



SOLUTION ANTIVIBRATION DAMPING

Rubber to metal & Steel spring

ELASTOPLOTS®





Technical

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RUBBER TO METAL

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CEF POLYMERES is a major supplier of a diverse range of engineered rubber and bonded metal/rubber products for the vehicle, mining, rail, construction and industrial markets.

Our products are exported worldwide. technologies and skills, breadth and depth of expertise, advanced rubber development expertise, and a variety of manufacturing processes.

Elements of an Isolation System

In discussing vibration protection, there are three basic elements to be considered:

1. An element which creates or transmits vibrational energy.
2. An element which must be protected, or "isolated" from that energy.
3. A third element, interposed between the first two, which provides the necessary vibration isolation between them.



Vibration is usually transmitted between equipment (machinery, components, etc.) and support structures (floors, brackets, baseplates, foundations, etc.).

Vibrational energy can be transmitted from equipment to support structures or vice-versa. In some instances, a clear cut distinction cannot be made between the element creating or transmitting vibrational energy and the element which must be isolated from that energy. This is the case with connections or linkages between moving parts where the need for isolation is necessary to prevent fatigue in the linkage rather than to protect either of the moving parts it connects.

Many situations involve several interrelated elements. In the case of a large punch press located near a precision grinder, for instance, the punch press creates the energy, which is transmitted to the floor and then to the grinder. The floor must be isolated from the press in order to sustain the impact force .without special foundations, and the grinder must be isolated from the floor to maintain the necessary high machining tolerances.

In either case, an isolator serves basically the same function to reduce the magnitude of the vibrational forces transmitted from one element to another.





DECREASED MAINTENANCE COSTS

When vibrating equipment is rigidly bolted to the floor, internal stresses may be amplified. We reduce these stresses and help prevent misalignment of machine frames and undue wear on bearings or related parts. Continued maintenance labor costs are reduced and replacement of worn parts is reduced.

IMPROVED PRODUCTION EFFICIENCY

Production machinery operates more efficiently when isolated from vibration. Higher machine output and quality are possible at higher operating speeds without disruption from neighboring equipment.

REDUCED COSTS OF SUPPORTING STRUCTURES

The vibration isolation provided by CEF eliminates the need for special foundations in a large number of instances, enabling the modest price of NIVELASTIC to be substituted for the costly and often prohibitive expense of concrete.

REDUCED INSTALLATION COSTS

CEF mounts need not be bolted to the support structure or floor beneath a machine. These isolators require no holes to drill and fill, no grouting, no glue to smear, no shimming and no cleanup. Compared to bolted foundations, these mounting Systems have provided up to 90% savings.

CHOICE & AVAILABILITY OF SOLUTION

With CEF mounts, you do not have to "settle" for a solution. Our complete range of types and sizes insures that you can find a CEF mounts suited specifically to your needs. Stocking distributors in principal cities throughout the country assure no lost time or effort.



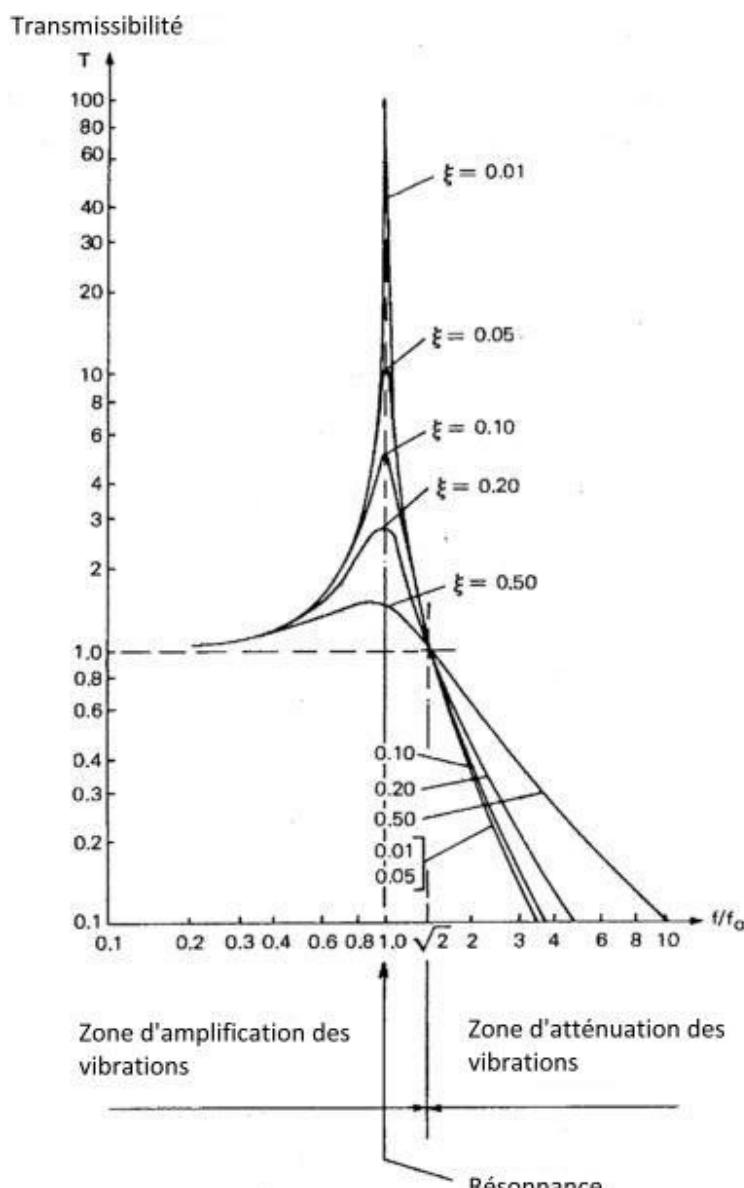
MAXIMUM UTILISATION OF EQUIPMENT

The relative mobility of equipment mounted on CEF mounts offers flexibility in terms of being able to use machines where they are most needed at any particular time. When production priorities are shifted from one area to another, machines can quickly and inexpensively be relocated as necessary. Since no special foundations or lagging are required, a machine on CEF mounts is simply picked up, moved, put down, leveled and can be operated once the power is reconnected. The "portability" of many machines on ours product also saves the expense of renting or purchasing machinery for short term needs.

A spring suspended from a ceiling, if stretched downward and released, would continuously vibrate up and down at a fixed number of oscillations per unit time if the spring could vibrate freely and were a perfectly resilient material. This number of oscillations per unit time is known as natural frequency. In a practical sense, however, no real material is perfectly resilient. All isolators exhibit some degree of non-resilience known as damping. If the spring suspended from the ceiling were critically damped, it would not oscillate after being stretched and released, but would rather return to the original unstretched position without overshoot. Such a spring would obviously provide much less isolation than one which was lightly damped and could oscillate more freely.

In addition to the natural frequency and damping characteristics of the isolator, the forcing frequency of the vibrational energy input is the third factor affecting isolation efficiency.

By definition, vibrational energy is oscillatory in nature and is usually input at a characteristic rate per unit time. This rate is known as forcing frequency. In the case of steadily rotating or reciprocating devices such as a ventilating fan, the forcing frequency will be the rpm. [usually expressed in cycles per second (called Hertz or Hz) as rpm divided by 60]. In the case of impacting devices such as punch presses, however, the disturbing frequency is influenced not only by the speed of the press, but also by complex relationships involving the reaction of the material being formed by the impact forces of the press. In such cases, either the forcing frequency must be measured, or the isolators for the press selected by experts on the basis of previous experience. The interrelationships between natural frequency (denoted f_n), forcing frequency (denoted f_d), damping (denoted C), critical damping (denoted C_c), and isolation efficiency are shown on Figures 1 and 2. Figure 1 shows a typical plot of isolation efficiency as a function of f_d/f_n . Note that when this ratio of frequencies is greater than 1.414, isolation efficiency is positive and isolation occurs. When f_d/f_n is less than 1.414 on the other hand, the isolation efficiency is less than zero and the isolator actually magnifies, rather than reduces, the input force. This amplification is maximized when $f_d = f_n$, a condition known as resonance.



Low damping elastomer	NR 145/155
Medium damping elastomer	CR NBR
High damping elastomer	VMQ HDS

Technical information

ELASTOLOTS®
LOTS ET SUPPORTS

Elastomer	Natural rubber	Chloropréne	Acrylonitrile-butadiène	Silicone	Ethylène propylène	Polyurethane
International mark DIN ISO 1629	NR	CR	NBR	VMQ	EPDM	PUR / AU
Codification CEF polymeres	1XX	2XX	3XX	4XX	5XX	Serie R
Hardness DIN 53505 (Sh A)	40 ... 80	45 ... 70	45 ... 90	35/45/55/65	45 ... 80	40...99
Tensile strength in the most favorable hardness range DIN 53504 (N/mm ²)	25	2	2	8	18	3
Elongation at break for Hardness range DIN 53504 (%)	8	35	35	45	35	8
Static mechanical propertie	Excellent	Very good	Medium	Low	Good	Excellent
Dynamic mechanical propertie	Excellent	Very good	Medium	A voir	Medium	Good
Operating temperature (°C) continue	-40 ...+70°	-30...+80°	-25 ...+125°	-60° +220°	-60° +150°	-40° +100°
Resistance to creeping	Excellent	Good	Good	Medium	Medium	Good
Resistance to aging	Moderate	Very good	Good	Good	Very good	Very good
Compression stress	Very good	Good	Good	Low	Low	Very good
Cold resistance	Good	Good	Moderate	Very good	Low	Very good
Abrasion resistance	Moderate	Low	Low	Low	Low	Very good
Wear resistance	Moderate	Very good	Low	Excellent	Very good	Excellent
Electric isolation	Contact us					
Bonding resistance	Excellent	Very good	Very good	Low	Low	Good
Water	B	A	A	B	A	B
Sea water	B	A	A	B	A	ether
Bleach water dilute	B	C	C	B	A	C
Diluted citric acid	C	C	C	C	C	C
Mineral oil	C	B	A	B	C	A
Fuel	B	C	A	C	B	B
Chlorinated solvent	D	C	D	D	D	D
Ketones	D	D	C	D	B	B
Urea	B	A	A	A	A	C
Gas oil	C	B	A	B	C	A
Grease	C	B	A	B	C	A
Chlore	C	C	C	C	B	C
Ammoniac liquid	C	A	A	C	A	C

Tests norms:

DIN 53505 Test Hardness - DIN 53509 ozon - DIN 53504 traction - DIN 53516 abrasion
DIN 53547 55537 Creep - DIN 53507 résistance tear resistance

ISO 7716 maintenance storage



This table give a simple a quick approch of vibration isolation in fonction of rubber deflection and exciting frequency



AMPLIFICATION AREA



ISOLATION AREA % OPTAINS

Exciting vibration tr/Min	Exciting vibration Hz	Deflection mm under load																				
		Natural frequency Hz																				
		0,5	1	2	3	4	5	6	8	10	12	15	20	25	30	35	40	60	80	100		
		22 Hz	16 Hz	12 Hz	10 Hz	8 Hz	7 Hz	6.5 Hz	5.6 Hz	5 Hz	4.6 Hz	4.3 Hz	3.6 Hz	3.2 Hz	2.9 Hz	2.7 Hz	2.5 Hz	2 Hz	1,8 Hz	1,6 Hz		
60	1																					
180	3																		43%	60%		
300	5															48%	58%	69%	80%	84%	88%	
480	8												50%	58%	74%	80%	84%	86%	88%	92%	94%	95%
600	10									53%	66%	72%	76%	84%	88%	90%	91%	92%	95%	96%	97%	
900	15						59%	71%	76%	83%	86%	89%	90%	93%	94%	95%	96%	97%	98%			
1500	25			69%	80%	88%	90%	92%	94%	95%			96%		97%			98%		99%		
1800	30		59%	80%	86%	91%	93%	94%	95%	96%	97%										99%	
3000	50	75%	88%	93%	95%	96%	97%	98%														
4500	75	90%	94%	96%	97%																	
6000	100	94%	96%		98%																	
9000	150	97%	98%																			
12000	200	98%																				

Natural frequency dynamic

In case of dynamic stress the hardness influance the stiffness. More the rubber is hard (hardness shore A) more the natural frequency change and becoming higher

Hardness Sh A	35	40	45	50	55	60	65	70	75
Ratio Dynamic/Static	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.7	1.8

