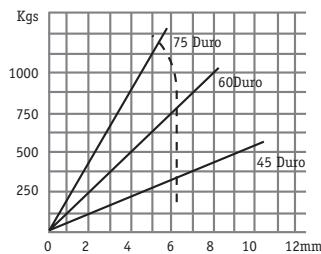
The "Beca" isolator is flexible both horizontally and vertically. It is particularly suitable for machines producing horizontal vibration forces. The horizontal deflections are approximately the same as the vertical deflections. The isolator is effective against all vibrations, irrespective of the direction in which they act.



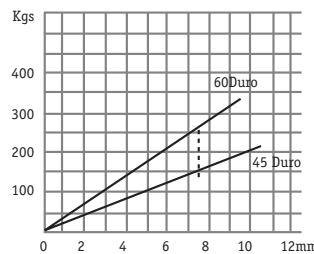
Shape	Generic No.	DIMENSIONS							Weight Kg
		A	B	C	D	E	F	G	
B	M533581	80	27	8.1	-	100	120	8.2	0.3
B	M533109	100	28	10	-	124	148	10.2	0.5
B	M533152	150	39	14	-	182	214	12.2	1.4
B	M533203	200	44	18	-	240	280	14.5	3.1
C	M533641*	40	20	-	M6	52	64	6.2	0.05
C	M533661*	60	24	-	M6	76	90	6.2	0.2
C	M533681*	80	27	-	M8	100	120	8.2	0.3
C	M533609*	100	28	-	M10	124	148	10.2	0.5

*Supplied with Threaded Fixing Hole

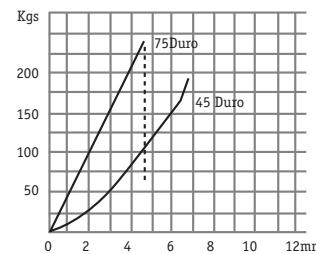
M533203



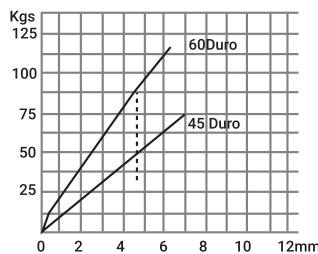
M533152



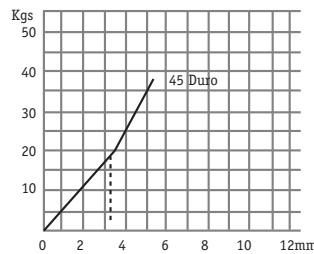
M533109



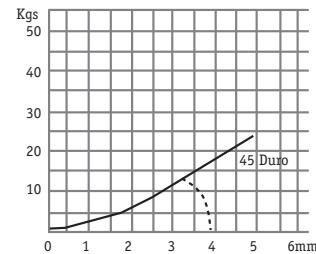
M533581 / M533681



M533661



M533641



Part No.	LOAD RANGE kgs	NOMINAL DEFLECTION mm	DURO
M53364145	1 - 4	2	45
M53364160	2 - 10	2.5	60
M53366145	3 - 15	3	45
M53368145	11 - 45	4	45
M53368160	20 - 80	4	60
M53310945	22 - 90	4	45
M53358160	20 - 80	4	60
M53315245	30 - 130	7	45
M53360960	40 - 160	4	60
M53310975	50 - 220	3	75
M53315260	60 - 250	7	60
M53320345	125 - 500	6	45
M53320360	200 - 825	6	60
M53320375	300 - 1250	5	75

COLOUR CODE	
DURO	COLOUR
45	Grey
60	Green
75	Red

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

VIBRATION ISOLATORS

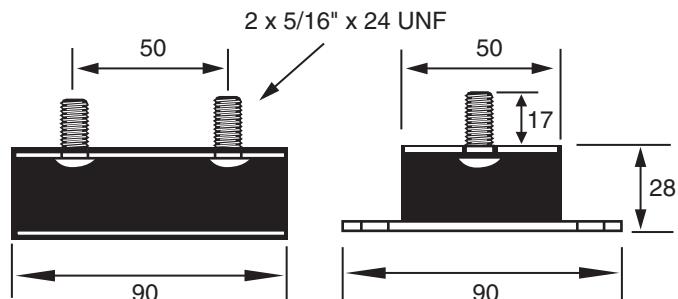
GENERAL MACHINERY

These isolators have been engineered to meet various vibratory problems found within industry and are easily applied to a variety of applications.

FEATURES :

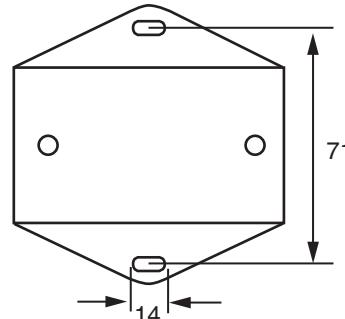
- All angle flexibility.
- Maximum durability.
- Ease of selection.
- Ease of installation.
- Designed for stability.
- Increased service life on equipment.

M181

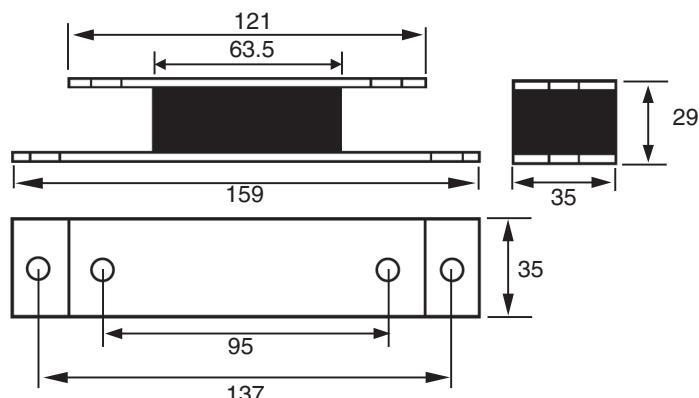


Load Rating at 3mm Deflection Compression 230 Kg Shear 30Kg

Part No.	COMPRESSION		SHEAR		Weight Kg
	LOAD Kg	DEF mm	LOAD Kg	DEF mm	
M181	125	1.6	15	1.5	0.3
	150	1.9	20	2.0	
	175	2.3	25	2.5	
	200	2.6	30	3.0	
	230	3.0			



M183



Part No.	COMPRESSION		SHEAR		Weight Kg
	LOAD Kg	DEF mm	LOAD Kg	DEF mm	
M183	50	1.4	5	1.1	0.3
	75	2.0	10	2.3	
	100	2.7	13	3.0	
	110	3.0			

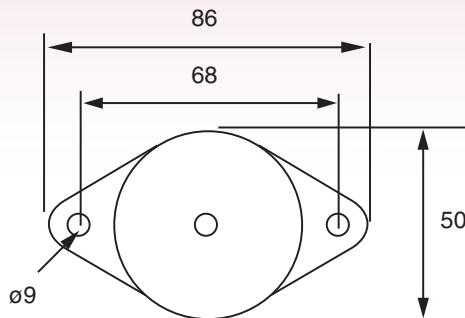
All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

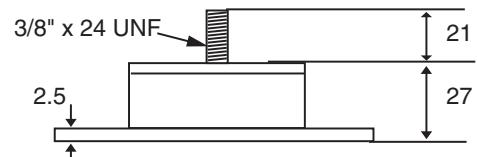
VIBRATION ISOLATORS

P 29
section
3

M21345

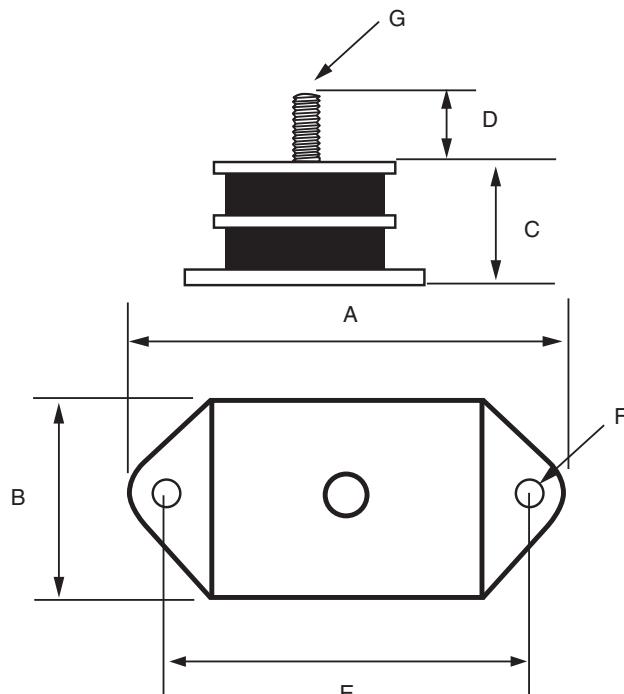


Part No.	COMPRESSION		SHEAR		Weight Kg
	LOAD Kg	DEF mm	LOAD Kg	DEF mm	
M21345	26	1.0	5	1.0	0.2
	56	2.0	11	2.0	
	85	3.0	15.5	3.0	
			20.4	4.0	



COLOUR CODE:

Duro	Colour
45	Red
60	White
70	Marked 70



Part No.	A	B	C	D	E	F	G	LOAD in Kg		DEF in mm		DURO	Weight Kg
								COMP	SHEAR	COMP	SHEAR		
M8040645	94	41	36	15	74.5	8.5	5/16" UNF	35-95	14-43	1.0-2.8	5.0-15.0	45	0.2
M8040660	94	41	36	15	74.5	8.5	5/16" UNF	65-175	27-70	1.0-2.8	5.0-12.0	60	0.2
M8040670	94	41	36	15	74.5	8.5	5/16" UNF	95-275	42-120	1.0-2.8	5.0-14.0	70	0.2

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

V - SHAPED (MARINE)

DESCRIPTION

The V-shaped marine mount works the elastomer at shear compression. It is comprised of 2 metal parts which permit its installation by means of a screw at the top and two holes for securing it to the chassis.

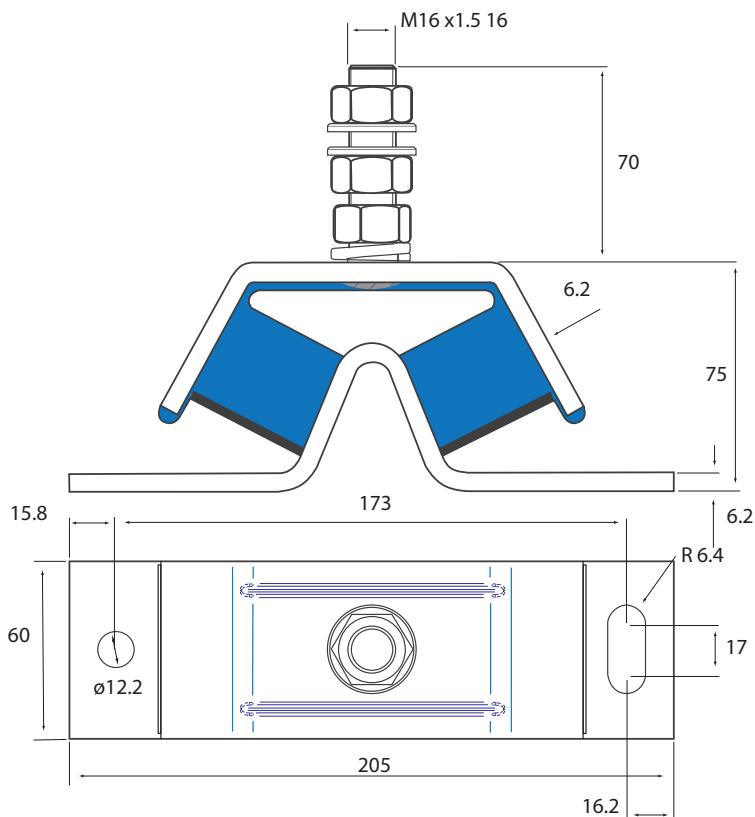
TECHNICAL CHARACTERISTICS

The V-shaped marine mount has a V-shaped architecture to provide major deflection at low loads. This means that the natural frequency is low and ideal for engines which normally work ticking over.

It has three different stiffnesses per axis X,Y,Z to be able to adjust the modes of the suspended unit to obtain an optimal isolation.

APPLICATION

It is used in applications where the load of the suspended unit is low and the level of vibration isolation is high, such as: Small vehicle or machines, small and medium-sized gen sets, marine engines...



Part No.	Duro	Load Kg	Static Deflection mm	Weight Kg
M148001	40	40	6	1.7
M148003	50	75	6	1.7
M148004	60	100	6	1.7
M148006	70	150	5	1.7

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

SINGLE V-SHAPED (SMALL ENGINE)

DESCRIPTION

The V-shaped Generator supports are comprised of two symmetrically-tilted metal parts with a screw on each side.

TECHNICAL CHARACTERISTICS

The V-shaped generator mounts render it possible to make installations which are more elastic than the ones usually made with cylindrical or bobbing mounts. This makes it possible to achieve lower frequency and consequently better vibration isolation.

Stability is enhanced when two are installed, symmetrically opposed. See fig. 1.

They have two different length screws which facilitate the assembly of the the engine to the chassis.

They have two "anti-turn" tabs which stop the mount from turning when strong tightening torque is applied (very frequently) with pneumatic tools.

They are supplied in 2 hardnesses to adapt to different load ranges.

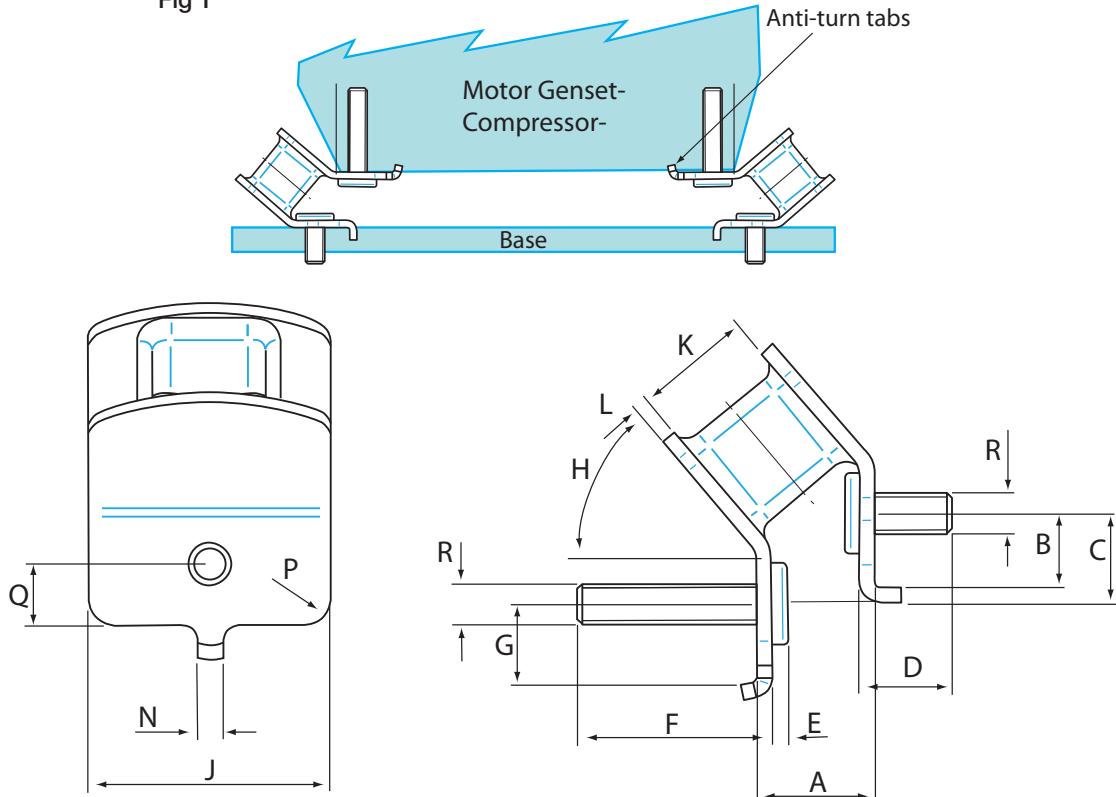
They provide vibration attenuation of above 90% in diesel or petrol single-cylinder engines running at 3000 rpm.