Isolation D

V_{err} min⁻¹

V_e min⁻¹

$$D = 20 \lg \left[\left(\frac{\nu_{\text{err}}}{\nu_e} \right)^2 - 1 \right]$$

Natural frequency fe

Hz

Stiffness know

C in N/mm

$$f_e = \frac{1}{2 \cdot \pi} \sqrt{\frac{c}{m} \cdot 1000}$$

Natural frequency fe

Hz

Stroke know

S_{subA} in cm

$$f_e = \frac{5}{\sqrt{S_{\text{subA}}}}$$

Natural frequency Ve

tr/mm

Stroke know

S_{subA} in cm

$$\nu_e = \frac{300}{\sqrt{S_{\text{subA}}}}$$

Degres isolation Verrf

Hz

V_{err} in min⁻¹

$$\nu_{\text{eff}} = \nu_{\text{err}} \cdot \sqrt{\frac{1-\eta}{2-\eta}}$$

Degré d'isolation n

V_{err} in min⁻¹

V_e Ferr in N

$$\eta = 1 - \frac{1}{\left(\frac{\nu_{\text{err}}}{\nu_e} \right)^2 - 1}$$

Force transmise Fu

En N

Ferr en N

V err en min⁻¹

$$F_u = \frac{F_{\text{err}}}{\left(\frac{\nu_{\text{err}}}{\nu_e} \right)^2 - 1}$$

Amplitude So

m

Ferr in N

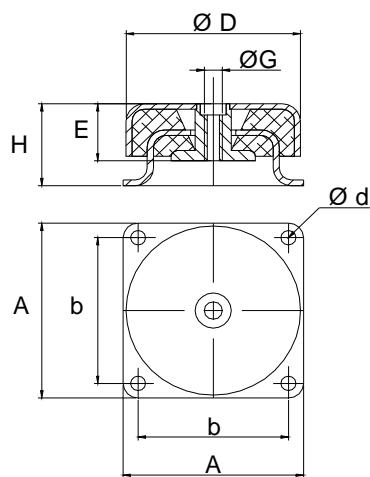
C in N/m

m in kg

W in s⁻¹

$$S_o = \frac{F_{\text{err}}}{c - m \cdot \omega^2}$$

ALL ATTITUDE MOUNT



Materials Elastomer chloroprene CR double serie avec armature et coupelle en acier zingué

Variant Elastomer VMQ with high damping value HDS

Stiffness Ratio Axiale / Radiale 1:1

Hardness 45/55/65/70/80 Sh A +-5

Bolt Without

Fail-safe

Vibration isolation

Shock damping

Oil Grease Ozone resistance...



Construction-borne noise isolation

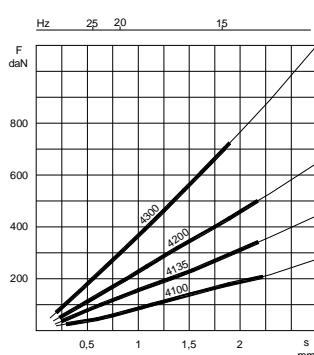
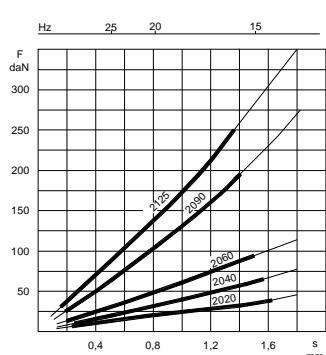
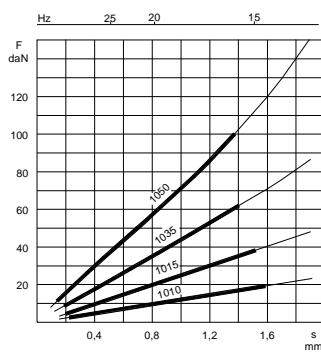
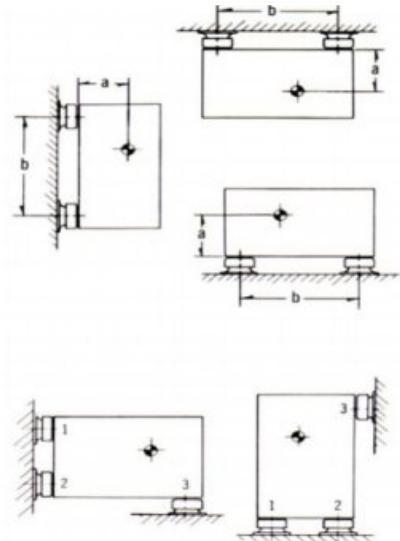


Vehicule off road application

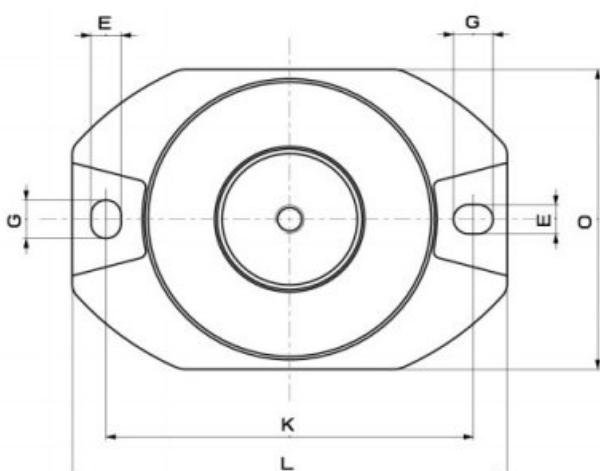
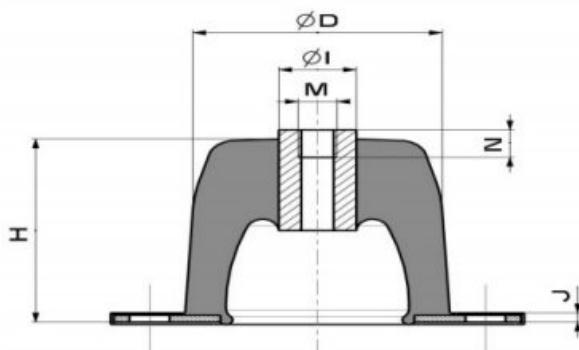


Applications	Vehicular electronics Racking system	Motor Fan	Pump Shipboard equipment
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Reference	D	H	E	A	b	d	G	Weight kg	Load Max kg Vehicule off-road Shock	Load Max kg Vibration
C 1010									20	25
C 1015	58	28	20	60	49,5	5,2	M6 (M8)	0,2	40	50
C 1035									60	85
C 1050									100	150
C 2020									40	50
C 2040									60	75
C 2060	76	38	30	76	63,5	6,4	M10 (M12)	0,45	100	120
C 2090									200	275
C 2125									250	400
C 4100									200	290
C 4135	124	63	19	133	108	11,9	M16	1,8	320	420
C 4200									500	625
C 4300									700	1100



ISOLATOR LOW LOAD



Materials	Elastomer NR bonding on steel base and upper nut
Hardness	50 / 60 / 70Sh A +/-3 sh A
Temperature	-30°C - +80°C
Natural frequency vertical	9 - 7 Hz
Natural frequency horizontal	5,5 - 3,5 Hz

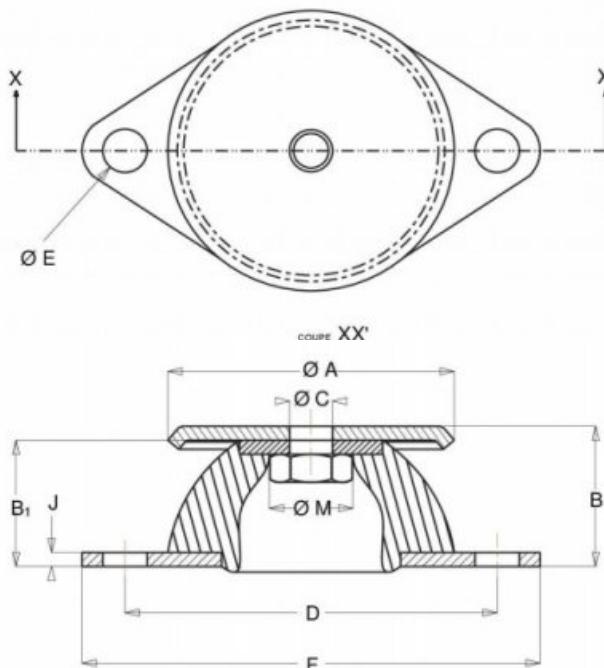
Fail-safe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Precision leveling	No possible
Isolation	Active & passive
Shock damping	Not recommended

Reference	Load Min kg	Load Max kg	Reference	Load Min kg	Load Max kg
EPCD 1 - 150	1	4	EPCD 2 - 150	5	20
EPCD 1 - 160	2	7	EPCD 2 - 160	10	30
EPCD 1 - 170	3	12	EPCD 2 - 170	20	50

typ	D	H	N	M	I	K	L	O	ExG	J
EPCD1 - XXX	40	40	6	M6	12	50	64	44	6.2*6.2	2,5
EPCD2 - XXX	60	40	6	M6	32	76	64	64	6.2*8.2	2,5

ISOLATOR WITH BOTTOM PLATE



Materials	Rubber NR ring bonded to a top and bottom fixing plate Additional cover plate for rubber protection and mass distribution Anti-slip
Hardness	45 / 60 / 75 Sh A +/-5 sh A
Natural frequency	16 - 8,5 Hz
Fail-safe	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vehicle off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Reference	Load Min kg	Load Max kg	Deflection load max mm
BCA 40 - 145	2	5	2,5
BCA 40 - 160	3	10	2,5
BCA 60 - 145	3	15	3,2
BCA 60 - 160	6	25	3,2
BCA 60 - 175	10	50	3,5
BCA 80 - 145	10	40	4,5
BCA 80 - 160	20	80	4,5
BCA 80 - 175	30	120	4,5
BCA 100 - 145	20	90	4,5
BCA 100 - 160	40	160	4,5
BCA 100 - 175	50	220	5,5
BCA 150 - 145	50	140	7,5
BCA 150 - 160	80	260	7,5
BCA 150 - 175	100	360	6,5
BCA 200 - 145	135	500	7,5
BCA 200 - 160	220	830	7,5
BCA 200 - 175	320	1250	6,5

typ	A	B	B1	C	D	E	F	M	J
BCA 40 - XX	40	20	18	M6	52	6,2	64	19	2
BCA 60 - XX	60	24	22,5	M6	76	6,2	90	18	3
BCA 80 - XX	80	27	25	M8	100	8,2	120	22	3
BCA 100 - XX	100	28	28	M10	124	10,2	148	22	3
BCA 150 - XX	150	41	38	M14	182	12,2	214	36	4
BCA 200 - XX	200	44	40	M18	240	14,5	280	48	5

Curves load/deflection on request

ISOLATOR HIGH DEFLECTION



Materials	Elastomer NR bonded to bottom plate and metal ring with threaded hole
Hardness	40 / 60 Sh A +5
Natural frequency	15 - 8 Hz

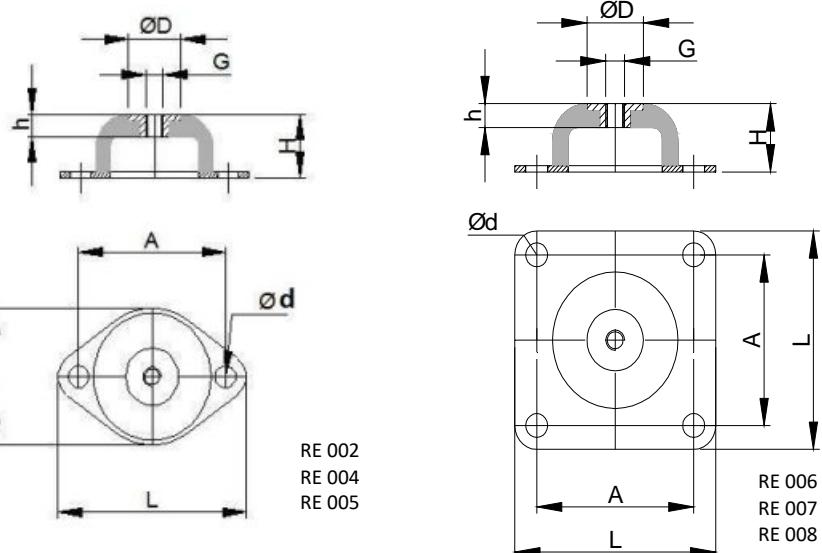
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Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

For ordering

typ + raw material code
Exemple RE004 – 160

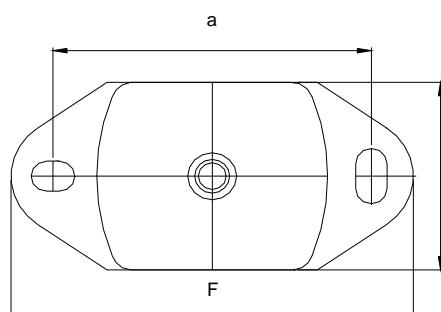
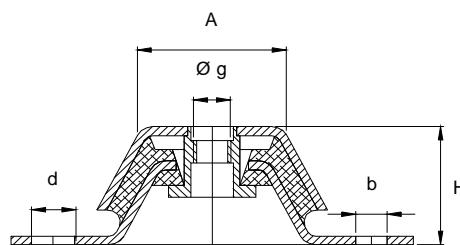
Applications

Electric motor
Climatisations
Testing Measuring
Medical equipment
Fan
Vibrator
Etc...



typ	A	C	L	H	h	D	d	G	Load Max kg		Deflection mm	
									40 Sh A 140	60 Sh A 160	40 Sh A 140	60 Sh A 160
RE 002	66	56	85	25	11	33	8	M8	20	50	4,5	3,6
RE 004	110	96	136	40	15	53	11.5	M10	70	150	10	8,5
RE 005	124	101	151	45	13	58	11.5	M10	130	220	9	7
RE 006	120		150	63	18	78	14.5	M12	280	500	13,8	13
RE 007	160		200	85	25	100	14.5	M16	380	750	18	15
RE 008	250		310	160	43	186	18	M24	1400	2500	50	42

ENGINES MOUNTS



Applications

Engines
Marine engines
Pumps
Compressors

VARIANTE Stainless steel 304L

Hardness 75/80/85 Sh A

OPTION Leveling bolt

For ordering

typ + fixing + raw material code

Exemple **EM 0 M12 – 160**

typ	A	g	H	a	E	F	d	b
EM 0	60	M12	38	100	60	120	11x14	11x14
EM 1	75	M16	50	140	75	183	20x13	13x30
EM 2	80	M20	70	182	112	230	25x18	18x33

typ	Load Max. daN			Deflection sous Load mm		
	45 Sh A 145	55 Sh A 160	65 Sh A 170	45 Sh A 145	55 Sh A 160	65 Sh A 170
EM 0	40	88	120	4,0	4,0	4,0
EM 1	145	190	305	5,0	5,0	5,0
EM 2	350	500	700	6,0	5,6	5,5

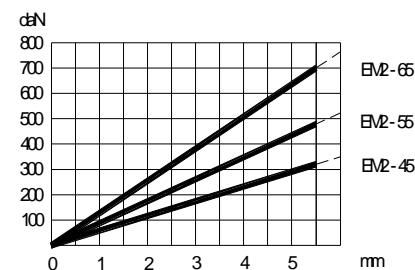
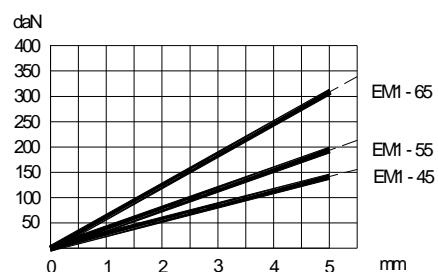
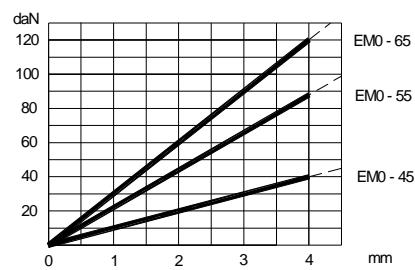
For marine engine decrease load capacity of 20%



Natural frequency 08 - 15 Hz

Hardness 45 / 55 / 65 Sh A +/- 5

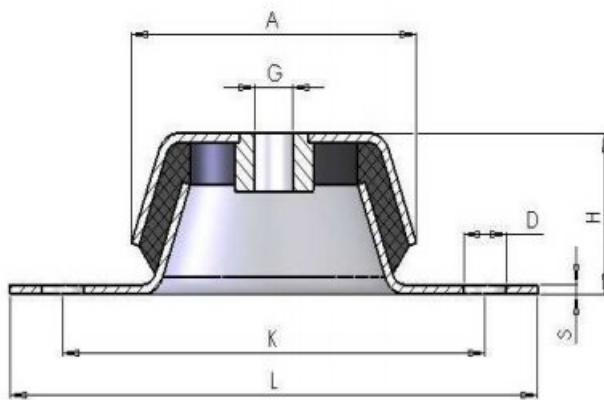
Bolt Additonal



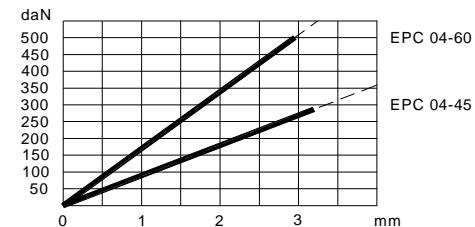
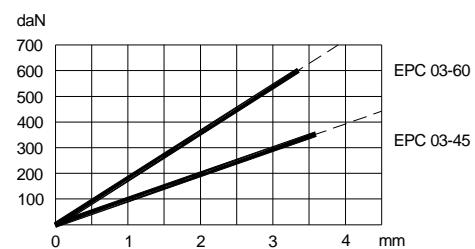
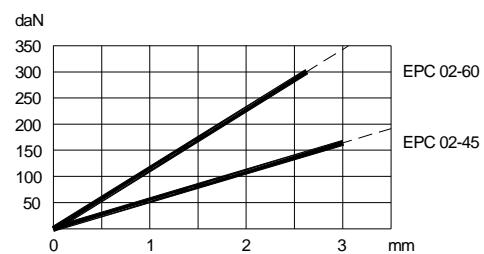
ISOLATOR STEEL CUP PROTECTION



Materials	Elastomer NR bonded on steel cup with bottom flange
Natural frequency	10 - 20 Hz
Hardness	45 / 60 / 70Sh A +-5
Tolérance	DIN 7715 M3
Bolt	Addtional
Fail-safe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



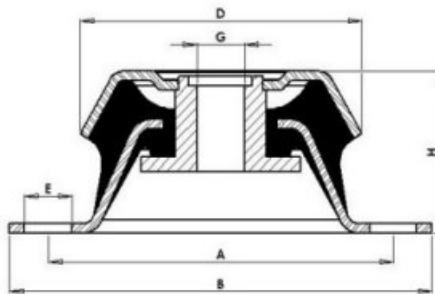
Reference	A	H	S	K	L	D	G	Load Max kg
EPC 02-145	62	30	2	85	105	8.2	M12 (M10)	150
EPC 02-160								230
EPC 03-145	90	45	2.5	117	151	10.2	M12	250
EPC 03-160								350
EPC 04-145	115	45	3	160	205	16.2	M16 (M24)	280
EPC 04-160								600



ISOLATOR STEEL CUP PROTECTION FAIL-SAFE



Materials	Elastomer NR bonded on steel cup with bottom flange Integrate anti-rebound washer Fail-safe
Natural frequency	10 - 20 Hz
Hardness	45 / 60 / 75 Sh A +5
Tolerance	DIN 7715 M3
Bolt	No
Fail-safe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vehicle off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

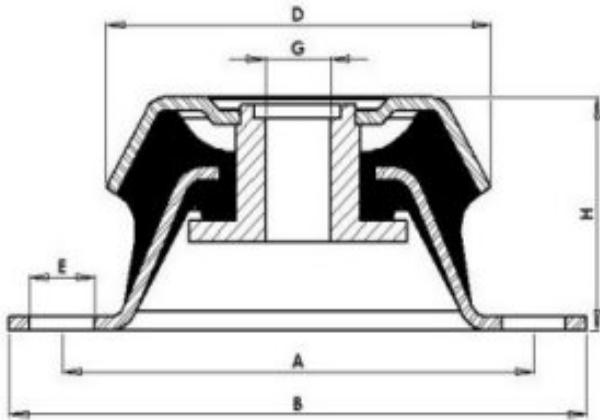


typ	D	H	S	B	A	E	G
EPCR 8335 M10-XX	83	35	3	130	108	9	M10
EPCR 8335 M12-XX	83	35	3	130	108	9	M12
EPCR 10641 M12-XX	106	41	3,5	170	137	12,5	M12
EPCR 10641 M16-XX	106	41	3,5	170	137	12,5	M16

For ordering ex EPCR 8335 M12-145

Reference	Load Max. daN	Deflec- tion mm	Stiffness daN/mm	Reference	Load Max. daN	Deflec- tion mm	Stiffness daN/mm	Reference	Load Max. daN	Deflec- tion mm	Stiffness daN/mm
EPCR 8335-145	110	4,5	24,44	EPCR 8335-160	180	4,3	41,80	EPCR 8335-175	280	4,3	65,10
EPCR 10641-145	200	5	40	EPCR 10641-160	400	5,6	71,50	EPCR 10641-175	580	5	116

ISOLATOR STEEL CUP PROTECTION FAIL-SAFE



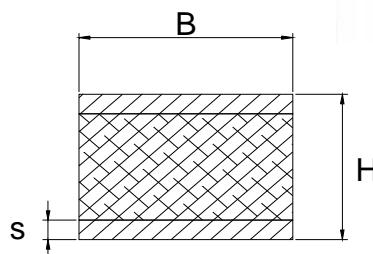
typ	D	H	S	B	A	E	G
EPCR 8335 M10-XX	83	35	3	135	108	11.5x15	M10
EPCR 8335 M12-XX	83	35	3	135	108	11.5x15	M12
EPCR 9245 M12-XX	92	42	3	150	123.5	10x15	M12
EPCR 10641 M12-XX	106	42	3,5	175	143	13x19	M12
EPCR 12548 M16-XX	125	48	3,5	192	156	14.5x20	M16
EPCR 15054 M16-XX	150	54	3,5	218	182	14x18	M16

Reference	Load Max. daN	Deflec-tion mm	Stiffness-moyenne daN/mm	Reference	Load Max. daN	De-flectio n mm	Stiffness-moyenne daN/mm	Reference	Load Max. daN	Deflec-tion mm	Stiffness-moyenne daN/mm
EPCR 8335-140	80	4	20	EPCR 8335-160	200	3,7	38	EPCR 8335-175	280	4,3	65,10
EPCR 9245-140	220	3,5	63	EPCR 9245-160	350	3,5	100	EPCR 9245-175	510	3,6	141,67
EPCR 10641-140	380	5	76	EPCR 10641-160	480	5	96	EPCR 10641-175	580	5	116
EPCR 12548-140	500	5	100	EPCR 12548-160	840	5	168	EPCR 10641-175	980	5	196
EPCR 15054-140	600	6	100	EPCR 15054-160	900	7	129	EPCR 15054-175	1400	6	250

typ	D	H	S	B	A	E	G
EPCR 15554 M20-XX	150	54	3	170x170	132	14x18	M20
EPCR 18086 M20-XX	180	86	3	190x190	150	18.5x21	M20
EPCR 220105M20-XX	220	105	3	220x220	170	17.5x20	M20



Reference	Load Max. daN	Deflec-tion mm	Stiffness-moyenne daN/mm	Reference	Load Max. daN	De-flectio n mm	Stiffness-moyenne daN/mm
EPCR 15554 M20-140	600	6	100	EPCR 15554 M20-160	7	3,7	129
EPCR 18086 M20-140	800	10	80	EPCR 18086 M20-160	1700	9	189
EPCR 220105M20-140	1700	113	76	EPCR 220105M20-160	3200	15	213



Materials	Elastomer NR bonding on 2 steel plate Length lg 2000 mm Option NBR CR
Hardness	55 Sh A +5 option 45 / 65 Sh A
Tolérance	DIN 7715 M3
Mounting	Machining steel plate

Fail-safe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Features

Multiple combinations allowing to adapt the length according to the distribution of the loads on the supports
 High load capacity
 Axial and radial stiffness > transverse stiffness
 Custom machining - Tapping in reinforcement - Cutting - Cutting of elastomer
 The applicable load varies according to the length, it is preferable to consult us

Reference	Dimensions		
	B	H	S
ER 2525 TA	25	25	5
ER 2530 TA	25	30	5
ER 3030 TA	30	30	5
ER 4020 TA	40	20	5 ou 10
ER 4030 TA	40	30	5 ou 10
ER 4040 TA	40	40	5 ou 10
ER 5030 TA	50	30	5 ou 10
ER 5040 TA	50	40	5 ou 10
ER 5050 TA	50	50	5 ou 10
ER 5070 TA	50	70	5 ou 10
ER 6030 TA	60	30	5 ou 10
ER 6040 TA	60	40	5 ou 10
ER 6060 TA	60	60	5 ou 10
ER 6080 TA	60	80	5 ou 10
ER 7040 TA	70	40	5 ou 10
ER 7050 TA	70	50	5 ou 10