APPLICATIONS

Very low-load engines requiring high levels of isolation. Portable gen sets, compressors, motor pumps...



Fig 1



Part No.	Duro	A	B	C	D	E	F	G	H	J	K	L	N	R	P	Q	Load Kg	Static Deflection mm	Weight Kg
M148151	45	23	14.5	18	18	3	38	15.9	50 ⁰	47	23	3	5	M8	5	11	5	5	0.1
M148153	60	23	14.5	18	18	3	38	15.9	50 ⁰	47	23	3	5	M8	5	11	15	5	0.1
M148171	45	28	19.5	23	18	3	38	20	50 ⁰	54	31	3	7	M8	10	16	43	9	0.2
M148173	60	28	19.5	23	18	3	38	20	50 ⁰	54	31	3	7	M8	10	16	90	9	0.2

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

BRB ISOLATORS

Replaces RAEM Isolators

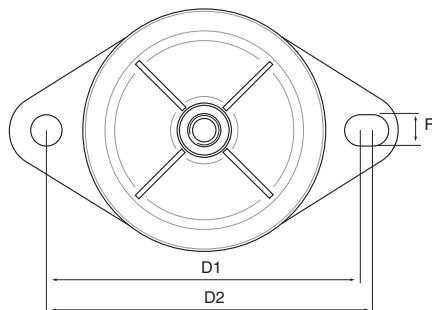
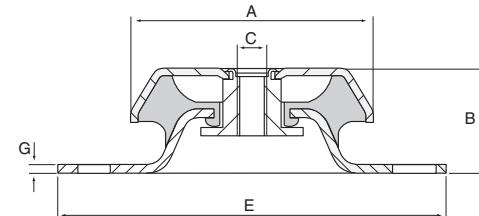
DESCRIPTION

The BRB type mounts are anti vibration elements which work the rubber in shear and compression. Their tall height profiles produce large deflections, low natural frequencies, and excellent vibration isolation results. This range of mounts is suitable for applications where high vibration isolation in the 85-95% range is a priority.



TECHNICAL CHARACTERISTICS

- The top metal hood protects the rubber from the Ozone, UV rays, diesel or oils which damage the rubber.
- The metal parts have a suitable anticorrosive treatment for outdoor applications.
- They have an interlocking metal component that provides a fail-safe protection for mobile applications. This device limits the ascending vertical movement when the mounting is submitted to shocks at traction.
- The mounts are clearly identified, as the bases are engraved with the type and hardness, which makes it possible to easily recognise the piece even after several years of use.
- The hood has a cross stamped on the top, which enhances its rigidity on mobile applications and also improves the evacuation of oils or liquids that precipitate onto it.



APPLICATIONS

This mount is suitable for the isolation of mobile rotating machines which are exposed to axial and radial shocks, dripping, oil diesel or exposure to the weather. It is particularly interesting for applications where a high level of vibration isolation is required.

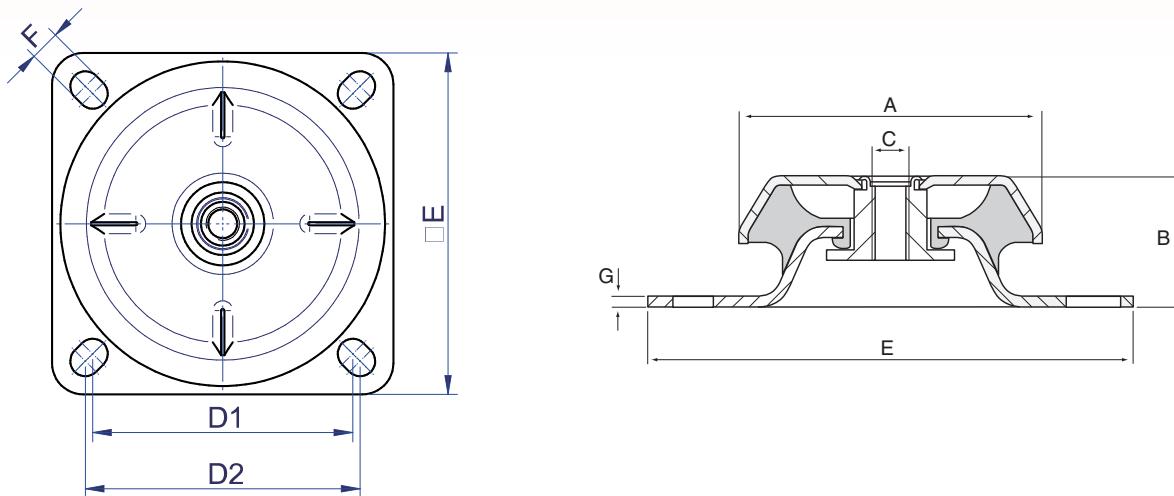
Part No.	Duro	A	B	C	D1 (min)	D2 (max)	E	F	G	Load Kg	Static Deflection mm	Weight Kg
M135451	40	50	25	M8	63	70	85	6.5	2	20	2.5	0.1
M135453	50	50	25	M8	63	70	85	6.5	2	40	2.5	0.1
M135455	60	50	25	M8	63	70	85	6.5	2	60	4.0	0.1
M135231	40	83	35	M10	108	112	135	11	3	80	4.5	0.39
M135232	50	83	35	M10	108	112	135	11	3	130	4.5	0.39
M135233	60	83	35	M10	108	112	135	11	3	175	5	0.39
M135234	70	83	35	M10	108	112	135	11	3	235	3.5	0.39
M135251	40	65	35	M12	100	100	120	11	3	50	4.5	0.25
M135252	50	65	35	M12	100	100	120	11	3	75	3.5	0.25
M135253	60	65	35	M12	100	100	120	11	3	125	5.0	0.25
M135275	40	83	35	M12	108	110	130	11	3	80	4.5	0.39
M135276	50	83	35	M12	108	110	130	11	3	130	4.5	0.39
M135277	60	83	35	M12	108	110	130	11	3	180	5.0	0.39
M135278	70	83	35	M12	108	110	130	11	3	230	3.5	0.39
M135241	40	106	41	M12	136	150	170	12.5	3.5	200	7.0	0.85
M135242	50	106	41	M12	136	150	170	12.5	3.5	300	7.5	0.85
M135243	60	106	41	M12	136	150	170	12.5	3.5	425	7.5	0.85
M135244	70	106	41	M12	136	150	170	12.5	3.5	475	5.5	0.85
M135331	40	106	41	M16	136	150	170	12.5	3.5	200	7.5	0.85
M135332	50	106	41	M16	136	150	170	12.5	3.5	300	7.0	0.85
M135333	60	106	41	M16	136	150	170	12.5	3.5	420	7.5	0.85
M135334	70	106	41	M16	136	150	170	12.5	3.5	475	5.5	0.85

All Dimensions in Millimetres

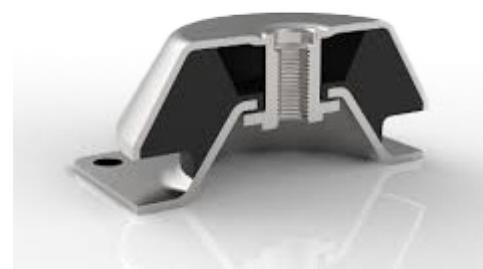
All properties nominal, contact Mackay for Technical advice



BRB ISOLATORS



Part No.	Duro	A	B	C	D1 (min)	D2 (max)	E	F	G	Load Kg	Static Deflection mm
M135206	50	156	54	M16	125	132	164	15	4	570	8
M135207	60	156	54	M16	125	132	164	15	4	800	8
M135208	70	156	54	M16	125	132	164	15	4	1000	7
M135392	50	186	84	M20	146	150	181	14	5	1200	12
M135393	60	186	84	M20	146	150	181	14	5	1700	12
M135394	70	186	84	M20	146	150	181	14	5	2400	12



All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

MD ISOLATORS

Replaces RAB isolators

DESCRIPTION

The advantage of this mount is that it is a high-damping elastic compound. Its special mix affords it a high degree of anti vibration isolation and offers great stability to suspended equipment.



TECHNICAL CHARACTERISTICS

- Metal hood that protects the part from possible oil splashes.
- It has an electrolytic coating that protects the part from corrosion.
- They have an interlocking metal component that provides a fail-safe protection for mobile applications. This device limits the ascending vertical movement when the mounting is submitted to shocks at traction.

APPLICATIONS

This mount has been specially designed to insulate engines that produce high-amplitude vibrations. Engines from 1 to 3 cylinders, Motor Pumps, Gensets, Compressors, Ventilators

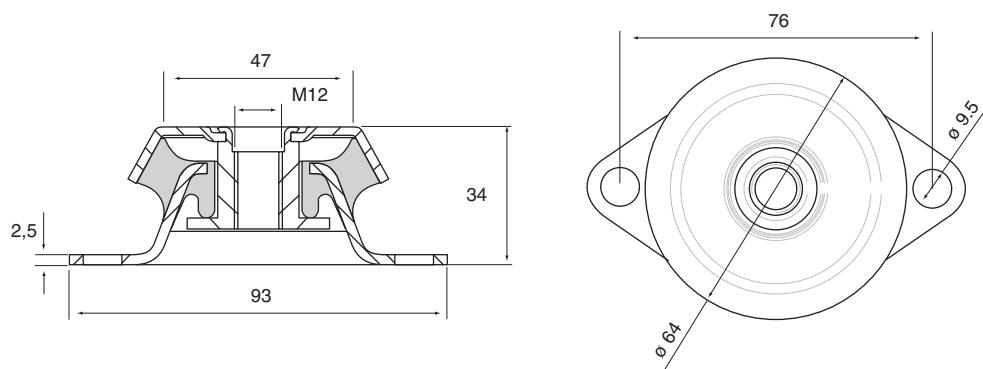
WHEN IS IT USED?

The MD-type works as an anti vibration mount but also as an engine stabiliser. This mount is used when conventional rubber metal mounts do not offer sufficient stability to the suspended equipment.

The MD is installed in small engines of 1, 2 and 3 cylinders which are particularly unstable.

These mounts are suitable for the suspension of machines which are started and stopped a lot and where the passage of resonance needs a high degree of damping or work in conditions which are close to the frequency of resonance of the system.

Diesel engines require MD mounts, particularly when they have few large-diameter cylinders, which makes the engine create high-amplitude vibrations, therefore requiring extra damping to correct these high amplitudes.



Part No.	Load Kg	Deflection mm	Weight Kg
M135219	50	3.0	0.23
M135213	70	3.5	0.23
M135212	105	3.5	0.23
M135210	130	3.5	0.23

PEDESTAL ISOLATORS

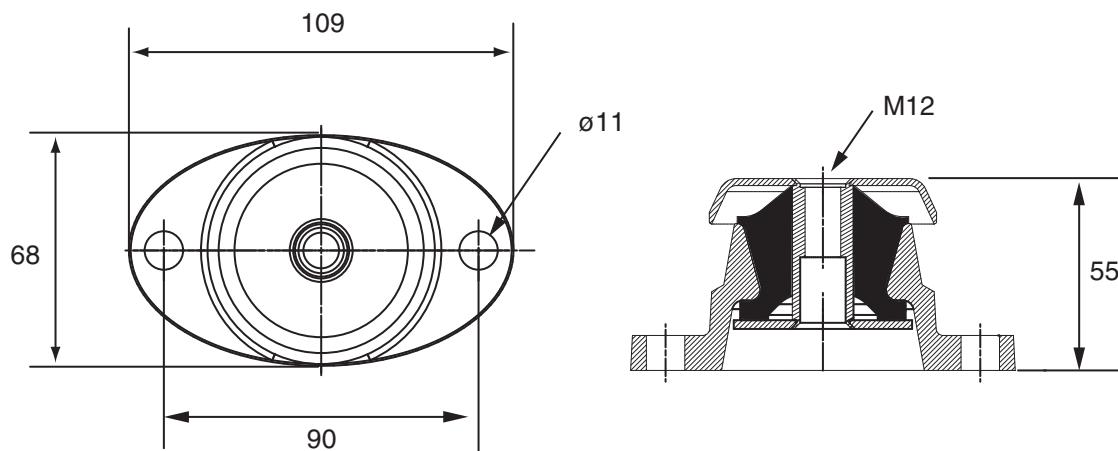
The Mackay pedestal mounting combines excellent isolation characteristics with convenient installation features, making it ideal for a wide variety of common installations.

It is typically employed for mounting pumps, compressors, fans, and other machinery, in static and some mobile applications.

Design features include security against excessive overload and rebound movement, a protective stainless steel cover and an attractive lightweight cast aluminium base.



INTEGRAL OVERLOAD AND REBOUND WASHERS



Part No	Normal Load Kg	Deflection at normal Load mm	Weight Kg
M70150	90	6	0.4
M70165	180	6	0.4

* Duro rating stamped on base

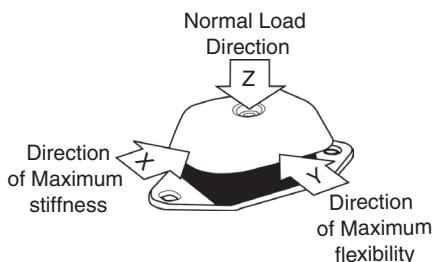
VIBRATION ISOLATORS

ISOMOUNT ISOLATORS SUITABLE FOR MARINE APPLICATIONS

Isomounts are general purpose vibration isolators suitable for mobile and static equipment installations.

Available in three different sizes Isomounts have a mechanically galvanized base and come with a choice of rubber hardnesses, they can also be supplied with two types of specialist height adjusters and a mechanically galvanized base.

Isomount isolators are suitable for operation under all types of engines. They offer 3-way control of engine movement with excellent isolation efficiency. Maximum use of this 3-way control when the isomount isolators are used as engine supports can be obtained by arranging the isolator with their maximum flexibility (Y) at right angles to the engine crankshaft and maximum stiffness (X) in line with the crankshaft. Using the isolators in this manner also has the advantage in marine applications of providing isolation against propeller thrust. The Isomount range also features bump and rebound control which prevents excessive movement under shock loads.



NOMINAL STIFFNESS RATIOS

X = 2.5
Y = 0.75
Z = 1.0

FIG 1 LOAD RANGE

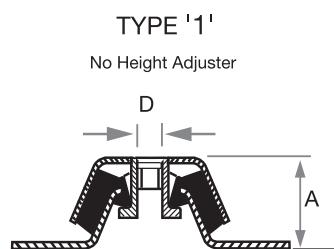
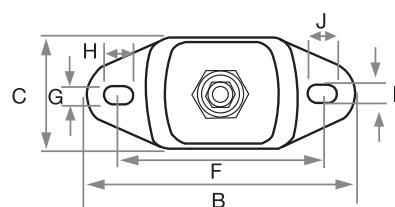
The static load figures shown in FIG 1. are offered as a reference to the maximum load acceptable for each rubber mix.