Reference	Dimensions		
	B	H	S
ER 7060 TA	70	60	5 ou 10
ER 8045 TA	80	45	5 ou 10
ER 8060 TA	80	60	5 ou 10
ER 8070 TA	80	70	5 ou 10
ER 10050 TA	100	50	10 ou 15
ER 10060 TA	100	60	10 ou 15
ER 10070 TA	100	70	10 ou 15
ER 10080 TA	100	80	10 ou 15
ER 100100 TA	100	100	10 ou 15
ER 12050 TA	120	50	10 ou 15
ER 12060 TA	120	60	10 ou 15
ER 12080 TA	120	80	10 ou 15
ER 15060 TA	150	60	10 ou 15
ER 15080 TA	150	80	10 ou 15
ER 150100 TA	150	100	10 ou 15
ER 200100 TA	200	100	10 ou 15

NO NOISE FIXING

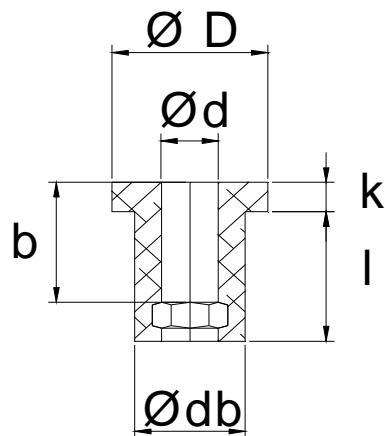


Materials Rubber NBR 370
 Nut bonding

Hardness 70 Sh A +5

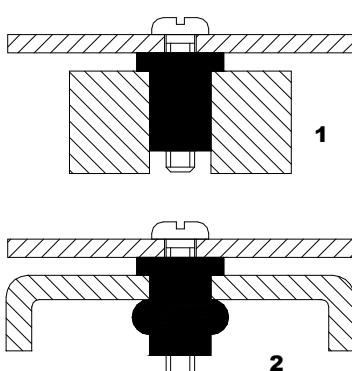
Natural frequency > 50 Hz

Fail-safe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Applications Steel metal protection covers
 Fans
 Electronic devices
 Small pumps
 Acoustic panel

Réf.	Dim. mm	D mm	dB mm	d mm	I mm	k mm	b mm
ECF 3	M3	9	7.2	3.4	9.0	2.5	8.0
ECF 4	M4	12	9.3	4.4	11.5	3.0	10.5
ECF 5	M5	15	10.2	5.4	14.5	3.5	13.0
ECF 6	M6	18	12.7	6.4	17.0	4.0	15.0
ECF 8	M8	24	16.5	8.4	22.0	5.0	19.5



Réf.	Passage mm	épaisseur mm	Couple en Nm		Load Max kg		
			Mont. 1	Mont. 2	1	2	A
ECF 3	7.2 – 7.5	0.6 – 2.5	0.3 – 0.4	0.4 – 0.5	1	5	2.5
ECF 4	9.3 – 9.6	0.8 – 3.3	0.4 – 0.6	0.4 – 0.5	1	7	3.5
ECF 5	10.2 – 10.5	0.8 – 4.3	0.6 – 0.10	0.5 – 0.6	1.5	10	5
ECF 6	12.7 – 13.0	1.5 – 5.0	0.23 – 0.35	0.7 – 0.9	3	14	7
ECF 8	16.5 – 16.8	1.5 – 6.5	0.30 – 0.40	0.16 – 0.18	5	28	14
							B

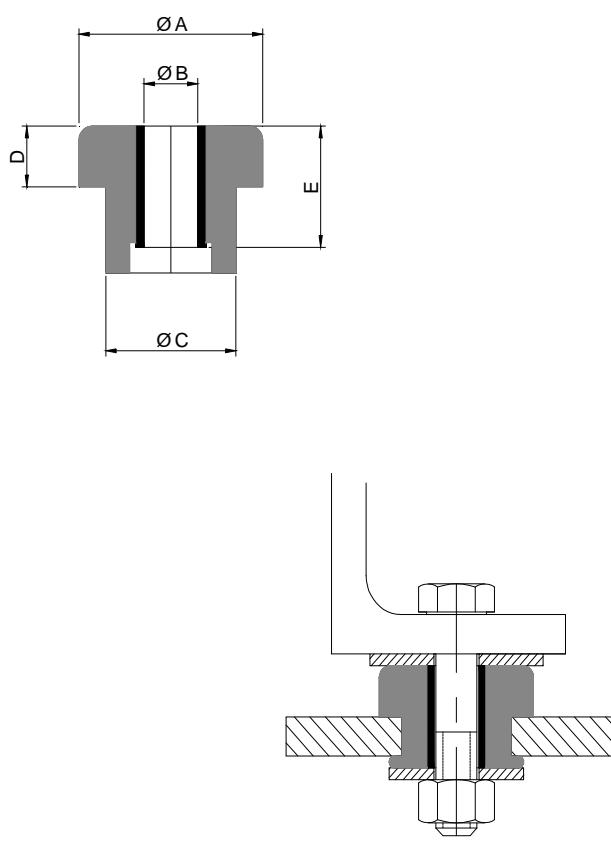
.A Mounting compression

.B Mounting cisaillement

FIXING WASHER



Materials	NR rubber bonding inner insert Fail safe if using washer
Hardness	45 / 60 / 75 Sh A ±5
Température	-30°C +80°C
Natural frequency	20 - 10 Hz
Fail-safe	<input checked="" type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



typ	A	B	C	D	E
PS 27*10/20	27,7	10	20,6	5,6	17,5
PS 44*13/30	44,5	13	31,5	10,4	25,4
PS 50*13/34	50,8	13	34,3	13,5	35
PS 63*16/41	63,5	16	41,1	15,7	44,5
PS 95*20/56	95	20	56,6	25,4	50,8

Reference	Hardness		Load daN		Deflection Load Max
	Sh A	Mini	Maxi	mm	
PS 27*10/20 145	45	8	15	0,7	
PS 27*10/20 160	60	10	50	0,7	
PS 44*13/30 145	45	15	75	1,2	
PS 44*13/30 160	60	25	100	1,2	
PS 50*13/34 160	60	35	150	1,2	
PS 50*13/34 175	75	80	330	1,2	

Reference	Hardness		Load daN		Flèche Load Max
	Sh A	Mini	Maxi	mm	
PS 63*16/41 160	60	60	250	2	
PS 63*16/41 175	75	125	500	2	
PS 95*20/56 160	60	175	700	3	
PS 95*20/56 175	75	250	1000	3	

2 WASHERS MOUNT



Materials 2 elastomer parts 1 ring 1 bonded on inner metal tube Rubber CR Variant NR

Hardness 45 55 60 Sh A +5 others Hardness on request

Temperature -30°C + 80°C

Natural frequency 20 - 10 Hz

Fail-safe

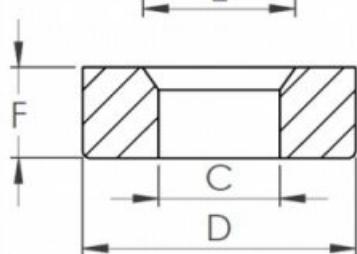
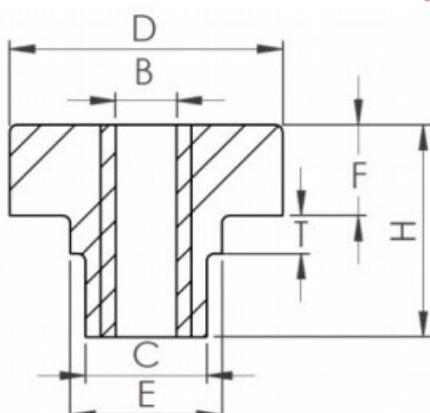
Vibration isolation

Shock damping

Oil Grease Ozone resistance...

Construction-borne noise isolation

Vehicule off road application



Mounting :

Contact us for specification



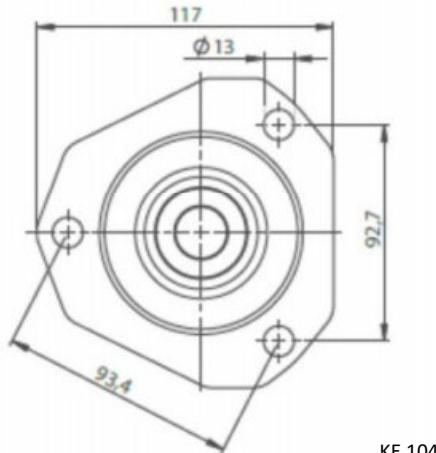
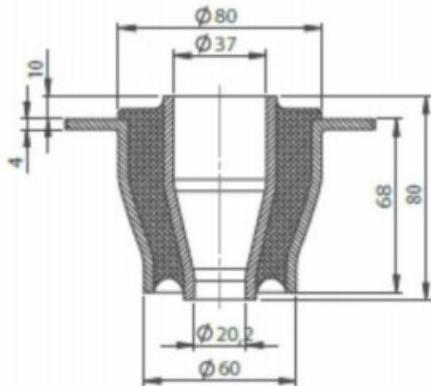
Special parts

typ	D	B	C	E	F	T	H
PSR 221	33,2	10,4	20,6	25	12,3	9,5	31,7
PSR 222	47,7	13,5	31,5	33	19,8	14	49,2
PSR 223	64,8	16,7	34,3	40,1	22,8	22	61,7
PSR 224	89	23,8	41,1	58,4	25,4	28,5	73,1
PSR 225	124	27	56,6	63,5	31,7	32	85,8

Reference	Hardness		Load daN	Deflection Load Max mm
	Sh A	Mini		
PSR 221-160	60	10	64	1,3
PSR 222-160	60	10	110	1,8
PSR 223-160	45	15	180	2,2
PSR 224-160	60	25	320	2,3
PSR 225-160	60	35	700	2,5

Reference	Frame thickness	
	Min i mm	Max i mm
PSR 221-160	9,5	9,5
PSR 222-160	13	14
PSR 223-160	19	22
PSR 224-160	26	28
PSR 225-160	20	32

CONICAL MOUNT



Materials

Elastomer NR bonded between the inner tube and outer housing
 Zinc anti-corrosion
 Washer for security monting and anti-rebound

Hardness

45 - 55 - 70 Sh A +5

Tolerance

DIN 7715 M3

Natural frequency > 12 Hz

Fail-safe



Vibration isolation



Shock damping



Oil Grease Ozone resistance...



Construction-borne noise isolation



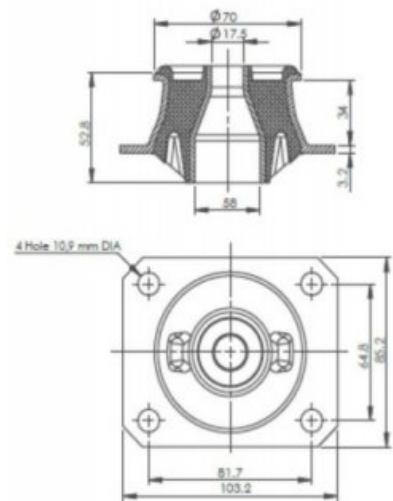
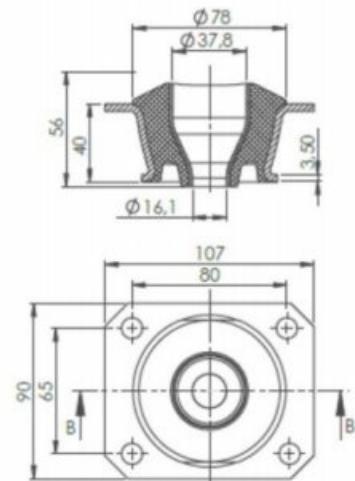
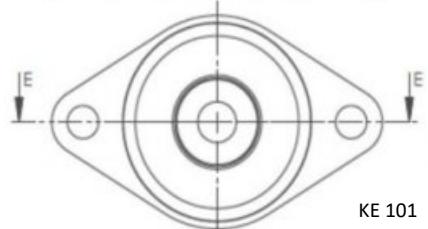
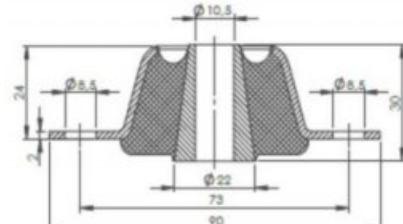
Vehicle off road application



Features

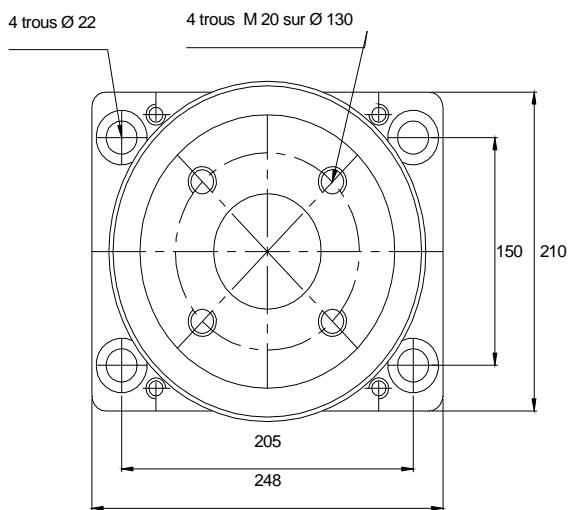
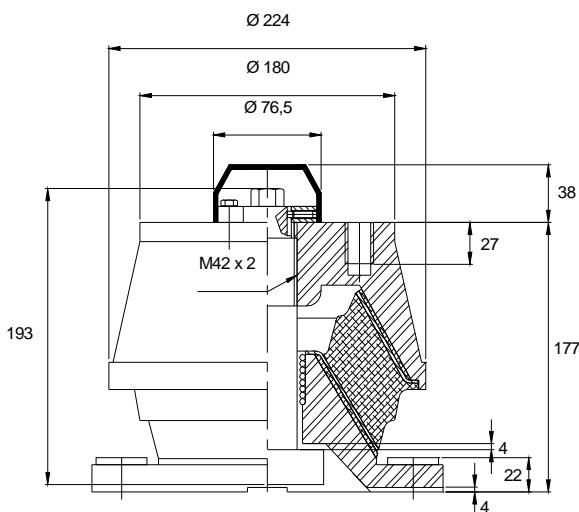
- Rubber working compression/shearing
- Medium deflection
- Lateral stability
- Stiffnesss differents 3 axes X Y Z
- Fail-safe with washer

Applications Cabin
 Motor
 Frame



Curves load/deflection on request

HEAVY LOAD ISOLATOR



Materials Rubber NR or CR
 AU4G casting

Natural frequency 8-10 Hz

Hardness 50 Sh A +-5

Tolérance DIN 7715 M3

Fail-safe

Vibration isolation

Shock damping

Oil Grease Ozone resistance...