Part No.			Maximum Load Without Thrust Kg	Maximum Load With Thrust Kg	Deflection mm	Duro
Type 1	Type 2	Type 3				
M200045	M200145	M200245	50	35	4	45
M200055	M200155	M200255	70	55	4	55
M200065	M200165	M200265	100	80	4	65
M220045	M220145	M220245	135	85	5	45
M220055	M220155	M220255	200	135	5	55
M220065	M220165	M220265	300	210	5	65
M220075	M220175	M220275	450	315	5	75
M240045	M240145	M240245	355	250	5	45
M240055	M240155	M240255	530	370	5	55
M240065	M240165	M240265	800	560	5	65
M240075	M240175	M240275	1000	700	5	75

Note : When used in marine engine applications with thrust forces, the maximum load capacity is substantially reduced. See table above.



TYPE '1'



VIBRATION ISOLATORS

HEIGHT ADJUSTERS

Two styles of height adjusters are available for each Isomount Isolator.

Type '1' Is supplied minus height adjuster.

Type '2' Is a general purpose adjuster suitable for static applications.

Type '3' Is available for mobile applications, where thrust is an issue.

Height adjusters are recommended where precise alignment is required and care should be taken when height adjusters are used not to allow excessive bending forces to be imposed on the centre spindle.

In the past fitment of inappropriate height adjusters has resulted in premature failure of the isolator by damage to the centre spindle.

Both types of height adjusters are available separately for each size Isomount, under the part numbers shown in Fig2.

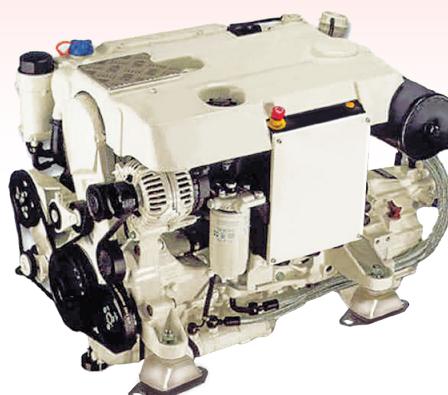


FIG2

ISOMOUNT Part No.	Height Adjuster			
	Part No.			
	G/Purpose	Weight Kg	H/Thrust	Weight Kg
M2000	M2000A	0.13	M2000B	0.3
M2200	M2200A	0.3	M2200B	0.5
M2400	M2400A	0.5	M2400B	0.7

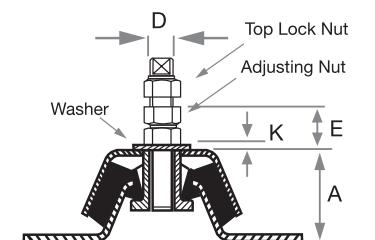
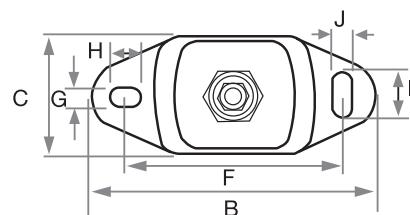
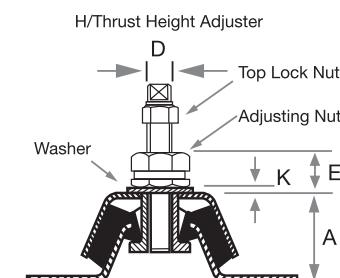
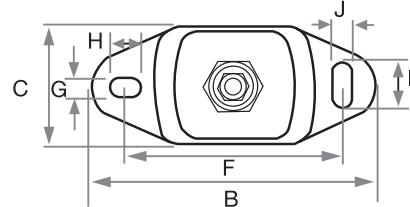


FIG3

Part No.	Type	A	B	C	D	E		F	G	H	I	J	K	Weight kg
						Max	Min							
M2000	1	38.5	120	60	M12	-	-	100	14	11	14	11	-	0.4
M2001	2	38.5	120	60	M12	32	22	100	14	11	14	11	3	0.5
M2002	3	38.5	120	60	M12	40	30	100	14	11	14	11	3	0.6
M2200	1	50.0	183	75	M16	-	-	140	13	20	30	13	-	0.9
M2201	2	50.0	183	75	M16	38	28	140	13	20	30	13	4	1.2
M2202	3	50.0	183	75	M16	41	31	140	13	20	30	13	4	1.4
M2400	1	68.0	228	112	M20	-	-	182	18	26	34	18	-	2.2
M2401	2	68.0	228	112	M20	44	34	182	18	26	34	18	4	2.8
M2402	3	68.0	228	112	M20	41	31	182	18	26	34	18	4	2.9



All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

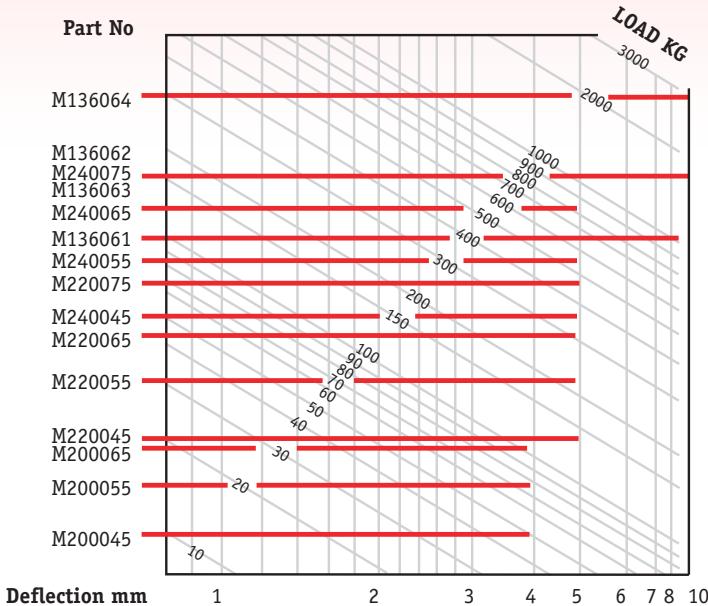
SELECTION CHART

It is important that isolators of the correct size (weight carrying capacity) and rubber hardness are selected to suit the application. Details on load range and static deflections are shown in figure 1

Ensure tightening torque values for the centre bolt fixing are followed as shown in figure 4.

Check that after tightening of the centre bolt fixing that there is not excessive distortion, misalignment and rotation of the top cap relative to the base.

Where alignment of the equipment is required packing pieces or shims should be employed either below the mounting base plate or above the isolator top cap. Alignment should be rechecked after centre fixing bolts have been tightened.



* Isomount isolators do not have a Duro colour coding, the Duro rating is stamped on the base plate.

FIG 4

Part No.	Type	Recommended Centre Bolt/Nut Tightening Torque Nm
M2000	1	45-50
M2001	2	45-50
M2002	3	45-50
M2200	1	100-110
M2201	2	100-110
M2202	3	100-110
M2400	1	150-170
M2401	2	150-170
M2402	3	150-170

INSTALLATION WITH HEIGHT ADJUSTER

When accurate alignment of equipment is required one of two types of adjusters (Type '2' or '3') should be employed.

Ensure that excessive bending forces are not imposed on the centre spindle.

When using height adjusters, ensure that the recommended washer is placed hard against the top cap and the height adjusting spindle is fully located into the isolator.

If height adjusters are insufficient to achieve desired height adjustment shims or packing pieces should be employed under the mounting base.

The isolators with the height adjusters in the mean position (dimension Fig3) should be fitted to the

equipment which should then be lowered onto the support. Vertical and horizontal alignment should now be effected using the height adjuster and slotted holes in the mounting base. After tightening centre fixings to the values shown in fig 4 recheck alignment. If necessary coupling and shaft alignment should be undertaken in accordance with the coupling manufacturers recommendations. Where possible coupling alignment procedures should be carried out after the power unit has settled on the mountings (preferably 2 days after installation). Should this action not be possible the power unit should be raised approximately 1mm after completion of the alignment procedure.

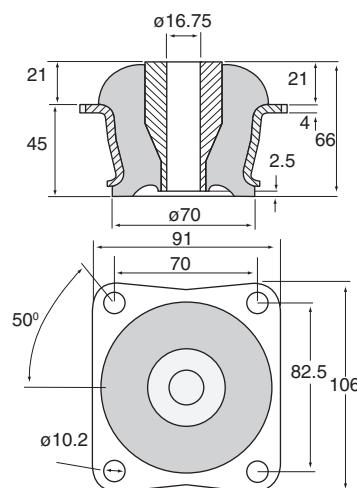
RECESSED FLANGE ISOLATORS

Recessed Flange Isolators designed for high load capacity combined with relatively large static deflections in an axial direction. Their high loading for a given size is obtained by utilising the rubber to the best advantage in both compression and shear.

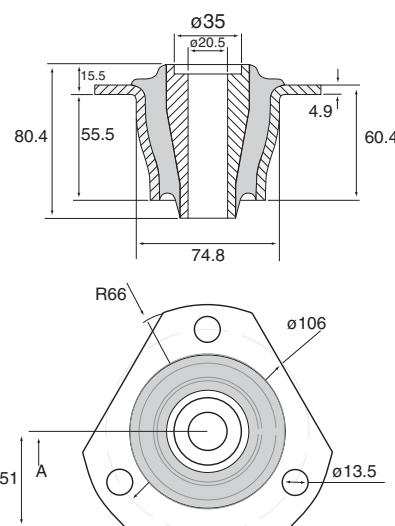
Isolators listed in the following pages are normally assembled with overload and rebound washers to control and limit the movement of the suspended equipment under the action of shock loads. The central fixing bolts should be torque tightened to the recommended values.

Supplied with overload and rebound washers

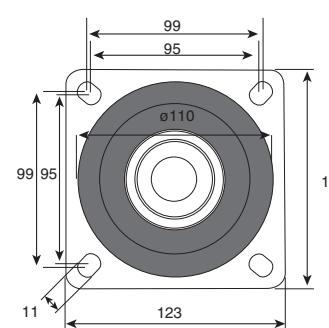
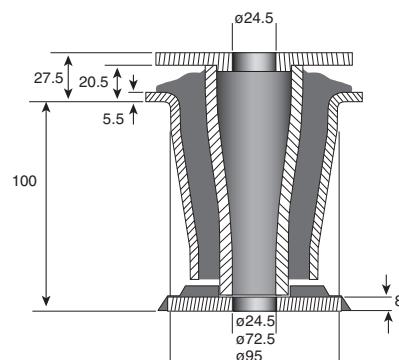
M137061,2,3



M137082,3



M137101,2,3



Part No.	Duro	Load Kg	Deflection mm	Weight Kg
M137063	50	310	6.5	1.18
M137061	60	500	6.0	1.18
M137062	70	960	6.0	1.18
M137082	60	690	6.0	1.21
M137083	70	1080	6.0	1.21
M137101	45	1000	6	3.45
M137102	60	2100	6	3.45
M137103	70	2500	6	3.45

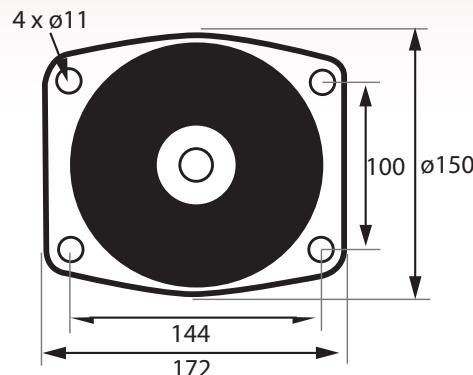
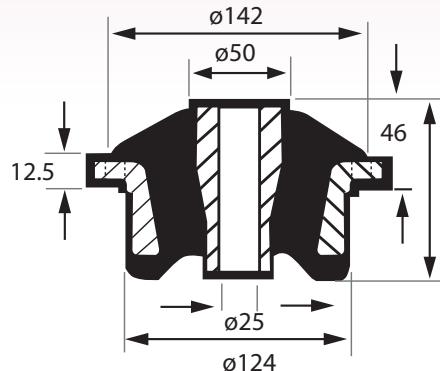
All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

VIBRATION ISOLATORS

GENERIC No. **M801550##**

Overload and rebound washers ordered separately



PART No.	Max Load (kg)	Displacement (mm)
M80155045	400	7
	640	11
M80155050	420	7
	660	11
M80155060	800	7
	1260	11
M80155070	1200	7
	1860	11

Overload Washer	Rebound Washer	Centre Bolt Size & Assembly Torque	Weight Kg
M181550C	M181550C	M24 260Nm	4.5

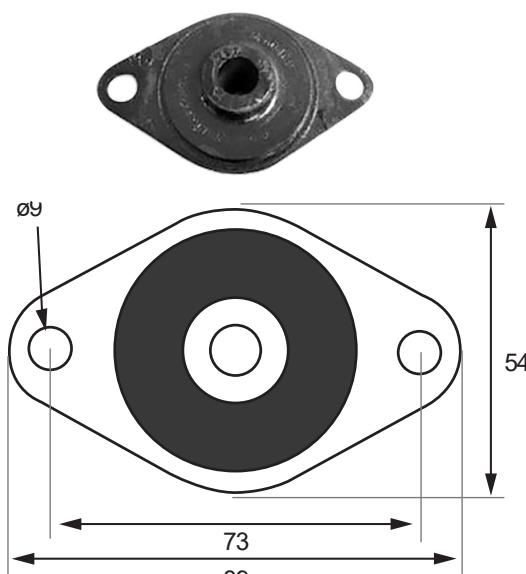
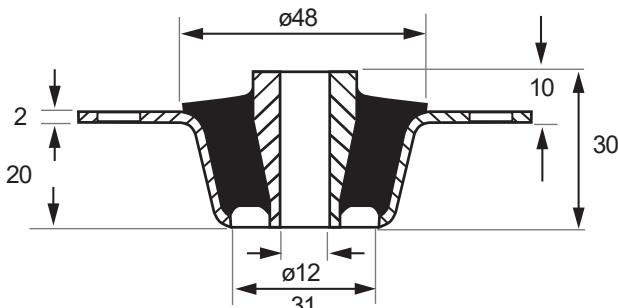
COLOUR CODE

Duro	Colour
45	Red
50	Yellow
60	White
70	Marked 70

*Parts are also Stamped with their Duro

GENERIC No. **M80409##**

1. M80409 may or may not require overload and rebound washers depending on the installation. (Supplied separately)
2. Ensure clearance between rebound washer and base of the isolator under static load.



PART No.	Max Load (kg)	Displacement (mm)
M8040935	15	2
	25	3
M8040945	23	2
	35	3
M8040960	45	2
	65	3
M8040970	65	2
	100	3

Overload Washer	Rebound Washer	Centre Bolt Size & Assembly Torque	Weight Kg
M18409A	M15286	M12 40Nm	0.1

DUROMETER

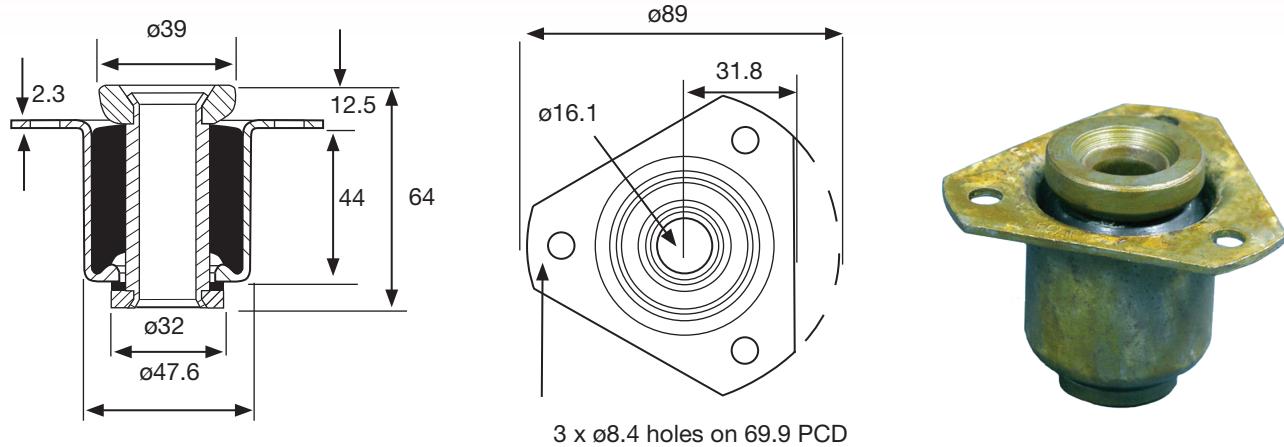
Duro	
35	
45	Stamped into flange
60	
70	

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

M70675

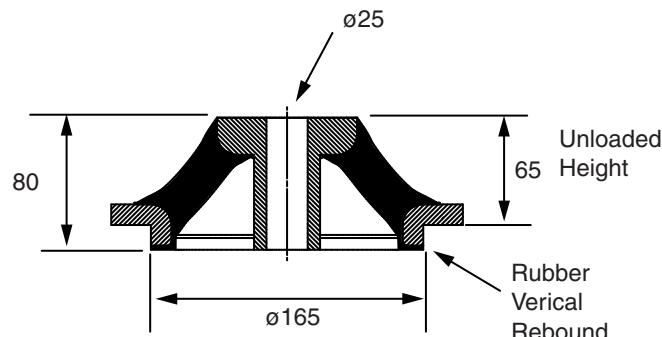
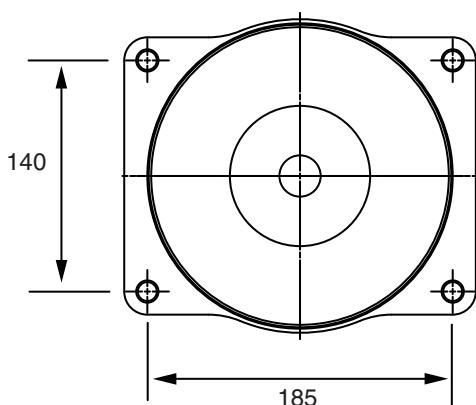
M70675 is a one piece recessed flange isolator that provides a low profile method of supporting a range of equipment. Their fail safe feature protects supported equipment under shock loads



Part No.	Compression		Weight Kg
	Kg	Def mm	
M70675	100	1.0	0.4
	147	1.63	0.4
	200	2.3	0.4

Q - MOUNTS

Non Stocked Item - Special Order Only



Part No.	Max Vertical Load Kg	Max Vertical Deflection mm	Rebound Cup Installed		Weight Kg
			Optimum Load Kg	Design Deflection mm	
M9030060	850	20	425	10	4.1
M9030068	1230	20	615	10	4.1
M9030075	1790	20	895	10	4.1
M90300W					

All Dimensions in Millimetres

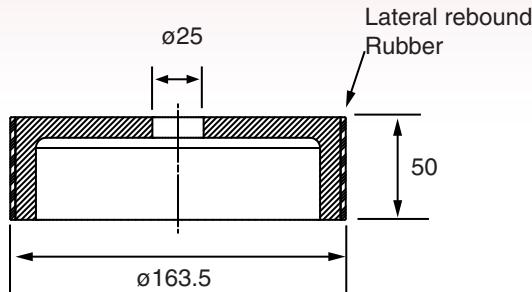
All properties nominal, contact Mackay for Technical advice



VIBRATION ISOLATORS

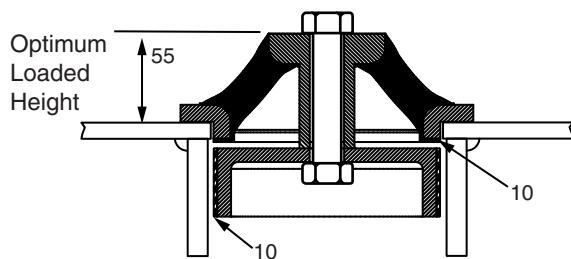
Q MOUNT REBOUND CUP

Non Stocked Item - Special Order Only



Q - Mount rebound cup is specifically designed to fit into a recess providing rebound protection in vertical loading and lateral bump stop facility.
Lateral clearance 10 mm maximum

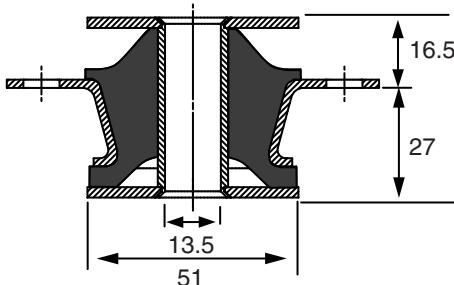
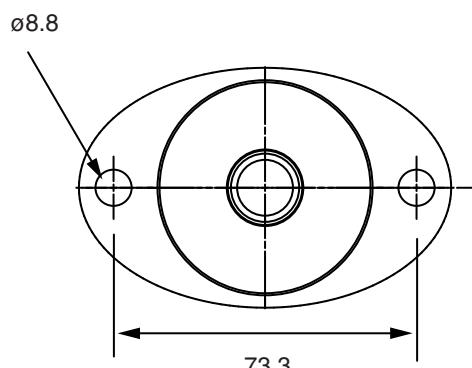
REBOUND CUP INSTALLATION AT OPTIMUM LOAD



INTEGRAL REBOUND

(Type 304 Stainless Steel)

Designed for recessed fitting into chassis and frames. Integral overload and rebound washers eliminate the need for additional bump stops. Ideally suited to mounting exposed equipment



Part No.	Max Load Kg	Deflection mm	Weight Kg
M70250	90	6	0.25
M70265	180	6	0.25

DUROMETER

Duro	Stamp
50	50
65	65

Stamped into Flange

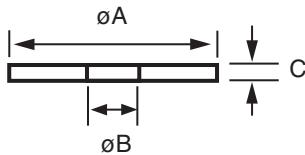
All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

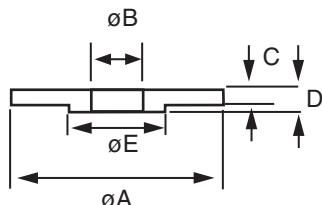
OVERLOAD AND REBOUND WASHERS

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

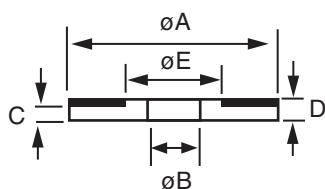
Type A
Steel washer



Type B
Top Stepped Steel Washer



Type C
Rebound Washer with Rubber



Part No.	TYPE	A	B	C	D	E	Top Washer Overload	Bottom Washer Rebound	Weight Kg
M15286	C	48	12	3	6	28.5		M80409	0.1
M153526	C	95	25	6	14	47			
M153527	C	117	25	6	16	48			
M153528	C	67	20	5	10	35			0.2
M18146C	B	116	25	4	8	47			
M181550C	A	139	25	10			M801550	M801550	1.15
M18168C	B	155	25	4	8	47			
M18225H	B	80	20	3	6	34.5			0.25
M18409A	A	50	12	4			M80409		0.07

RECOMMENDED TIGHTENING TORQUE FOR CENTRE FIXING BOLTS

THREAD SIZE	TORQUE (Nm)
M10	25
M12	40
M16	135
M20	180
M24	260

TWO PIECE ISOLATOR

DESCRIPTION

The Mobile Two Piece isolator is made of two parts of elastomer bonded to a central tube.

- Interior reinforced : cylindrical tube
- Elastomer: Neoprene. Range of three different stiffnesses.

OPERATION

The design of the Mobile Two Piece isolator gives the following basic characteristics.

- Elastomer element resistant to oils.
- Absorb vibrations and reduce noise in all directions.

ADVANTAGES

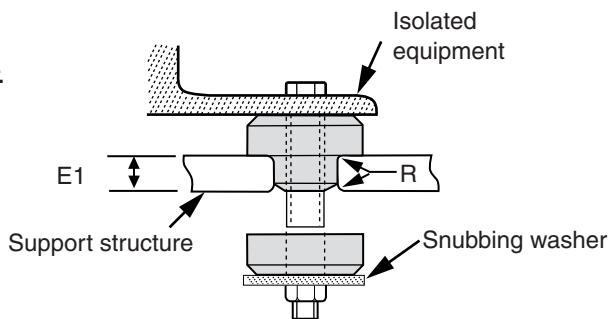
- Good isolation against structural noises.
- Neoprene resistance to oils, most solvents and ozone.
- Simple and economical
- Simple to fit
- Four sizes for load capacity under axial loads from 18-953Kg
- Anti-rebound effect when it is assembled with a washer.



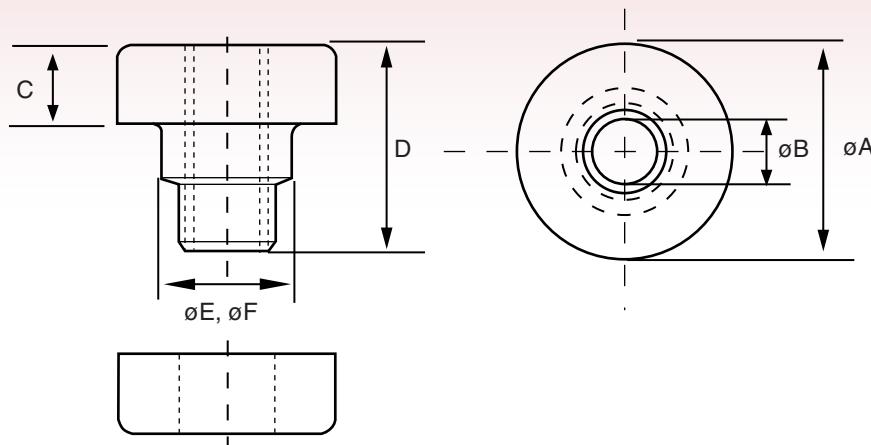
APPLICATIONS

Mobile Two Piece isolator can be used in static or mobile applications , such as:

- Pumps
- Compressors
- Generators
- Electronic equipment
- Engines
- Transmissions
- Plant cabs
- Radiators



Part No.	Colour Code Neoprene	Duro	Support plate details		Load per isolator		Bolt Information		
			E1 (mm)	R (mm)	Load Kg	Def mm	Size mm	SAE Grade	Max (Nm) Torque
M83090311	red	40	9.5	1	18	1.2	9	5	40
M83090313	white	60	9.5	1	64	1.3	9	5	40
M83090315	"75" in silver pen	75	9.5	1	136	1.6	9	5	40
M53090321	red/white	40	14.3	1.5	59	1.9	13	8	162
M53090323	green/white	55	14.3	1.5	109	2.1	13	8	162
M53090325	purple/white	75	14.3	1.5	286	2.4	13	8	162
M53090331	red/white	40	22.2	2.3	95	2.3	16	8	298
M53090333	green/white	55	22.2	2.3	222	2.5	16	8	298
M53090335	purple/white	75	22.2	2.3	604	2.9	16	8	298
M53090341	red/white	45	28.6	3	123	2.7	22	8	813
M53090343	green/white	55	28.6	3	350	3	22	8	813
M53090345	purple/white	75	28.6	3	953	3.5	22	8	813

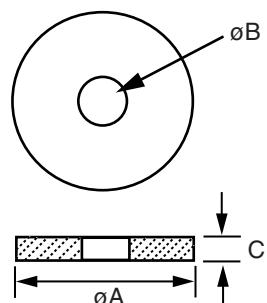


Part No.	\varnothing A mm	\varnothing B mm	C mm	D mm	\varnothing E mm	\varnothing F mm	Weight Kg
M83090311	33.2	10	12.3	31.7	20.1	19	0.04
M83090313	33.2	10	12.3	31.7	20.1	19	0.04
M83090315	33.2	10	12.3	31.7	20.1	19	0.04
M53090321	47.7	13.5	19.8	49.2	33	31.7	0.14
M53090323	47.7	13.5	19.8	49.2	33	31.7	0.14
M53090325	47.7	13.5	19.8	49.2	33	31.7	0.14
M53090331	64.8	16.7	22.8	61.7	40.1	38.1	0.31
M53090333	64.8	16.7	22.8	61.7	40.1	38.1	0.31
M53090335	64.8	16.7	22.8	61.7	40.1	38.1	0.31
M53090341	88.9	23.8	25.4	73.1	58.4	57.1	0.67
M53090343	88.9	23.8	25.4	73.1	58.4	57.1	0.67
M53090345	88.9	23.8	25.4	73.1	58.4	57.1	0.67

Snubbing washers are recommended for the assembly of the isolator. They ensure correct static and dynamic loading of the isolator and protection of suspended equipment under shock loads.

SNUBBING WASHER SIZES

To Suit Isolator Part No.	\varnothing A mm	\varnothing B mm	C mm
M83090311-15	39.6	10.3	2.2
M53090321-25	54.1	13.5	3.4
M53090331-35	71.3	16.7	4.7
M53090341-45	98.5	23.8	6.3

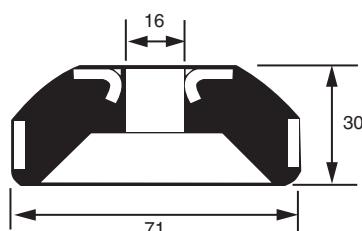


Note: Snubbing washers are not supplied by Mackay Australia.
The Standard material should be low-carbon steel

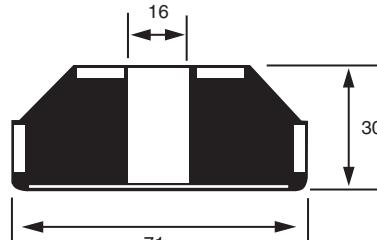
COMBINATION ISOLATORS

Combination isolators provide the excellent shock absorbing properties of rubber in shear and compression with good dynamic cushioning under rugged operating conditions.

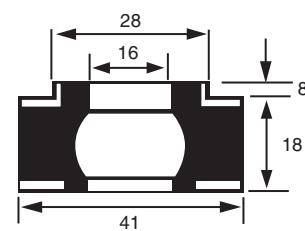
These isolators are designed to be used as an assembly. The rebound unit limits the free movement of the equipment to some extent, but this restriction is very desirable in mobile installations. Care must be taken when installing to ensure that the nut is not drawn too tightly so as to avoid any excessive pre-loading of the isolator and rebound unit.