Construction-borne noise isolation

Vehicule off road application

Features

Rubber working in semi-shear protected from damage
Integrated stop to control vertical and horizontal movements
High elastic deflection for high efficiency for shock and vibration insulation
High mechanical strength
Differentiated stiffness in both axes; Horizontal stiffness is superior to vertical stiffness so the transverse stability is optimized.

Applications Engine
 Marine engine
 Blower
 Exhaust
 Cabin

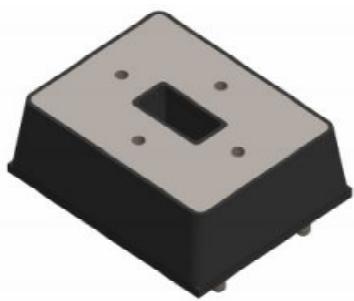
Nous consulter pour le Mounting

Reference	Load maximum compression kg	Deflection Max mm	Stiffness shearing N/mm
J 248177 -150	3100	7.5	413

Other Load on request

Weight: 14 kg

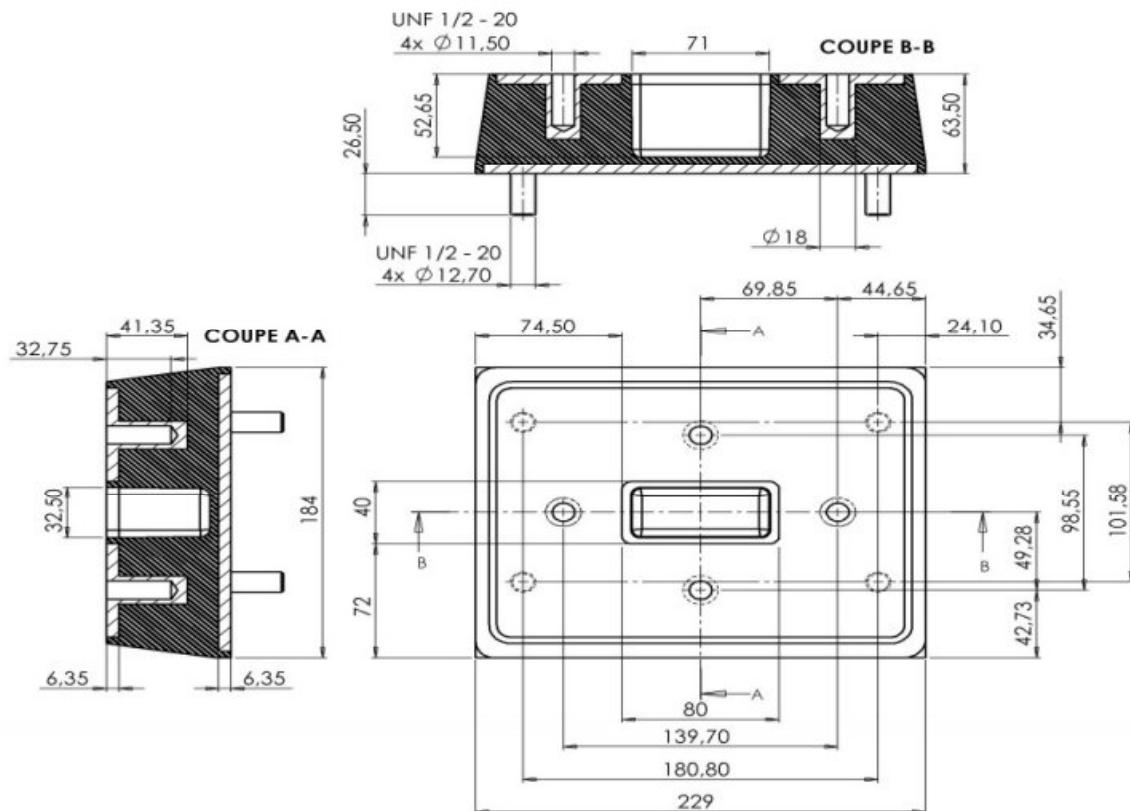
DAMPER HIGH LOAD CAPACITY



Materials	Elastomer NR or NBR Bonded too steel zinc plates
Hardness	65 Sh A +- 5
Tolerance	DIN 7715 M3
Fixing	UNF

Fail-safe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vehicle off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

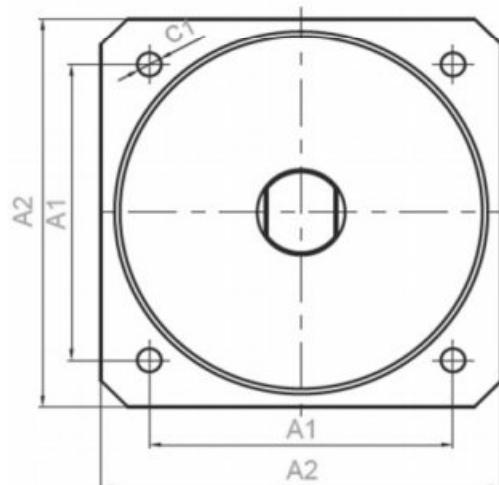
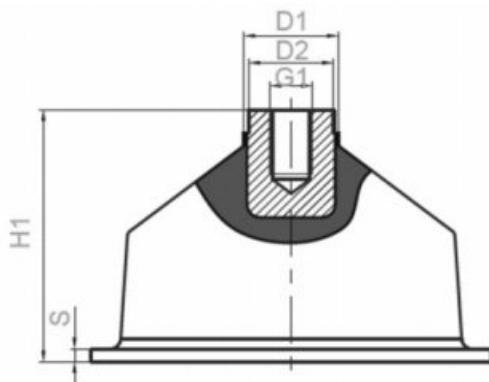
Reference	Load maximum Compression kg	Stiffness compression N/mm	Load maximum Shearing kg	Stiffness shearing N/mm
J 6332 – 165	5900	7100	740	740



DAMPER HIGH DEFLECTION



Materials	Conical rubber NR (Variant CR) bonded on base plate with 4 fixing holes and top steel fixing ring
Hardness	45 - 65 Sh A +-5
Temperature	NR -30C° +80 C° CR -30C° +120 C°
Natural frequency	4 to 8 Hz
Fail-safe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



Application	Compressor Alternator
On-board equipment under constraints of shocks	Transformer Fan Pump Packaging/Shipping

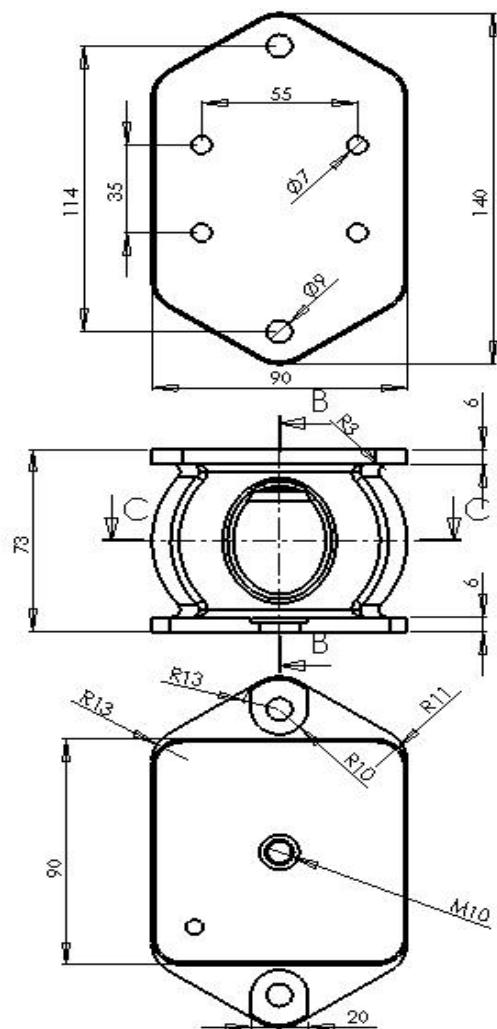
typ	A1	A2	H1	D1	D2	S	C1	G1
J 150097	114	140	97.5	35	27	5	9	M16
J 165125	140	165	125.5	54	42	10	13	M16
J 190250	210	250	154	116	41	15	18	M24

Reference	Load kg Minimum Fz	Load kg Maximum Fz	Stiffness Fz N/mm	Deflection mm Load Max
J 150097-145	60	150	166	9
J 150097-165	160	400	444	9

Reference	Load kg Minimum Fz	Load kg Maximum Fz	Stiffness Fz N/mm	Deflection mm Load Max.
J 165125-145	100	245	144	17
J 165125-165	200	600	353	17

Reference	Load kg Minimum Fz	Load kg Maximum Fz	Stiffness Fz N/mm	Deflection mm Load Max
J 190250-145	300	720	55,40	13
J 190250-155	400	920	70,80	13

DAMPER HIGH DEFLECTION



Materials Rubber NR bonded on 2 steel fixing plate

Load 25—150 Kilos

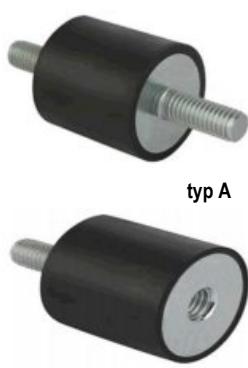
Stiffness

- Stiffness Kx 145 N/mm
- Stiffness Ky 20 N/mm
- Stiffness Kz 30 N/mm

Shock deflection 15 mm axial

Fail-safe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicle off road application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CYLINDRICAL MOUNT



Materials Rubber NR bonding
Metal parts zinc Rohs
Variant stainless steel 304L 316L

Form typ A DIN 95363 Form A
typ B DIN 95363 Form B
typ C DIN 95363 Form C
typ D DIN 95364 Form D
typ E DIN 95364 Form E