M104



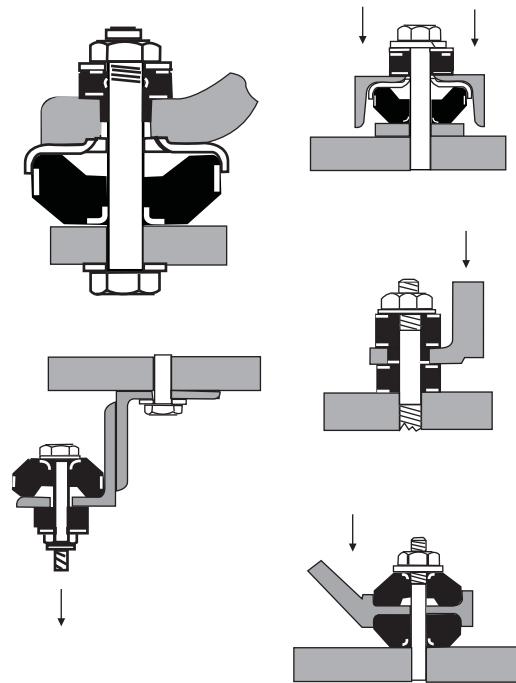
M204



M107

Part No.	LOAD Kg	DEF. mm	Duro	WEIGHT Kg
M10440	57	4	40	0.2
M10450	90	4	50	0.2
M10460	125	4	60	0.2
M10470	180	4	70	0.2
M204	270	4		0.2
M10740	115	4	40	0.05
M10750	170	4	50	0.05
M10760	250	4	60	0.05
M10770	280	4	70	0.05

TYPICAL MOUNTING SYSTEMS



COLOUR CODE

DURO	COLOUR
40	Red
50	Yellow
60	White
70	Marked 70

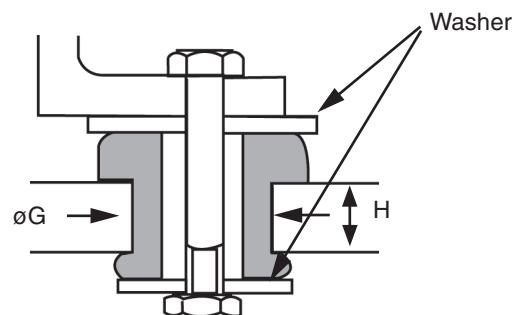
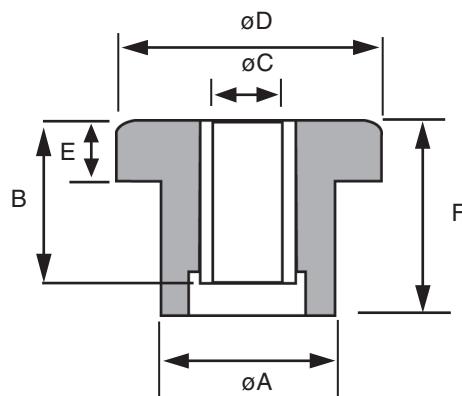
All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

DUAL COMPRESSION MOBILE ISOLATORS

The Mackay dual compression mobile isolators have been engineered to isolate vibration, control shock and reduce noise due to structure borne vibrations. They have high load carrying capacity with improved multi-directional resilience and built in rebound protection.

The isolators give versatility for protecting the equipment and improving operator comfort for all types of cabins and vehicles. Their engineered design balances stability with resilience to withstand high static and shock loading as well as providing fail safe assembly when installed with suitable washers.

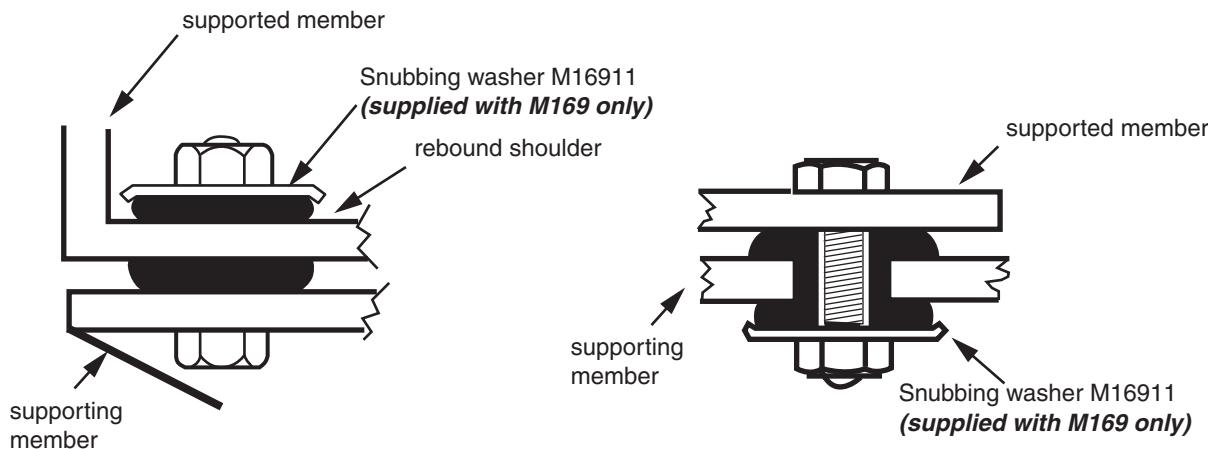


* H : Thickness of supporting member

GENERIC No.	A	B	C	D	E	F	G	H	WEIGHT Kg
M539887	20.6	17.5	10	27.7	5.6	20	20.6	8	0.02
M539190	31.5	25.4	13	44.5	10.4	32	31.5	10	0.05
M539886	34.3	35	13	50.8	13.5	42	34.3	16	0.08
M169	34	35	16	50	13	41.2	34	16	0.1
M187	41	44.5	13	63	22	51	41	16	0.2
M539191	41.1	44.5	16	63.5	15.7	51	41.1	19	0.2
M539951	56.6	50.8	20	95	25.4	62	56	20	0.4

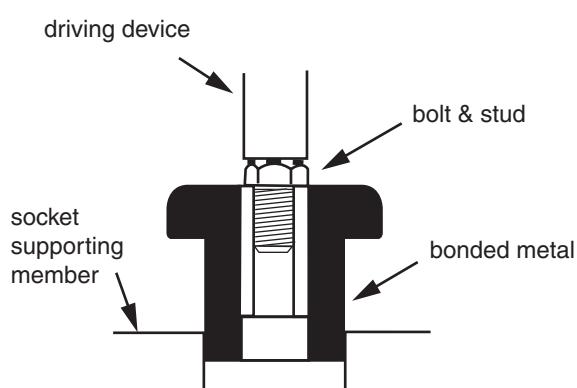
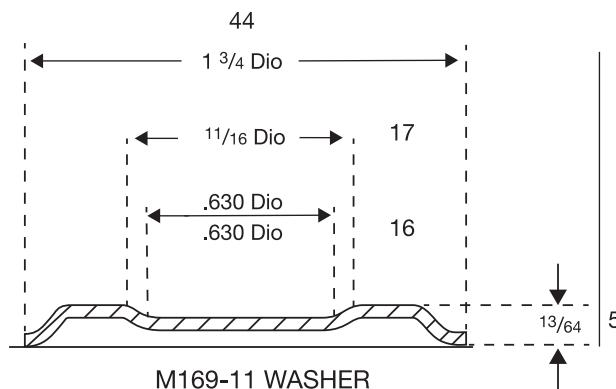
ALSO AVAILABLE ; M189 MECHANICAL & CHEMICAL PROTECTION SHIELD.

METHODS OF MOUNTING



Part No.	DURO	COLOUR CODE	LOAD RANGE Kg	NOMINAL DEFLECTION mm
M53988745	45	White	8 - 35	0.7
M53988760	60	Green	10 - 50	0.7
M53919045	45	White	15 - 75	1.2
M53919060	60	Green	25 - 100	1.2
M53919160	60	Green	60 - 250	2
M53919175	75	Blue	125 - 500	2
M53988660	60	Green	35 - 150	1.2
M53988675	75	Blue	80 - 330	1.2
M53995145	45	Marked 45	175 - 700	3
M53995165	65	Marked 65	250 - 1000	3
M16940	40	Red	100	1.5
M16940K *				
M16950	50	Yellow	150	1.5
M16950K *				
M16960	60	White	250	1.5
M16960K *				
M18740	40	Red	200	3.3
M18750	50	Yellow	200	2.3
M18760	60	White	200	1.4
M18770	70	marked 70	500	2.3

* With Snubbing washer



* INSTALLATION NOTE: Tighten nut to pull mounting bracket and snubbing washer firmly against inner member.

INSTALLATION IS SIMPLE

1. Both the isolator and the socket should be lubricated with water.
2. Insert part in socket and rotate by hand, while applying axial force until partially positioned. Insert driving bolt , stud or assembly fixture in the metal inner member of the mounting. Care should be taken that the driving device does not overhang the outside diameter of the inner member in order to prevent damage to the Elastomer.
3. Apply pressure to the driving device to seat the mounting in its socket.
4. Assemble the other elements of the support , insert the mounting bolt and tighten by applying the required torque. When the nut is tightened against the snubbing washer , the rebound shoulder is formed automatically. The resulting pre-compression will ensure optimum performance.

U-FLEX ISOLATORS

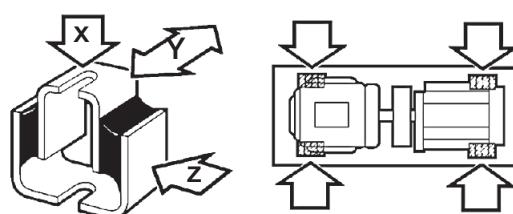
Mackay U-Flex isolators are a general purpose isolator which offer excellent protection against vibration and shock to a wide range of applications including electronic apparatus, vibratory feeders, general machinery as well as equipment in packing cases during transit.

U-Flex isolators are most flexible in directions X and Y (Fig1) when the rubber is used in shear and offer greater stiffness in direction Z where the rubber is used in compression. This characteristic is particularly useful when limitation of movement is required in one direction.

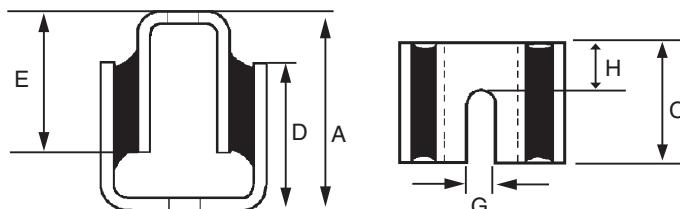


Fig1

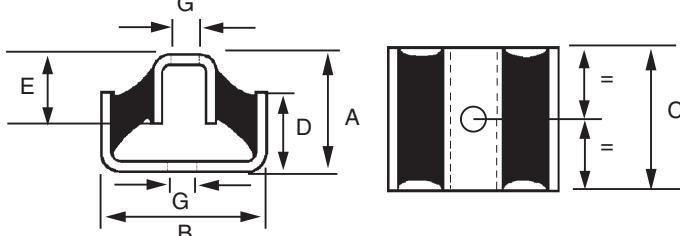
Fig2



M1403



M1404



Part No.	A	B	C	D	E	F	G	H	Duro	Weight Kg
M140350	108	86	64	83	76	38	16.7	32	50	1.0
M140450	41	60	51	29	24	20	11	-	50	0.2

LOAD RANGE

Part No.	STATIC LOAD kg	DEFLECTION mm
M140350	200	7.5
M140450	50	8

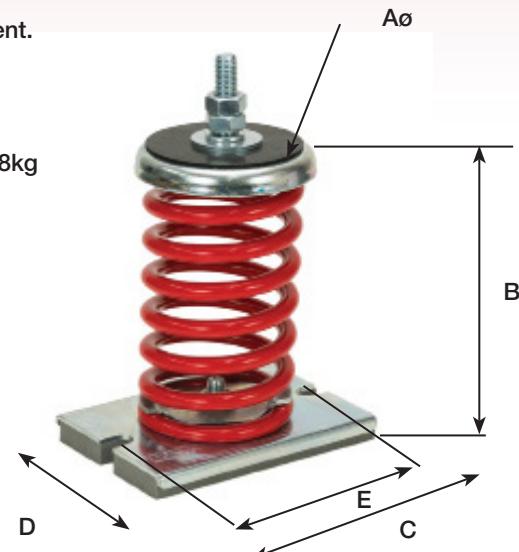
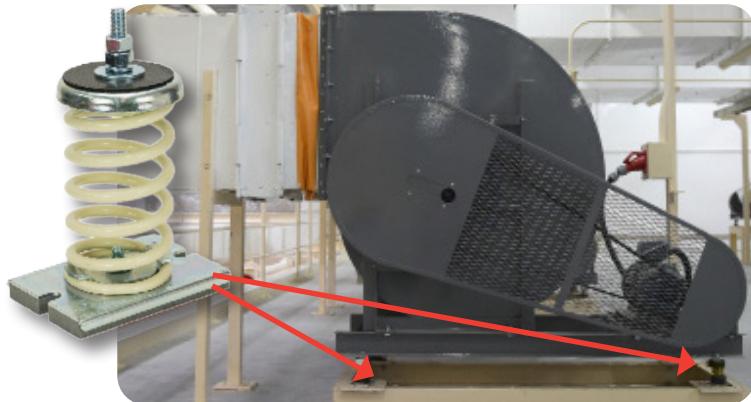
* Available in other rubber hardnesses on indent order only and subject to minimum order quantity

SPRING MOUNTS

Free Standing Spring Mounts

Spring mounts used with inertia bases or directly connected to equipment.

- Low natural frequency suitable for low frequency isolation
- Cellular Polyurethane base pad for increased noise reduction
- M12 adjustable stud for levelling of equipment
- Generally used at 50% deflection at point loads from 34kg to 168kg

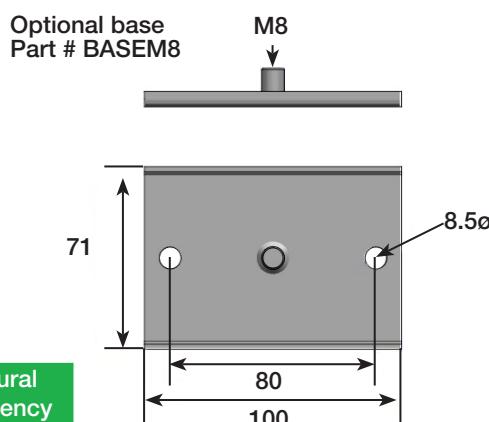
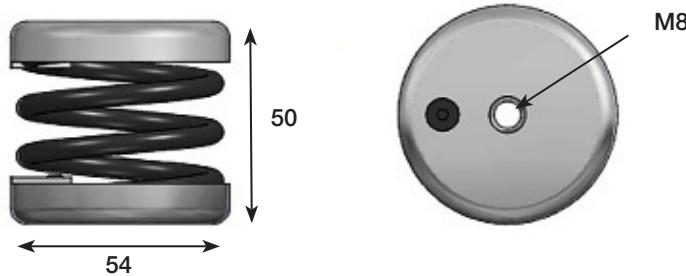


Type	Max. Permanent Load KG	Max. Deflection mm	Spring Colour	Weight g	A mm	B mm	C mm	D mm	E mm	Thread	Natural Frequency @ 50% Max Load Hz	Natural Frequency @ Max Load Hz
MSM67	67	50	Blue	1,480	90	172	140	100	120	M12	2.8	2.0
MSM95	95	50	White	1,530	90	172	140	100	120	M12	2.8	2.0
MSM123	123	50	Black	1,560	90	172	140	100	120	M12	2.8	2.0
MSM173	173	50	Beige	1,650	90	172	140	100	120	M12	2.8	2.0
MSM223	223	50	Red	2,010	90	172	140	100	120	M12	2.8	2.0
MSM335	335	50	Grey	2,320	90	172	140	100	120	M12	2.8	2.0

BASE SERIES

A small spring mount for loads up to 100 kg. With Natural frequencies down to 6Hz, base mounts provide a transition mount between rubber and steel coil spring types. Select these mounts when frequencies are lower and damping is not specifically an issue.

Using the optional base will provide greater free standing ability.



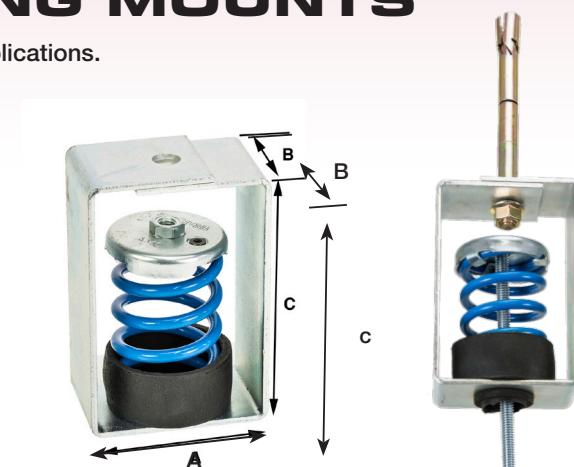
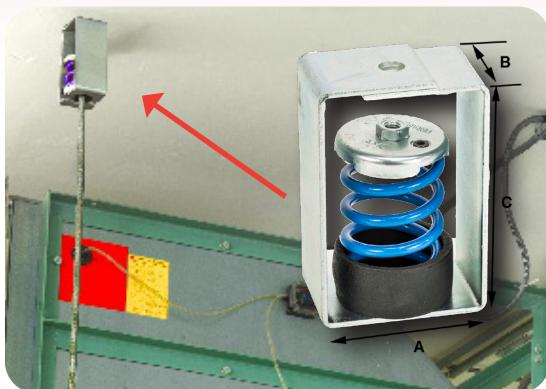
Type	Max. Permanent Load kg	Max. Deflection mm	Weight g	Natural Frequency @ 50% Max Load Hz	Natural Frequency @ Max Load Hz
MBSM10	10	6	200	9.0	6.5
MBSM25	25	7	205	8.5	6.0
MBSM50	50	7	254	8.5	6.0
MBSM75	75	7	260	8.5	6.0
MBSM100	100	7	290	8.5	6.0

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

SUSPENSION SPRING MOUNTS

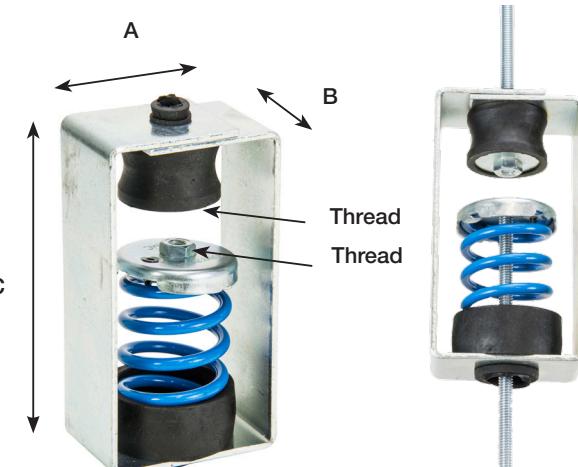
Used for suspension in air-handing, pipework or similar applications.



Type	Max. Permanent Load kg	Max. Deflection mm	Spring Colour	Weight g	A mm	B mm	C mm	Thread	Natural Frequency @ 50% Max Load Hz	Natural Frequency @ Max Load Hz
MCSM25	25	21	Black	710	75	50	120	M8	6.0	3.5
MCSM50	50	22	Blue	710	75	50	120	M8	5.5	3.5
MCSM75	75	22	Grey	720	75	50	120	M8	5.0	3.5
MCSM100	100	22	Beige	780	75	50	120	M8	5.0	3.5
MCSM125	125	21	White	1,100	75	50	120	M8	5.0	3.5
MCSM150	150	32	Blue	2,040	120	80	160	M12	4.5	3.0
MCSM200	200	30	White	2,070	120	80	160	M12	4.5	3.0
MCSM250	250	32	Black	2,150	120	80	160	M12	4.5	3.0
MCSM350	350	32	Cream	2,330	120	80	160	M12	4.5	3.0

SUSPENSION SPRING MOUNTS - INTEGRAL RUBBER ISOLATOR

Used for suspension in air-handing, pipework or similar applications. Additional of rubber element to provide improvements in isolation of noise.



Type	Max. Permanent Load kg	Max. Deflection mm	Spring Colour	Weight g	A mm	B mm	C mm	Thread - Spring Cap	Thread - Rubber Cap	Natural Frequency @ 50% Max Load Hz	Natural Frequency @ Max Load Hz
MCSR25	25	24	Black	900	75	50	150	M8	M8	6.0	3.5
MCSR50	50	25	Blue	900	75	50	150	M8	M8	5.5	3.5
MCSR75	75	26	Grey	900	75	50	150	M8	M8	5.0	3.5
MCSR100	100	27	Beige	900	75	50	150	M8	M8	5.0	3.5
MCSR125	125	19	White	900	75	50	150	M8	M8	5.0	3.5

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

VIBRATION ISOLATORS

SYLOMER PAD

Closed-cell polyurethane pads or use under the flat base of equipment.

- 12mm thick & 25mm thick
- Microcellular structure provides isolation with very little deflection
- Simple and effective solution for free-standing equipment
- Individual squares show maximum load capacity to simplify application; 20kg, 40kg & 80kg squares easily cut from larger sheet.



Part No.	Max. Permanent Load on 50mm x 50mm Kg	Max. Permanent Load on 300mm x 300mm Sheet Kg	Colour	Weight per 300mm x300mm Sheet g	Thickness mm	Natural Frequency Hz
MSP11012	20	720	Tan	415	12	20.1
MSP11025	20	720	Tan	830	25	13.7
MSP22012	40	1,440	Red	540	12	17.4
MSP22025	40	1,440	Red	1,080	25	11.4
MSP45012	80	2,880	Grey	685	12	16.1
MSP45025	80	2,880	Grey	1,370	25	10.6

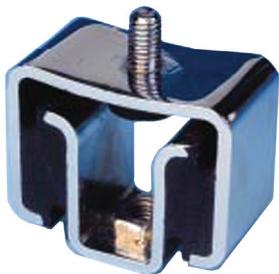
TRAXIFLEX SUSPENSION ISOLATORS

Traxiflex suspension isolators eliminate noise from piping and suspended equipment.

Typical Applications:

- Suspension and insulation of single pipe against vibrations
- Insulation of acoustic false ceilings.
- Suspension of overhead hot air heating ducts.

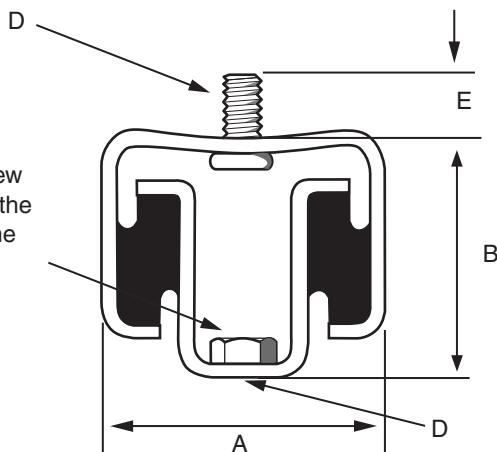
SHAPE A



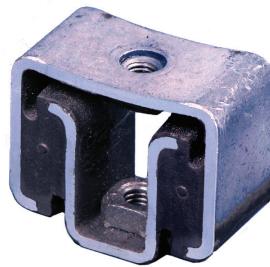
M53560345

M53560360

Fixing screw
welded to the
metal frame



SHAPE B

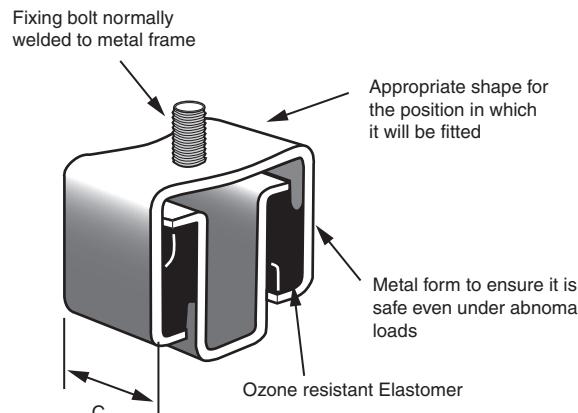


M53562145

M53562160

M53562245

M53562260



Part No.	SHAPE	DIMENSIONS					LOAD RATING	DEF	Duro	Weight
		A	B	C	D	E				
M53560345	A	47	38	16	M6	12	12-18	3-4	45	0.08
M53560360	A	47	38	16	M6	12	20-30	3-4	60	0.08
M53562145	B	55	47	30	M8	-	40-52	3-4	45	0.2
M53562160	B	55	47	30	M8	-	62-80	3-4	60	0.2
M53562245	B	74	50	40	M12	-	72-92	3-4	45	0.4
M53562260	B	74	50	40	M12	-	104-136	3-4	60	0.4

COLOR CODE

Duro	Colour
45	Grey
60	Green

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

SUSPENSION ISOLATORS

Suspension isolators have been designed for use in the building and construction industry. Use of these isolators will give satisfactory isolation of vibration and structural borne noise transmitted in piping and ductwork.

The mountings work equally well when used in heavy pipe installations, air conditioning, ducting, suspended fan units or acoustical ceilings. Supplied in two parts, the mountings are easily installed. The frame is fixed to the building structure by loxin bolts, welding or other suitable means. The rubber flexible element is then installed in the frame and the hanger rod passed through the base of the assembled mount and fastened in position. Height adjustment can be made to ensure correct location of the suspended unit if threaded hanger rods are used. The smaller unit (M193) allows for pre-assembly of the hanger rod into the rubber element prior to raising into position. The assembled unit provides a strong, compact failsafe mounting for the suspension of all types of equipment. The components form an interlocking link, thus preventing failure in the event of destruction or damage to the rubber flexible element.

M193

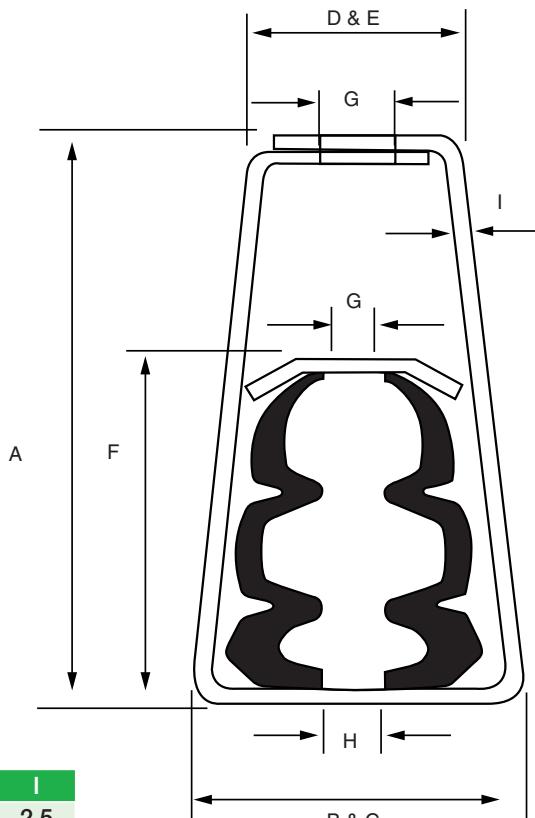


M197



DIMENSIONS

Part No.	A	B	C	D	E	F	G	H	I
M193	73	56	51	35	25	30	10	25	2.5
M197	178	102	76	64	76	106	19	32	3.2



Detail Drawing is Typical Only.

LOAD RATING

Part No.	LOAD Kg	DEF mm	COLOUR CODE	DURO	Weight Kg
M19350K	30	11	YELLOW	50	0.2
M19360K	45	11	WHITE	60	0.2
M197	91	19			1.5
	272	37			

Deflection tolerance \pm 1.6mm

All Dimensions in Millimetres

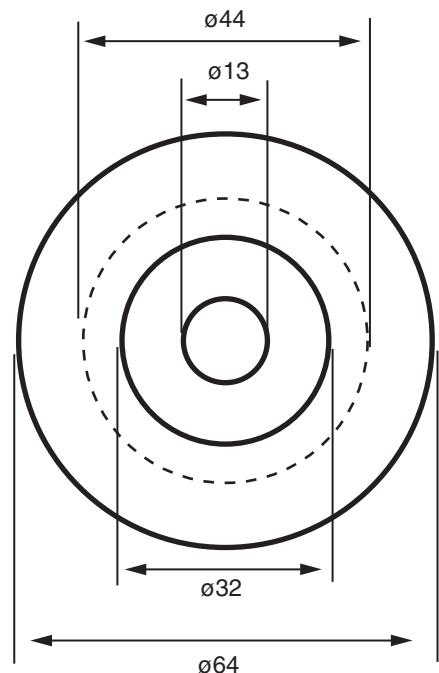
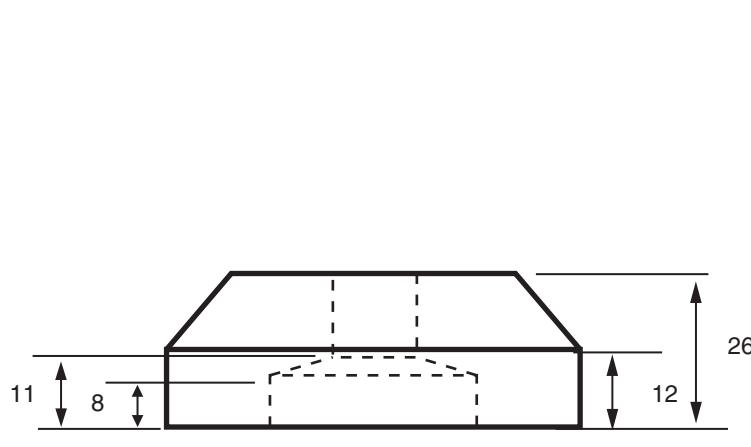
All properties nominal, contact Mackay for Technical advice

SIMPLE MACHINERY FOOT ISOLATOR

Part No. M177MF.

Typical Applications:

- Small generators
- Small compressors
- Portable equipment



LOAD RATING CHART

Load Kg	Def mm	Weight Kg
90	3	0.2

MINIFIX ISOLATOR

MINIFIX is a machine support that is composed of a rubber foot with a grooved anti-slip base and a threaded stud which allows equipment to be accurately adjusted.

- ANTI-VIBRATION
- RELIABLE
- ECONOMICAL

MINIFIX is produced in two rubber hardnesses and is supplied complete with locking nuts and washers.



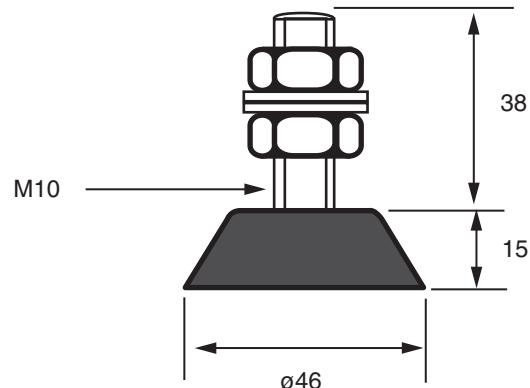
Simple and economical the MINIFIX machine foot is of particular use in the following applications ;

- ELECTRONIC CABINETS
- LABORATORY EQUIPMENT
- AGRICULTURAL EQUIPMENT
- PACKING MACHINERY
- SURVEYING EQUIPMENT
- MEASURING EQUIPMENT
- DOMESTIC APPLIANCES
- ELECTRICAL INSTALLATIONS
- FOOD PROCESSING MACHINES
- FACTORY EQUIPMENT

For larger load ratings please refer to our range of SUREFOOT machine levelling Isolators.