Elastomer Variant CR EPDM CR VMQ

Temperature NR – 40° + 80°
For other rubber on request

Hardness Standard 55 Sh A
Variante 45 / 70 Sh A
Sur demande 65 / 80Sh A

Tolerance DIN 7715 M3
Hardness +/- 5 Sh A

Fail-safe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Avantages

- .Extensive range 5 series
- .Quick fixing
- .Cost
- .Universal mounts

Mounting

- .Compression
- .Semi-cisaillement
- .Cisaillement

Traction not available

Variant

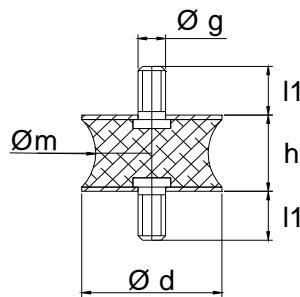
Stainless steel





Reference	Deflec-	Stiffness	Load	Reference	D	H	G	I2	Deflec-	Stiffness	Load	Reference	Deflec-	Stiffness	Load	
	tion	Cz							mm	daN/mm			mm	daN/mm		
Soft	mm	daN/mm	daN	Standard					mm	daN/mm	daN	Hard		mm	daN/mm	daN
EC 7525/B M12x37-145	5	88,35	44	EC 7525/B M12x37-155	75	25	M12x37	12	5	117,78	59	EC 7525/B M12x37-170	5	261,11	13	
EC 7535/B M12x37-145	6	67,17	4	EC 7535/B M12x37-155	75	3	M12x37	12	6	89,97	54	EC 7535/B M12x37-170	6	132,34	795	
EC 7535/B M12x37-145	7	38	265	EC 7535/B M12x37-155	75	35	M12x37	12	7	66,5	465	EC 7535/B M12x37-170	7	14,5	73	
EC 7540/B M12x37-145	8	3,97	245	EC 7540/B M12x37-155	75	40	M12x37	12	8	59,85	48	EC 7540/B M12x37-170	8	84,55	675	
EC 7545/B M12x37-145	9			EC 7545/B M12x37-155	75	45	M12x37	12	9			EC 7545/B M12x37-170	9			
EC 7550/B M12x37-145	1	26,4	264	EC 7550/B M12x37-155	75	50	M12x37	12	1	47,5	475	EC 7550/B M12x37-170	1	69,1	69	
EC 7560/B M12x37-145	11	18,9	28	EC 7560/B M12x37-155	75	55	M12x37	12	11	36,4	4	EC 7560/B M12x37-170	11	52	57	
EC 7570/B M12x37-145	14	15,51	215	EC 7570/B M12x37-155	75	70	M12x37	12	14	24,44	34	EC 7570/B M12x37-170	14	49,81	695	
EC 7530/B M16x42-145	6	67,17	4	EC 7530/B M16x42-155	75	30	M16x42	16	6	89,97	54	EC 7530/B M16x42-170	6	132,34	795	
EC 7535/B M16x42-145	7	38	265	EC 7535/B M16x42-155	75	35	M16x42	16	7	66,5	465	EC 7535/B M16x42-170	7	14,5	73	
EC 7540/B M16x42-145	8	3,97	245	EC 7540/B M16x42-155	75	40	M16x42	16	8	59,85	48	EC 7540/B M16x42-170	8	84,55	675	
EC 7545/B M16x42-145	9			EC 7545/B M16x42-155	75	45	M16x42	16	9			EC 7545/B M16x42-170	9			
EC 7550/B M16x42-145	1	26,4	264	EC 7550/B M16x42-155	75	50	M16x42	16	1	47,5	475	EC 7550/B M16x42-170	1	69,1	69	
EC 7560/B M16x42-145	11	18,9	28	EC 7560/B M16x42-155	75	55	M16x42	16	11	36,4	4	EC 7560/B M16x42-170	11	52	57	
EC 7570/B M16x42-145	14	15,51	215	EC 7570/B M16x42-155	75	70	M16x42	16	14	24,44	34	EC 7570/B M16x42-170	14	49,81	695	
Soft	mm	daN/mm	daN	Standard					mm	daN/mm	daN	Hard		mm	daN/mm	daN
EC 8030/B M14x37-145	6	99,18	595	EC 8030/B M14x37-155	8	30	M14x37	14	6	13,2	78	EC 8030/B M14x37-145	6	192,9	115	
EC 8040/B M14x37-145	8	52,35	42	EC 8040/B M14x37-155	8	40	M14x37	14	8	71,64	58	EC 8040/B M14x37-145	8	16,5	85	
EC 8050/B M14x37-145	1	43,7	43	EC 8050/B M14x37-155	8	50	M14x37	14	1	6	55	EC 8050/B M14x37-145	1	89,47	52	
EC 8060/B M14x37-145	12			EC 8060/B M14x37-155	8	60	M14x37	14	12			EC 8060/B M14x37-145	12			
EC 8080/B M14x37-145	16	17,9	29	EC 8080/B M14x37-155	8	80	M14x37	14	16	25,2	4	EC 8080/B M14x37-145	16	38,38	615	
Soft	mm	daN/mm	daN	Standard					mm	daN/mm	daN	Hard		mm	daN/mm	daN
EC 10040/B M16x42-145	8	92,59	74	EC 10040/B M16x42-145	1	4	M16x42	16	8	147,85	118	EC 10040/B M16x42-170	8	273,82	219	
EC 10050/B M16x42-145	1	6,2	6	EC 10050/B M16x42-145	1	5	M16x42	16	1	132,42	132	EC 10050/B M16x42-170	1	153,6	153	
EC 10055/B M16x42-145	11	49,82	545	EC 10055/B M16x42-145	1	55	M16x42	16	11	88,83	98	EC 10055/B M16x42-170	11	125,3	138	
EC 10060/B M16x42-145	12			EC 10060/B M16x42-145	1	6	M16x42	16	12			EC 10060/B M16x42-170	12			
EC 10070/B M16x42-145	14	34,1	48	EC 10070/B M16x42-145	1	7	M16x42	16	14	62,39	88	EC 10070/B M16x42-170	14	89,4	125	
EC 10075/B M16x42-145	15	29,17	44	EC 10075/B M16x42-145	1	75	M16x42	16	15	54,15	81	EC 10075/B M16x42-170	15	78,19	117	
EC 100100/B M16x42-145	2			EC 100100/B M16x42-145	1	1	M16x42	16	2			EC 100100/B M16x42-170	2			
EC 10040/B M20x45-145	8	92,59	74	EC 10040/B M20x45-145	1	4	M2x45	2	8	147,85	118	EC 10040/B M20x45-170	8	273,82	219	
EC 10045/B M20x45-145	1	6,2	6	EC 10045/B M20x45-145	1	5	M2x45	2	1	132,42	132	EC 10045/B M20x45-170	1	153,6	153	
EC 10050/B M20x45-145	11	49,82	545	EC 10050/B M20x45-145	1	55	M2x45	2	11	88,83	98	EC 10050/B M20x45-170	11	125,3	138	
EC 10060/B M20x45-145	12			EC 10060/B M20x45-145	1	6	M2x45	2	12			EC 10060/B M20x45-170	12			
Soft	mm	daN/mm	daN	Standard					mm	daN/mm	daN	Hard		mm	daN/mm	daN
EC 15050/B M20x45-145	1	15,34	15	EC 155/B M20x45-155	15	5	M2x45	2	1	254,71	255	EC 155/B M2x45-170	1	378,42	39	
EC 15060/B M20x45-145	12	133,86	14	EC 156/B M2x45-155	15	6	M2x45	2	12	233,68	245	EC 156/B M2x45-170	12	348,18	37	
EC 15075/B M20x45-145	15	91,43	13	EC 1575/B M20x45-155	15	75	M2x45	2	15	167,46	24	EC 1575/B M2x45-170	15	238	36	
EC 150100/B M20x45-145	2	8,84	12	EC 151/B M20x45-155	15	1	M2x45	2	2	115,32	23	EC 151/B M2x45-170	2	27,95	345	
EC 200100/B M20x45-145	2	13,97	28	EC 21/B M20x45-155	2	1	M2x45	2	2	19,37	38	EC 21/B M2x45-170	2	27,54	54	

DIABOLO

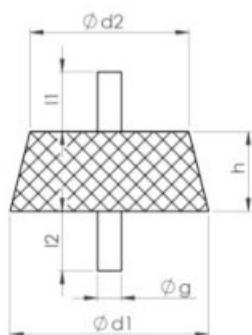


Variant typ B Male/Female
 typ C Femelle/Female

Materials	NR 55 variant NBR CR EPDM Zinc steel				
Form	DIN 95363				
Temperature	-40° +80°				
Hardness	155 Standard 55 Sh A +-5				
Fail-safe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reference	d	m	h	g	l1
EDC 10/10 M4	10	8	10	M4	10
EDC 12-7/15 M4	12	7	15	M6	18
EDC 15-12/15 M4	15	12	15	M4	10
EDC 20/15 M6	20	14	15	M6	18
EDC 20-14/30 M6	20	14	30	M6	18
EDC 20-16/20M6	20	16	20	M6	18
EDC 25-10/20 M6	25	10	20	M6	18
EDC 25-17/20 M6	25	17	20	M6	18
EDC 30-20/20 M8	30	20	20	M8	20
EDC 40-20/30 M8	40	20	30	M8	23
EDC 40-25/40 M8	40	25	40	M8	23
EDC 40-32/48 M8	40	32	48	M8	23
EDC 50/50 M10	50	35	50	M10	28
EDC 50/30 M10	50	28	30	M10	28
EDC 75/40 M12	75	60	40	M12	37
EDC 80/60 M12	80	60	60	M12	37
EDC 110/60 M16	110	86	60	M14	28

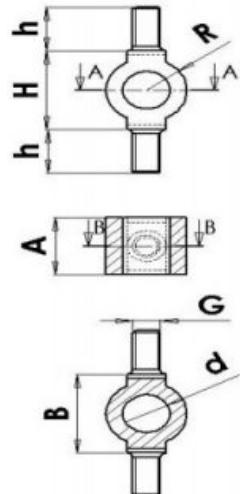
ECC

CONICAL MOUNT



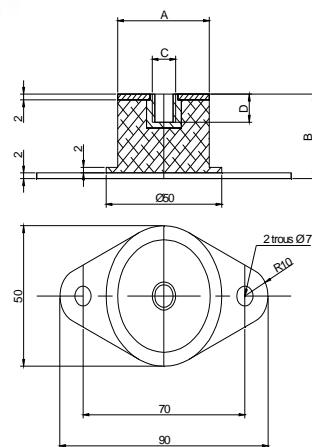
Reference	d1	d2	h	g	l1 l2
ECC 10/10 M4	28	38	22	M8	20
ECC 3245/A M8	32	45	30	M8	20

SMALL LOAD



Reference	B	A	H	G x h	d	R	Load Max daN
PF 12.5/12.5 M4	12.5	9,5	12.5	M4x10	5.6	5,25	1
PF 17/14 M4	17	13	14	M4x10	6	7	1,8
PF 25/30 M5	25	20	30	M5x14/6	12	7	5
PF 36/40 M10	36	26	40	M10x20	17	7	10
Fail-safe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>						
Shock damping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FLANGE MOUNT



Reference	A	B	C	D	Load
EP 01.55 M6	25	20	M6	6	15 - 35 kg
EP 02.55 M8	40	30	M8	8	30 - 90 kg
EP 03.55 M10	50	40	M10	10	60 - 120 kg

Fail-safe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

BUTEE



Materials NR variante NBR CR EPDM
Insert acier zingué

Forme DIN 95364F

Température -40° +80°

Hardness 155 Standard 55 Sh A +5

Fail-safe

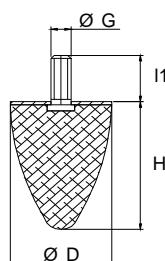
Vibration isolation

Shock damping

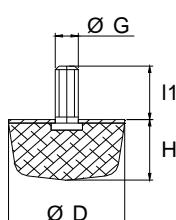
Oil Grease Ozone resistance...

Construction-borne noise isolation

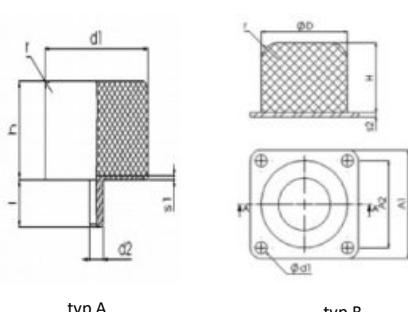
Vehicule off road application



Reference	D	H	G	I1	Effort max daN	Course mm
EBP 10/10	10	10	M5	12		
EBP 20/24	20	24	M6	18	60	14
EBP 25/20	25	20	M6	18		
EBP 30/30	30	30	M8	20	140	15
EBP 30/36	30	36	M8	20	140	19
EBP 30/36	30	36	M8	20	140	19
EBP 50/58	50	50	M8 (M10)	20	330	22
EBP 50/64	50	64	M10	28	400	32
EBP 75/89	75	89	M12	33	900	47
EBP 100/85	100	85	M16	37	1200	35
EBP 115/136	115	136	M16	37		



Reference	D	H	G	I1	Effort Max daN	Course mm
EBK 25/17	25	17	M6	18	100	6,5
EBK 35/40	35	40	M8	23	350	5,5
EBK 40/30	40	30	M8	23		
EBK 50/18	50	18	M10	28	500	4,5
EBK 50/30	50	30	M10	28	500	4,0
EBK 75/28	75	28	M12	37		
EBK 80/30	80	30	M12	37	2000	8,5
EBK 125/45	125	45	M16	45	5000	18



Reference	D	H	A1	A2	d1	G	I1	r	S1	s2	T	Course mm	Force kN	Energie Joules
EBR 4032B	40	32	50	40	5,5		23	8	2	2	8	18	15	70
EBR 5040B	50	40	63	50	6,5		28	10	3	2	10	22	24	140
EBR 6350B	63	50	80	63	6,5		28	12,5	4	3	10	28	37,5	280
EBR 8063B	80	63	100	80	9		37	18	5	3	12	35	60	560
EBR 10080B	100	80	125	100	9		36	20	6	4	12	44	95	1120
EBR 125100B	125	100	160	125	11		36	25	6	4	16	55	150	2240
EBR 160125B	160	125	200	160	11		44	32	8	6	16	68	240	4400
EBR 200160B	200	160	250	200	13		44	40	8	6	18	38	375	8800



Materials NR Rubber
Bonded on square steel plate

Forme Hollow cylindrical

Hardness 60 / 75 Sh A +5

Tolérance DIN 7715 M3

Fail-safe

Vibration isolation

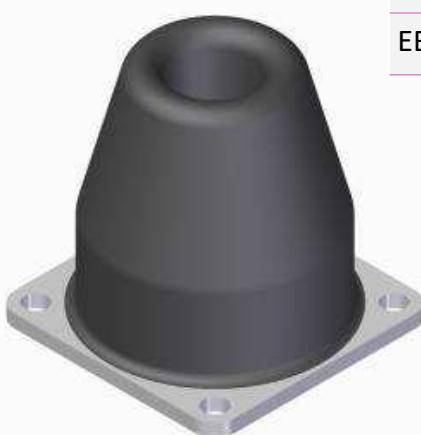
Shock damping

Oil Grease Ozone resistance...