ADVANTAGES;

- No floor bolting required
- Controls noise, shock and vibration
- Save on installation and relocation
- Fast, simplified and precise levelling of all machines
- Compensates for uneven floors

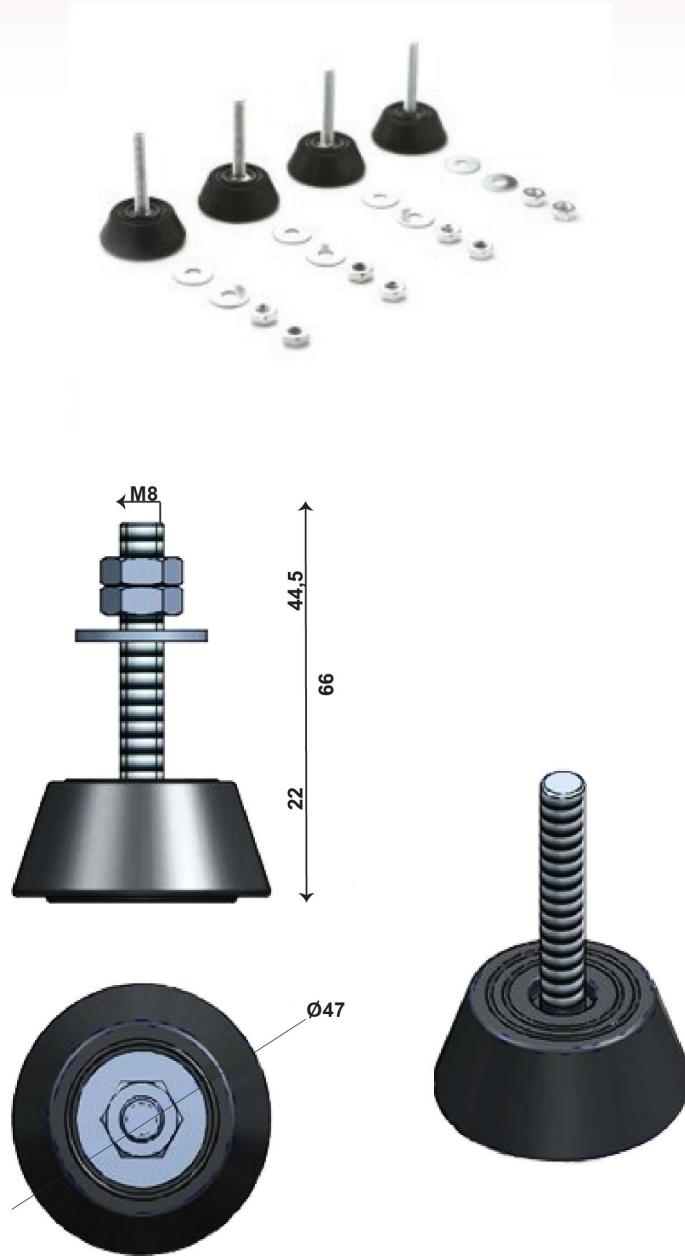


Part No.	COLOUR	Material	LOAD RATING kgs	RECOMMENDED LOAD (N)	DYNAMIC STIFFNESS (kN/M)	DURO	Weight Kg
M53080550	GREY	SBR (1)	30-40	300-400	570-660	50	0.1
M53080580	BLACK	Nitrile (2)	80-100	800-1000	5500-5800	80	0.1

(1) **POOR** resistance to Fuel, Oil & Grease

(2) **GOOD** resistance to Fuel, Oil & Grease

ADJUSTABLE FEET ISOLATORS



S40 TYPE

LOAD Kg	WEIGHT	MACKAY PART #	QTY
5-45	281	M649017KIT	4

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice



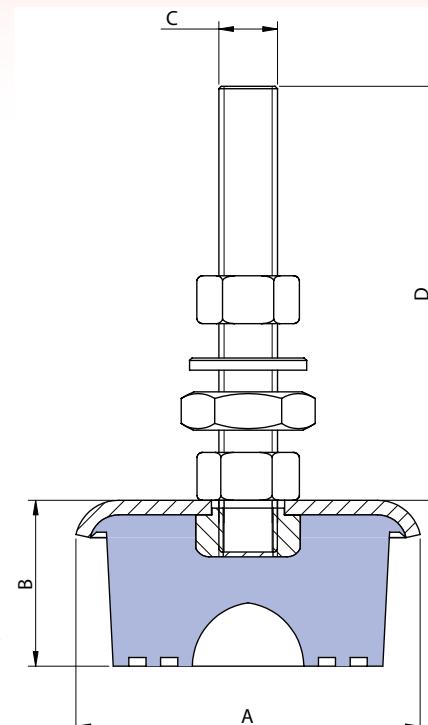
VIBRATION ISOLATORS

ADJUSTABLE FEET ISOLATOR

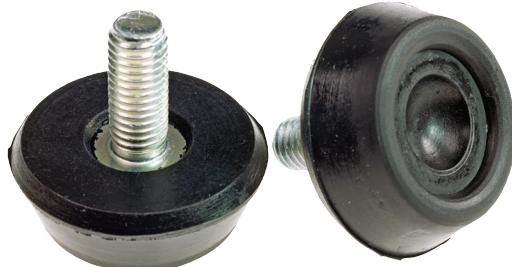
SV TYPE



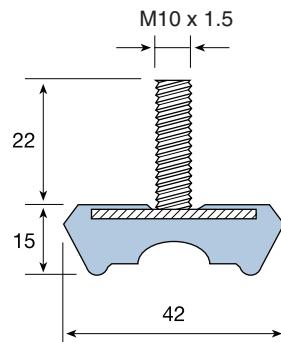
DIMENSIONS mm				LOAD Kg		WEIGHT (g)	Part No.
A	B	C	D	MIN	MAX		
40	23	M8 x 1.25	48	20	80	89	M143001
60	28	M10 x 1.5	81	60	120	235	M143002
70	32	M12 x 1.75	89	90	160	350	M143003



JT TYPE



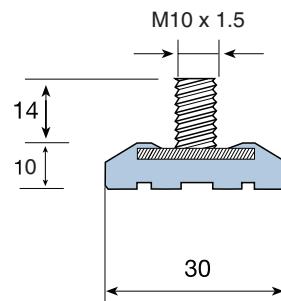
HARDNESS	LOAD Kg	WEIGHT (g)	Part No.
50	25-40	53	M144001
75	75-100	53	M144002



SX TYPE



HARDNESS	LOAD Kg	WEIGHT (g)	Part No.
50	10-25	25	M145001



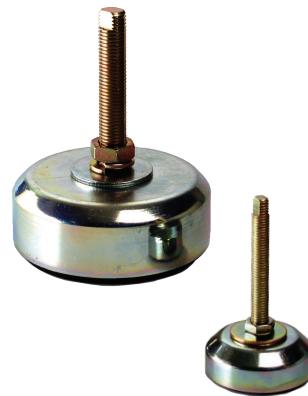
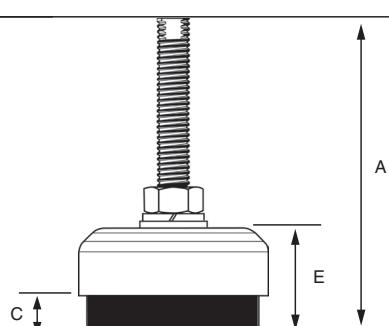
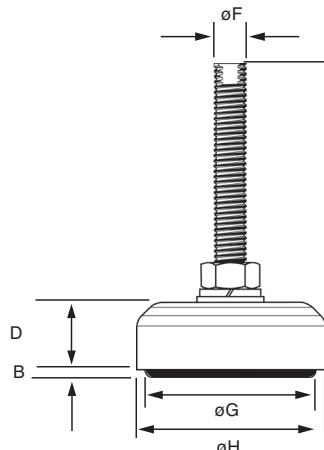
All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

SURE FOOT ISOLATORS

Mackay Sure Foot Levelling Isolators are designed for cost-effective machine levelling for isolator loads up to 6000Kg. Sure Foot Levelling Isolators offer an effective and durable method for isolating free standing equipment and machinery on non-level surfaces.

Sure Foot standard range is made with electrolytically plated zinc applied to automotive standards. Where superior corrosion resistance is required Mackay recommends the Sure Foot stainless Steel alternative. Made using Nitrile rubber, Sure Foot offers superior chemical and oil resistance in comparison to natural rubber.



DIMENSIONS

Part No.		OVERALL	EXPOSED BASE		ADJUSTMENT		DIAMETERS		
Standard	Stainless type 304	A mm	Min B mm	Max C mm	Min D mm	Max E mm	Thread F mm	Base G mm	Cap H mm
M400300	M410300	119	6.7	15	31.7.	40	(M12x1.75)	64	71
M401200	M411200	144	8.8	28	50.8	70	(M16x2.0)	91	101
M402500	M412500	177	11.9	32	61.9	82	(M20x2.5)	135	144
M404000		212	14.9	40	74.9	100	(M24x3.0)	180	192
M406000		218	14.9	46	80.9	112	(M24x3.0)	203	216

PROPERTIES

Part No.		LOAD RANGE		DEFLECTION AT MAX EXPOSED BASE		Weight kg
Standard	Stainless type 304	Min kg	Max kg	Min Load mm	Max Load mm	
M400300	M410300	30	300	0.2	2.3	0.4
M401200	M411200	300	1200	1.5	5.9	1.1
M402500	M412500	1200	2500	3.0	6.3	2.5
M404000		2500	4000	4.1	6.5	5.2
M406000		4000	6000	6.5	9.7	6.4

The low-cost way to install machinery...

LESS VIBRATION - tighter tolerances

LESS NOISE - better operator performance

LESS WEAR - reduces maintenance

LESS DOWNTIME when moving

...for increased production.

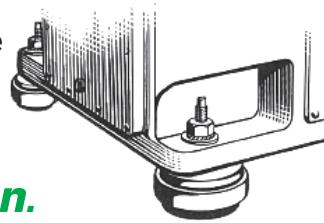


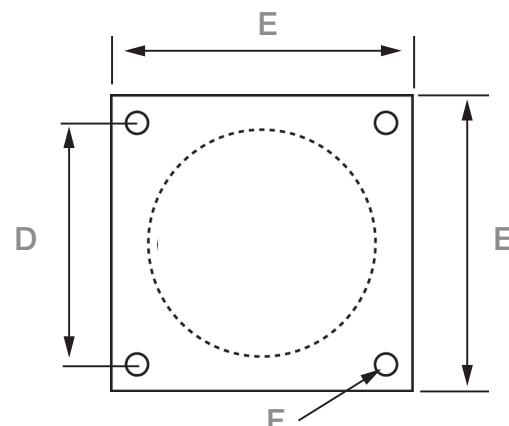
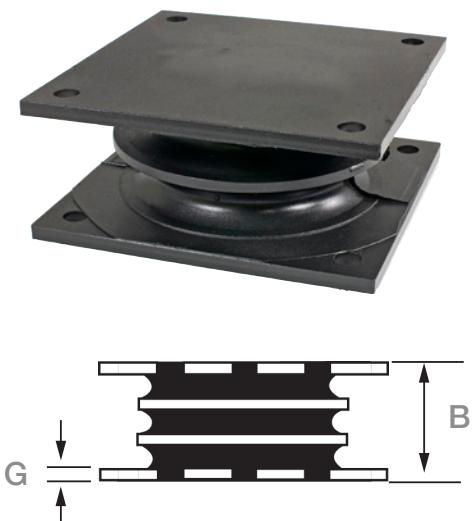
PLATE ISOLATORS

Where you require a isolator of straight forward design to provide an uncomplicated solution to controlling vibration and shock , the range of Mackay Plate Mountings provide the answer. These isolators are designed to protect equipment and machinery from damaging vibration and shock and have an excellent capacity for energy control.

APPLICATIONS: Printing presses, Road rollers, Vibratory

feeders, Shipping containers, Crushers, Shaker units, Industrial machinery.

M1482##



PART No.	B	D	E	F	G	WEIGHT
M148213	51	118	148	13.5	5	2.5
M148202	63	136	166	13.5	6	4.5
M148208	120	270	310	22	10	27

PART No.	Compression Properties		Durometer	Item Weight (kg)
	Compression Load (kg)	deflection (mm)		
M148213	1000	1.5	45	2.5
	1500	2.5		
	2200	3.5		
M148202	2500	1.5	60	4.5
	4500	3		
	7500	5		
M148208	10,000	3	60	27
	20,000	6		
	30,000	9		

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice



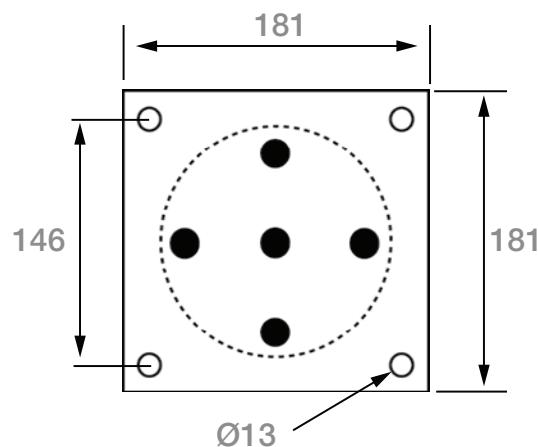
VIBRATION ISOLATORS

PLATE ISOLATORS

M211045, M211060



M211160



M211260



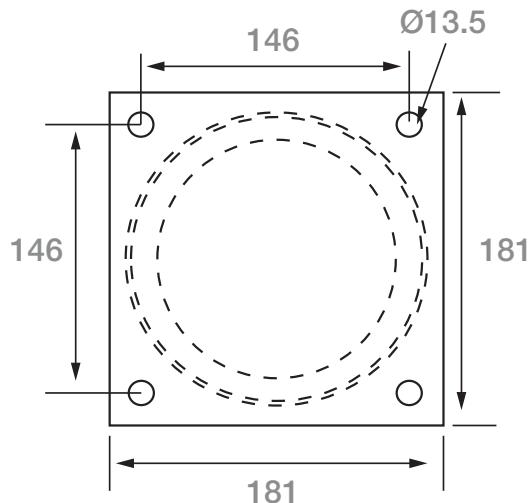
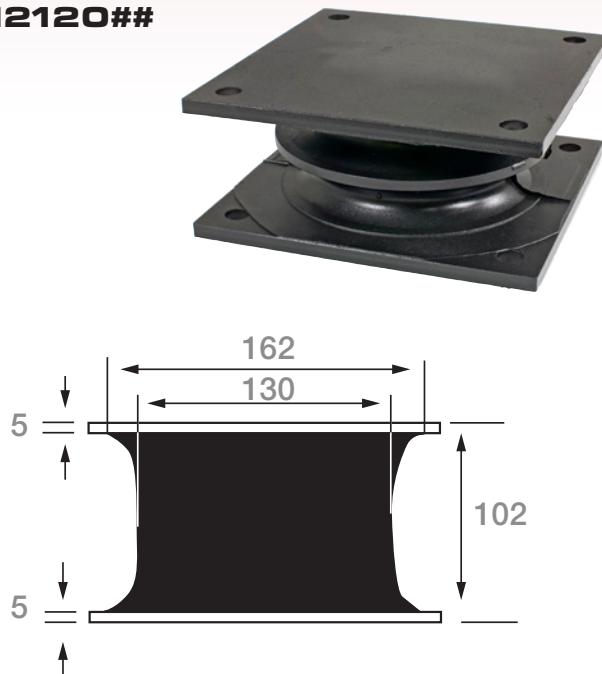
PART No.	Compression Properties		Shear Properties		Durometer	Item Weight (kg)
	Compression Load (kg)	deflection (mm)	Shear Load (kg)	deflection (mm)		
M211045	300	2.0	57	2.5	45	5.2
	558	4.0	137	6.0		
	841	6.0	248	12.0		
	1144	8.0	308	16.0		
	1452	10.0				
M211060	607	2.0	100	2.0	60	5.2
	1195	4.0	176	4.0		
	1789	6.0	260	6.0		
	2432	8.0	341	8.0		
	3104	10.0	418	10.0		
			498	12.0		
M211160	832	2.0	79	2.0	60	5.5
	1758	4.0	132	4.0		
	2722	6.0	197	6.0		
	4064	8.0	341	8.0		
M211260	1725	2.0	106	2.0	60	6.2
	3640	4.0	277	6.0		
	6130	6.0	441	10.0		
	9476	8.0	608	14.0		