Construction-borne noise isolation

Vehicule off road application

typ	Base	Height	Entraxe	Fixing hole
EBRS 110	110x110	110	90	8.5



Reference	Energy	Deflection	Reaction force
EBRS 110.160	330 J	50 mm	1800 daN
EBRS 110.175	550 J	50 mm	3400 daN

ISOLATEUR METALLIQUE



Materials Spring with Shot peeling treatment to improve its dynamic resistance and epoxy finish for better protection. Polyethylene softened with closed cells to prevent the entry of solid elements and avoid any damage to the coils. Zinc plated metal parts

Natural frequency 3 - 5 Hz

Ratio stiffness Kx/Ky : 0.7

SurLoad 25% de la Load maximale

Fail-safe

Vibration isolation

Shock damping

Oil Grease Ozone resistance...

Construction-borne noise isolation

Vehicule off road application

Reference	Diameter mm	height mm	Fixing
V 1.xx	50,50	50,50	M8/M8

Reference	Load KG	Deflection mm	Load Max	Deflection mm	Stiffness daN/mm	Weight kg
V 1.15	2	1,2	15	12	1,25	0,15
V 1.25	3	1,2	25	12	2,50	0,16
V 1.50	5	1,2	50	12	4,17	0,17
V 1.75	8	1,2	75	12	6,25	0,17
V 1.100	10	1,2	100	12	8,33	0,17

VR 1

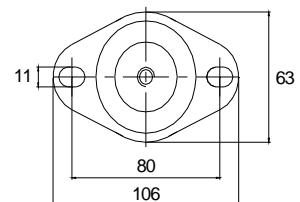
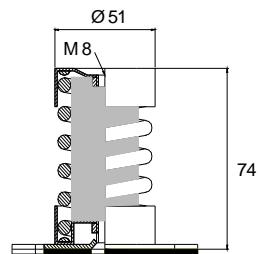
STEEL SPRING ISOLATOR

ELASTOPLOTS®
PLOTS ET SUPPORTS

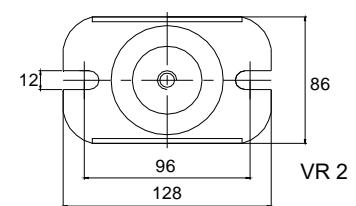
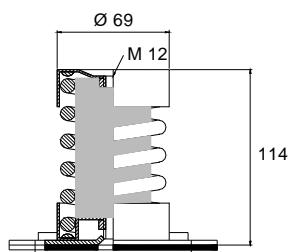


Materials	Spring with Shot peeling treatment to improve its dynamic resistance and epoxy finish for better protection. Polyethylene softened with closed cells to prevent the entry of solid elements and avoid any damage to the coils. Zinc plated metal parts
Natural frequency	3 - 5 Hz
Ratio stiffness	Kx/Ky : 0.7
Overload	25% Maximal load
Fail-safe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Reference	Load Min kg	Deflection Min mm	Load Max kg	Deflection Max mm	Stiffness daN/mm	Weight kg
VR 1.5	2	10	5	25	0,2	0,28
VR 1.15	6	10	15	25	0,6	0,29
VR 1.25	10	10	25	25	1	0,30
VR 1.50	20	10	50	25	2	0,32
VR 1.75	30	10	75	25	3	0,35
VR 1.100	40	10	100	25	4	0,36
VR 1.125	50	10	125	25	5	0,37
VR 2.150	60	10	150	25	6	0,80
VR 2.200	80	10	200	25	8	0,90
VR 2.250	100	10	250	25	10	1
VR 2.500	200	10	450	25	20	1
VR 2.600	240	10	600	25	24	1,20
VR 2.700	250	10	700	25	38	1,20
VR 2.800	340	10	800	23	34,78	1,20



VR 1



VR 2

VR 3

STEEL SPRING ISOLATOR

ELASTOPLOTS®
PLOTS ET SUPPORTS



Materials

Spring with Shot peeling treatment to improve its dynamic resistance and epoxy finish for better protection. Polyethylene softened with closed cells to prevent the entry of solid elements and avoid any damage to the coils. Zinc plated metal parts

Natural frequency 3 - 5 Hz

Ratio stiffness $K_x/K_y : 0.7$

Overload 25% Maximal load

Features

Economic solution,

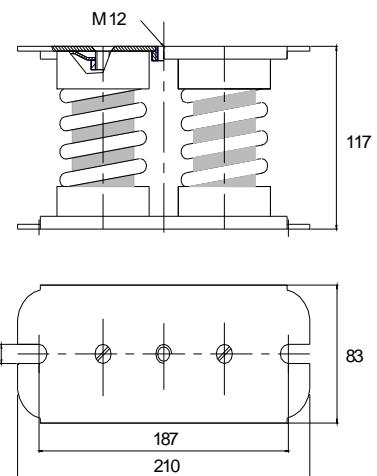
Extended load range for accurate calculation

Large elastic stroke up to 25 mm

Elastomer plate under the fixing plate to isolate high frequencies

Precision leveling integrated by screwing the nut

Reference	Load Mini kg	Deflec-tion Mini	Load Max kg	Deflec-tion Max	Stiffness daN/mm	Weight kg
VR 3.300	110	10	300	25	12	2
VR 3.400	140	10	400	25	16	2
VR 3.500	170	10	500	25	20	2
VR 3.600	200	10	600	25	24	2,5
VR 3.800	250	10	800	25	32	3
VR 3.1200	340	10	1200	25	48	3.4
VR 3.1400	560	10	1400	25	56	3.4

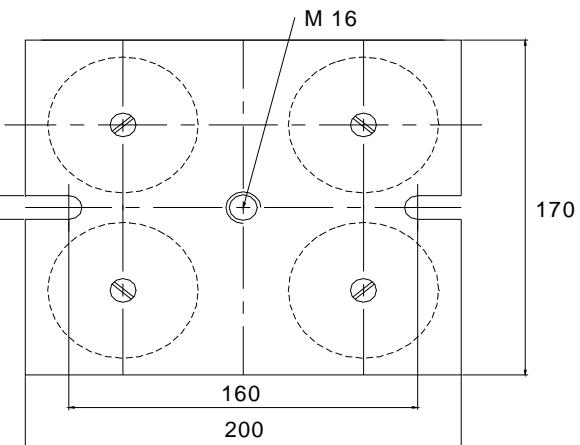
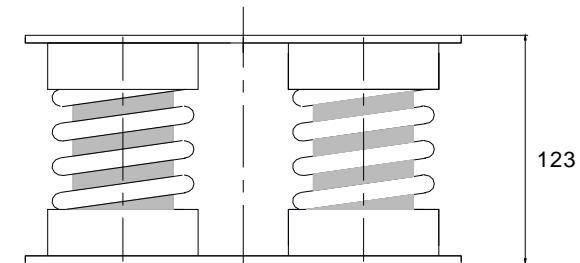


VR 4

STEEL SPRING ISOLATOR



ELASTOPLOTS®
PLOTS ET SUPPORTS



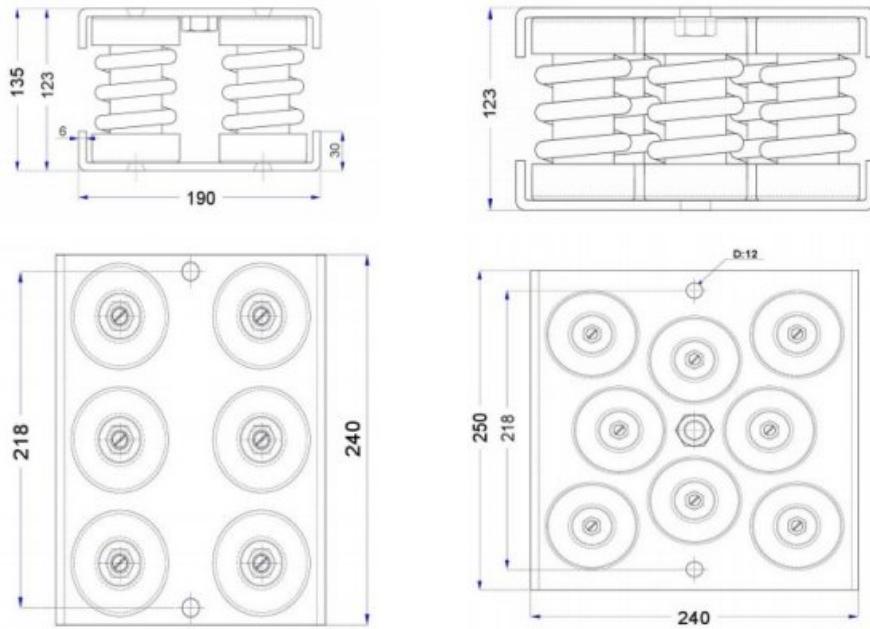
Variant

- Pre-stressed model code P
- Anti-rebound spring box code AR
- Epoxy box protection code E
- Elastomer plate 12 mm code R H becomes 132 mm

Reference	Load Mini kg	Deflection Mini mm	Load Max. kg	Deflection Max. mm	Stiffness daN / mm	Weight kg
VR 4.600	257	15	600	25	24	6
VR 4.800	343	15	800	25	32	6
VR 4.1000	428	15	1000	25	40	6
VR 4.1200	720	15	1200	25	48	6
VR 4.1400	840	15	1400	25	56	6
VR 4.1600	960	15	1600	25	64	7
VR 4.1800	1080	15	1800	25	72	7
VR 4.2000	1200	15	2000	25	80	7
VR 4.2200	1300	15	2200	25	80	7
VR 4.2400	1440	15	2400	25	96	7
VR 4.2800	1680	15	2800	25	112	7
VR 4.3200	1920	15	3200	25	128	7



STEEL SPRING ISOLATOR



Hauteur libre 123 mm + Elastomère 5 mm 1 face Total 128 mm Sur demande Hauteur libre max 131 mm avec élastomère spécial 8 mm
 SurLoad admissible temporaire +50% de la Load max.