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice

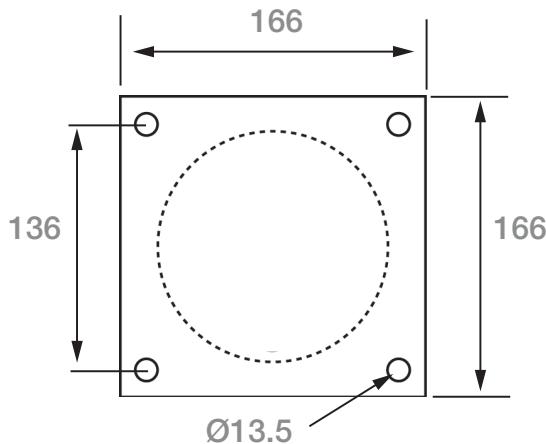
PLATE ISOLATORS

M2120##



PART No.	Compression Properties		Shear Properties		Durometer	Item Weight (kg)
	Compression Load (kg)	deflection (mm)	Shear Load (kg)	deflection (mm)		
M212045	680	14	152	20	45	5
M212055	1064	14	235	20	55	5
M212065	1,765	14	390	20	65	5

M211275SAW150



PART No.	Compression Properties		Shear Properties		Durometer	Item Weight (kg)
	Compression Load (kg)	deflection (mm)	Shear Load (kg)	deflection (mm)		
M211275SAW150	3010	2.0	78	2.0	75	4.2
	6900	4.0	160	4.0		
	11,700	6.0	240	6.0		
	17,700	8.0	300	8.0		

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice



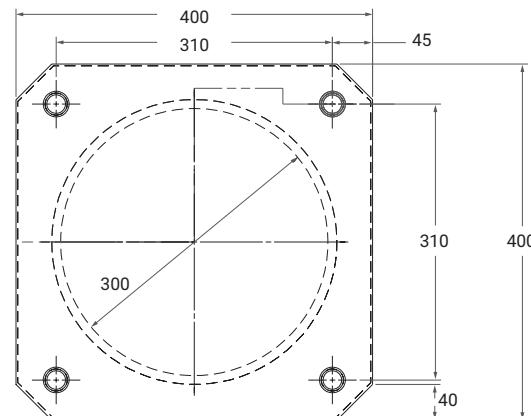
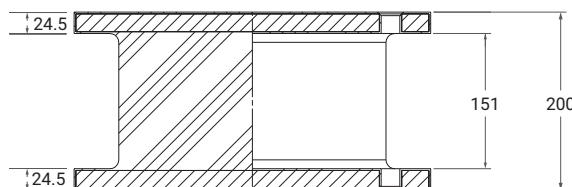
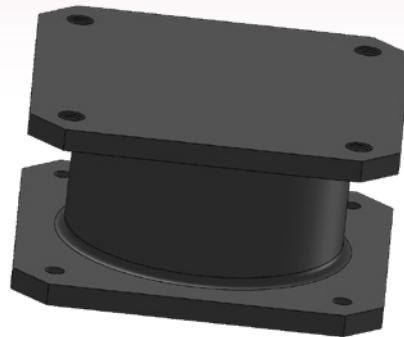
PLATE ISOLATORS

M2140##

*** NON STOCKED ITEM.
SPECIAL ORDER ONLY.**

The metalwork is encapsulated in bonded rubber at nominal 2mm thick.

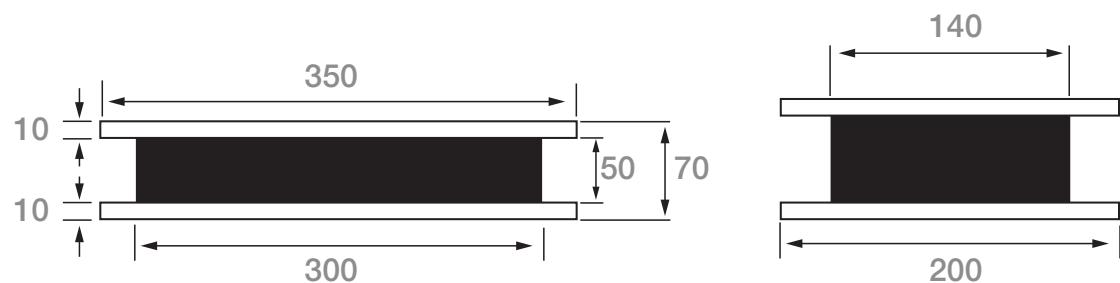
The only metal exposed is at the mounting holes and this area can be sealed with Silastic or similar during installation.



Part No.	COMPRESSION		SHEAR	
	LOAD Kg	DEF mm	LOAD Kg	DEF mm
*M214060	410	4	70	4
	860	8	140	8
	1350	12	210	12
	1880	16	270	16
	2460	20	340	20
*M214060	970	4	160	4
	2030	8	320	8
	3180	12	480	12
	4440	16	650	16
	5810	20	810	20

PLATE ISOLATORS

M141004



PART No.	DESCRIPTION	COMP LOAD KG	DEF MM	WEIGHT
M141004	Plate Isolator	2000	1.5	13
		5000	3.5	
		10,000	7	

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice



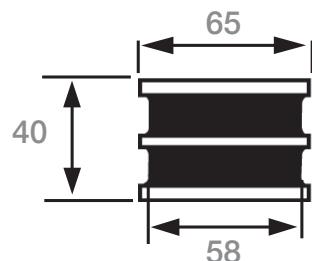
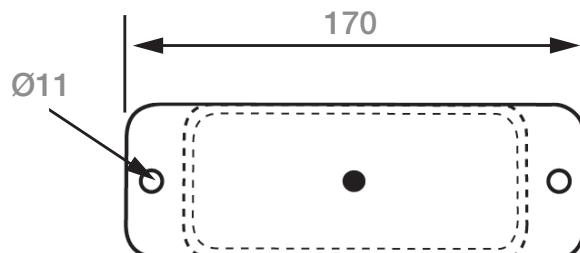
PLATE ISOLATORS

M2060##

NO INTERMEDIATE PLATE

M2061##

WITH INTERMEDIATE PLATE



PART No.	Compression Properties		Shear Properties		Durometer	Item Weight (kg)
	Compression Load (kg)	deflection (mm)	Shear Load (kg)	deflection (mm)		
M206035	100	1.5	20	3.0	35	1.2
	200	2.5	35	5.0		
	311	4	50	7.0		

PART No.	Compression Properties		Shear Properties		Durometer	Item Weight (kg)
	Compression Load (kg)	deflection (mm)	Shear Load (kg)	deflection (mm)		
M206135	480	2.0	30	3.0	35	1.2
	730	3.0	50	5.0		
	970	4.0	70	7.0		
M206145	710	2.0	50	3.0	45	1.2
	1060	3.0	80	5.0		
	1410	4.0	110	7.0		
M206155	920	2.0	60	3.0	55	1.2
	1380	3.0	100	5.0		
	1840	4.0	140	7.0		
M206165	1320	2.0	80	3.0	60	1.2
	1980	3.0	140	5.0		
	2640	4.0	190	7.0		

All Dimensions in Millimetres

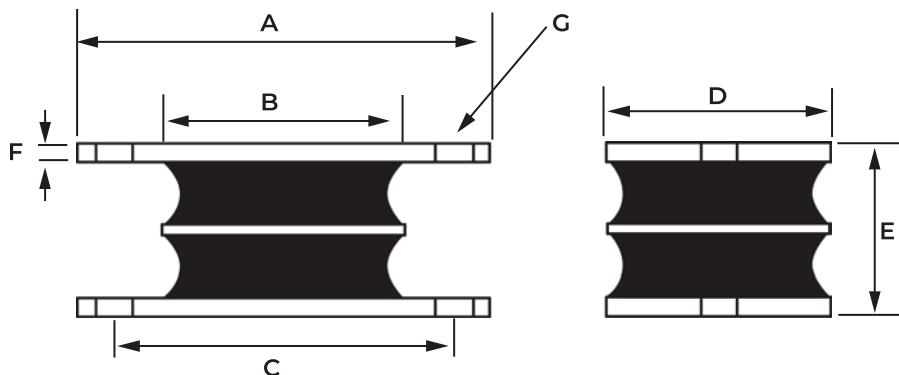
All properties nominal, contact Mackay for Technical advice

PLATE ISOLATORS

MA3132240

MA3132250

MA3132260



PART No.	A	B	C	D	E	F	G
MA3132240	108	63.5	89	57	43	5	10.3
MA3132250	108	63.5	89	57	43	5	10.3
MA3132260	108	63.5	89	57	43	5	10.3

PART No.	COMPRESSION LOAD Kg	DEF mm	SHEAR LOAD Kg	DEF mm	WEIGHT KG
MA3132240	50	1	36	4	0.6
	105	2	44	8	
	160	3	32	12	
MA3132250	85	1	22	4	0.6
	175	2	44	8	
	260	3	66	12	
MA3132260	110	1	36	4	0.6
	220	2	72	8	
	350	3	108	12	

All Dimensions in Millimetres

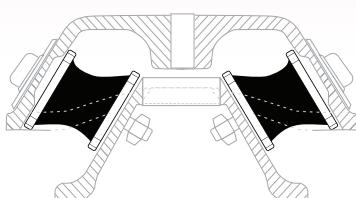
All properties nominal, contact Mackay for Technical advice



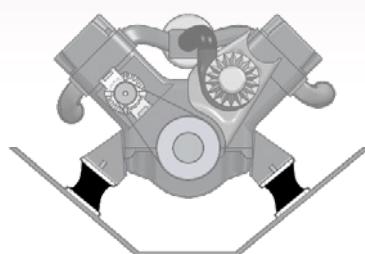
VIBRATION ISOLATORS

PLATE ISOLATORS

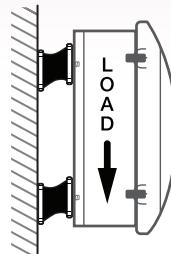
M1734245 M1734255 M1734260



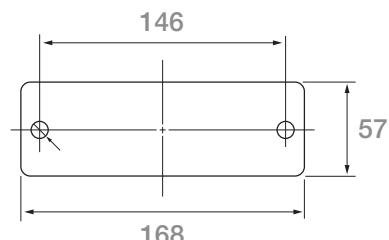
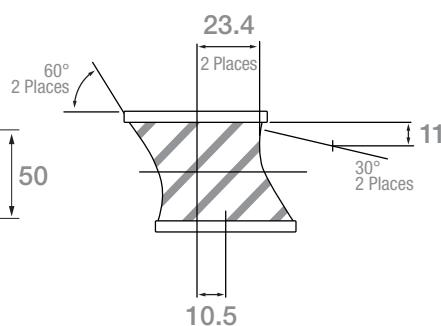
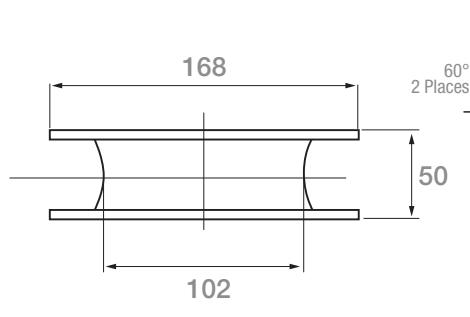
Used in CUSHYFOOT Mounts



Used on Engines with limited space



Wall Mount



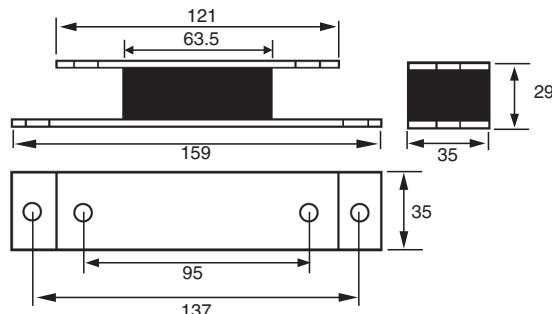
Part No.	COMPRESSION		SHEAR	
	LOAD Kg	DEF mm	LOAD Kg	DEF mm
M1734245				
	95	2.5	15	2.5
	210	5.0	30	5.0
	355	7.5	45	7.5
	535	10.0	60	10.0
	740	12.5	75	12.5
	970	15.0	90	15.0
M1734255				
	145	2.5	20	2.5
	325	5.0	45	5.0
	545	7.5	65	7.5
	825	10.0	90	10.0
	1140	12.5	115	12.5
	1500	15.0	135	15.0
M1734260				
	185	2.5	25	2.5
	415	5.0	55	5.0
	705	7.5	85	7.5
	1060	10.0	115	10.0
	1465	12.5	145	12.5
	1930	15.0	175	15.0

All Dimensions in Millimetres

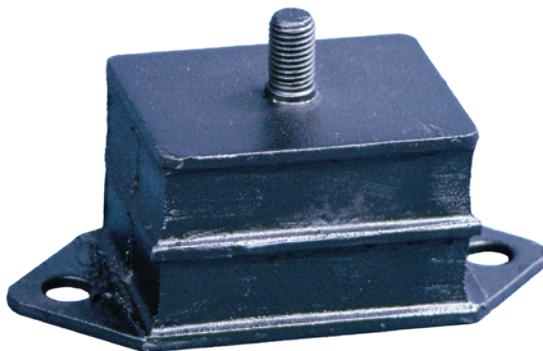
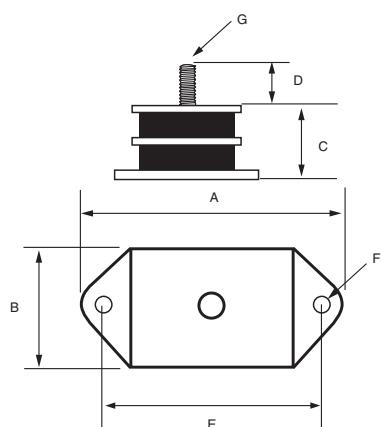
All properties nominal, contact Mackay for Technical advice

PLATE ISOLATORS

M183



Part No.	COMPRESSION		SHEAR		WEIGHT Kg
	LOAD Kg	DEF mm	LOAD Kg	DEF mm	
M183	50	1.4	5	1.1	0.3
	75	2.0	10	2.3	
	100	2.7	13	3.0	
	110	3.0			



Part No.	A	B	C	D	E	F	G	LOAD in Kg		DEF in mm		DURO	Weight Kg
								COMP	SHEAR	COMP	SHEAR		
M8040645	94	41	36	15	74.5	8.5	5/16" UNF	35-95	14-43	1.0-2.8	5.0-15.0	45	0.2
M8040660	94	41	36	15	74.5	8.5	5/16" UNF	65-175	27-70	1.0-2.8	5.0-12.0	60	0.2
M8040670	94	41	36	15	74.5	8.5	5/16" UNF	95-275	42-120	1.0-2.8	5.0-14.0	70	0.2

All Dimensions in Millimetres

All properties nominal, contact Mackay for Technical advice