Ratio Stiffness Kx/Kz 3.2 Ratio Stiffness Ky/Kz 1.6

Reference	Load Mini kg	Deflec-tion Mini mm	Load Max kg	Deflec-tion Max mm	Stiffness daN / mm	Weight kg	Reference	Load Mini kg	Deflec-tion Mini mm	Load Max kg	Deflec-tion Max mm	Stiffness daN / mm	Weight kg
VR 6.600	190	8	600	25	24	9.5	VR 8.2800	900	8	2800	25	112	15
VR 6.800	255	8	800	25	32	9.5	VR 8.3200	1024	8	3200	25	128	15
VR 6.1000	320	8	1000	25	40	9.5	VR 8.3400	1088	8	3400	25	136	15
VR 6.1200	385	8	1200	25	48	10	VR 8.3600	1152	8	3600	25	144	15
VR 6.1400	450	8	1400	25	56	10	VR 8.4000	1280	8	4000	25	160	15
VR 6.1600	510	8	1600	25	64	10	VR 8.4200	1344	8	4200	25	168	15
VR 6.1800	580	8	1800	25	72	10	VR 8.4400	1408	8	4400	25	176	15
VR 6.2000	640	8	2000	25	80	10	VR 8.4800	1536	8	4800	25	192	15
VR 6.2400	760	8	2400	25	96	10	VR 8.5000	1740	8	5000	23	217,39	15
VR 6.2700	860	8	2800	25	108	10	VR 8.5600	1948	8	5600	23	243,48	15
VR 6.3000	960	8	3200	25	120	10	VR 8.5800	2017	8	5800	23	252,17	15
VR 6.3200	1000	8	3600	25	128	10	VR 8.6000	2086	8	6000	23	260,87	15
VR 6.3300	1050	8	3300	25	132	10	VR 8.6400	2220	8	6400	23	278,26	15
VR 6.3600	1100	8	3600	25	144	10							
VR 6.4200	1400	8	4200	23	182,60	10							
VR 6.4400	1500	8	4400	23	191,30	10							
VR 6.4800	1700	8	4800	23	208,70	10							

VRH 3

STEEL SPRING REINFORCED

ELASTOPLOTS®
PLOTS ET SUPPORTS



Materials

Spring with Shot peeling treatment to improve its dynamic resistance and epoxy finish for better protection. Polyethylene softened with closed cells to prevent the entry of solid elements and avoid any damage to the coils. Zinc plated metal parts

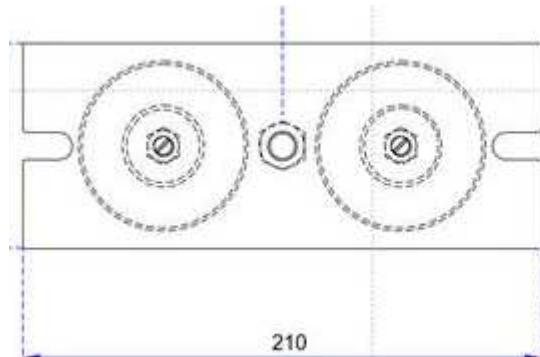
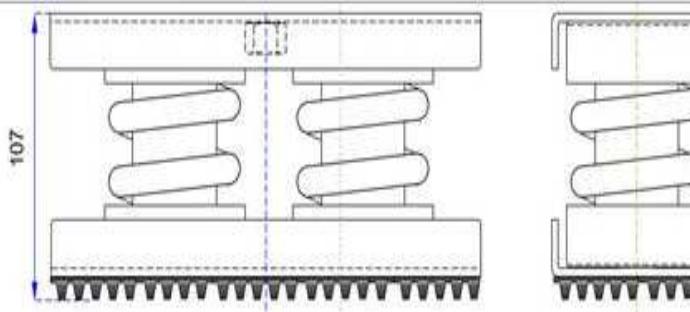
Natural frequency 6–11 Hz

Ratio stiffness $K_x/K_y : 1.4 \quad K_x/K_z : 2,8$

Overload 25% Maximal load

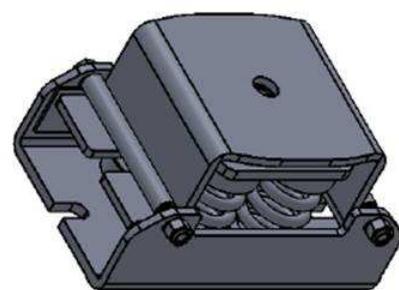
Features

- High lateral stability
- Gamme de Load étendue pour un calcul précis
- Deflection up to 15 mm
- Rubber pad for
- Precision leveling



Reference	Load Mini	Deflection Mini	Load Max	Deflection Max mm	Stiffness daN/mm	Weight kg
VRH 3.400	200	7.5	400	15	26,67	4
VRH 3.600	300	7.5	600	15	40	4
VRH 3.800	400	7.5	800	15	53,33	4,1
VRH 3.1000	500	7.5	1000	15	66,67	4,1
VRH 3.1200	600	7.5	1200	15	80	4,2
VRH 3.1400	700	7.5	1400	15	93,33	4,3

STEEL SPRING ANTISEISMIC 25 mm



Features

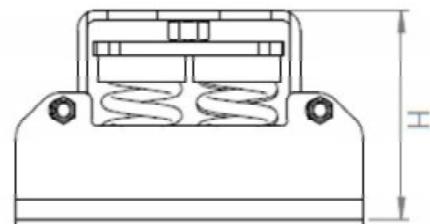
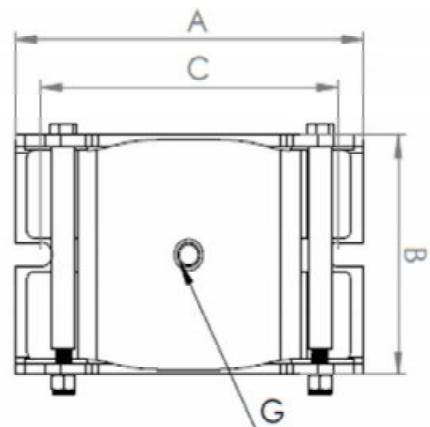
- Reinforced construction
- Painted corrosion protection
- Integrated precision leveling
- Multidirectional guiding
- Lateral and vertical movement limited by stop
- Rubber sole to isolate high frequencies
- 1/2/4 springs box

Applications :

Insulation of rotating equipment from 400 rpm
Equipment that must withstand seismic stresses,
strong winds, dynamic forces

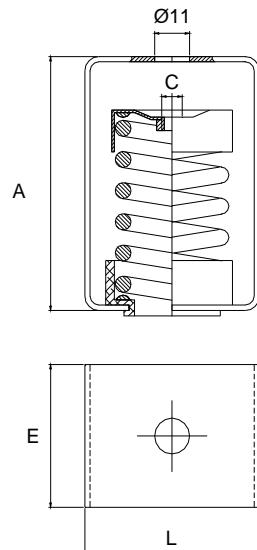
VRR Natural frequency: 3 - 5 Hz

Fail-safe	<input checked="" type="checkbox"/>				
Vibration isolation	<input checked="" type="checkbox"/>				
Shock damping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>				
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicule off road application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Référence	A	B	H	Leveling mm	C	G	Load mini daN	Deflection mm	Load Max daN	Deflection mm	Stiffness daN/mm
VRR 2.0250	276	110	163	+10	236	M16x10	100	10	250	25	10
VRR 2.0500	276	110	163	+10	236	M16x10	200	10	500	25	20
VRR 2.0750	276	110	163	+10	236	M16x10	300	10	750	25	30
VRR 2.1000	276	110	163	+10	236	M16x10	400	10	1000	25	40
VRR 4.0500	276	177	163	+10	236	M18x10	200	10	500	25	20
VRR 4.0750	276	177	163	+10	236	M18x10	300	10	750	25	30
VRR 4.1000	276	177	163	+10	236	M18x10	400	10	1000	25	40
VRR 4.1250	276	177	163	+10	236	M18x10	500	10	1250	25	50
VRR 4.1500	276	177	163	+10	236	M18x10	600	10	1500	25	60
VRR 4.1750	276	177	163	+10	236	M18x10	700	10	1750	25	70
VRR 4.2000	276	177	163	+10	236	M18x10	800	10	2000	25	80
VRR 4.2250	276	177	163	+10	236	M18x10	900	10	2250	25	90
VRR 4.2400	276	177	163	+10	236	M18x10	1000	10	2400	25	96
VRR 4.2800	276	177	163	+10	236	M18x10	1100	10	2800	25	112
VRR 4.3000	276	177	163	+10	236	M18x10	1200	10	3000	25	120
VRR 4.3200	276	177	163	+10	236	M18x10	1280	10	3200	25	128

HANGER STEEL SPRING



Reference	A	C	E	L	Load mini daN	Deflection mini mm	Load maxi daN	Deflection maxi mm	Stiffness daN/mm
NINI VT 05					0.5		05		0.22
NINI VT 15					2		15		0.65
MINI VT 25	102.5	M12	60	66	3		25		1.09
MINI VT 50					5		50		2.17
MINI VT 75					10		75		3.26
MINI VT 100					10		100		4.35
Reference	A	C	E	L	Load mini daN	Deflection mini mm	Load maxi daN	Deflection maxi mm	Stiffness daN/mm
VT 100					40		100		4
VT 125					50		125		5
VT 150					60		150		6
VT 200					80		200		8
VT 250					100		250		25
VT 350	150	M12	80	100	140	10	350	25	14
VT 450					180		450		18
VT 500					200		500		20
VT 600					240		600		24
VT 700					280		700		28
VT 800					320		800		32

Livré sans tige de fixation

HANGER RUBBER SPRING



Materials Zinc steel box
NR rubber steel

Hardness 45 / 55 Sh A + -5

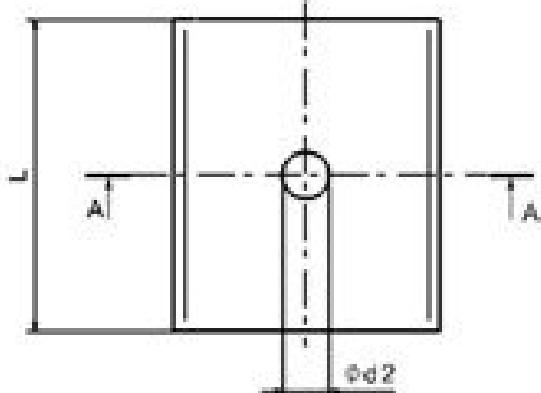
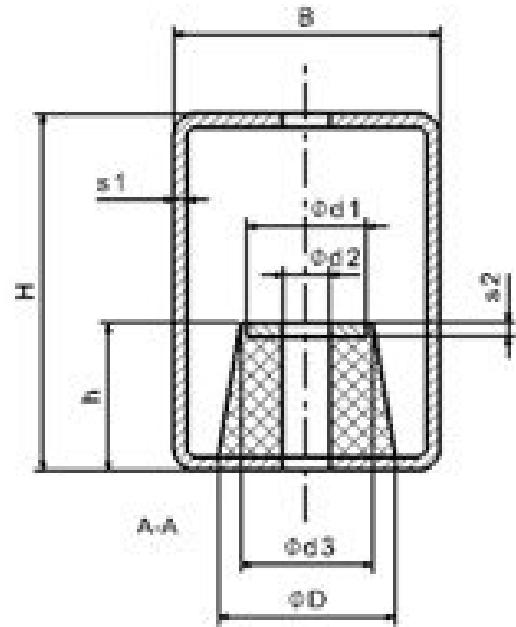
Tolerance DIN 7715 M3

Natural frequency 12 - 8 Hz

Hanger Ductwork
Piping
Air conditionning
False ceiling

Mounting Articulated steel cage for easy mounting

Delivery without bolt nut washer



Reference	B	H	D	d1	d2	d3	s1	s2	h	L	Weight
VE 01 - 145	50	56	40	34	8.5	30	2.5	2	23	45	0,28
VE 01 - 155											

Reference	Load mini daN	Deflection mini mm	Load maxi daN	Deflection maxi mm
VE 01 - 145	8	1	45	3
VE 01 - 155	15	1	75	3

PRE-MANUFACTURED MODULAR FLOATING FLOOR

PLAKISOL PL are not underlays for impact sound insulation. If they also fulfill this function, they are above all devices for low-frequency vibration isolation



12 - 8 Hz
Rubber spring version

Natural frequency

5 - 3.5 Hz
Steel spring version

Features

- Low frequency vibration isolation
- Delivered assembled and ready to install
- Quick installation that can be done without skill specific
- No slab to level
- Thermal insulation

2 types of shock absorbers

Rubber springs

Steel springs

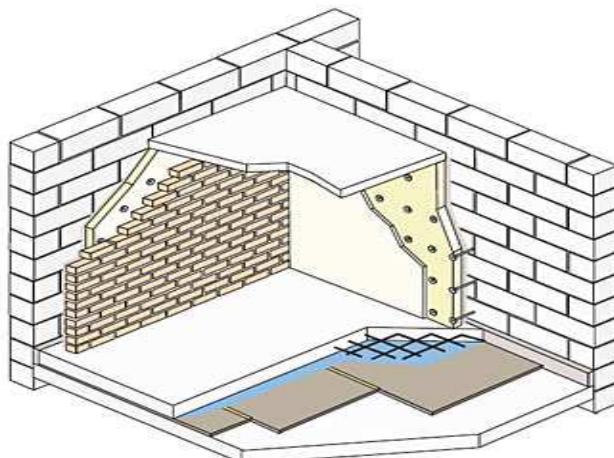
Serves as formwork for pouring a reinforced concrete slab of 12 to 15 cm minimum, i.e. 260 and 400 kg/m².

We recommend a reinforced slab with a minimum thickness of 10 cm

No need for an inspection hatch, the slab is automatically suspended

Homogeneous distribution of the supports allowing a uniform resumption of the efforts

Translated with www.DeepL.com/Translator (free version)



Limited effective stress rate to achieve a settlement < 3% of height over a 20 year period

Constant insulation performance over time

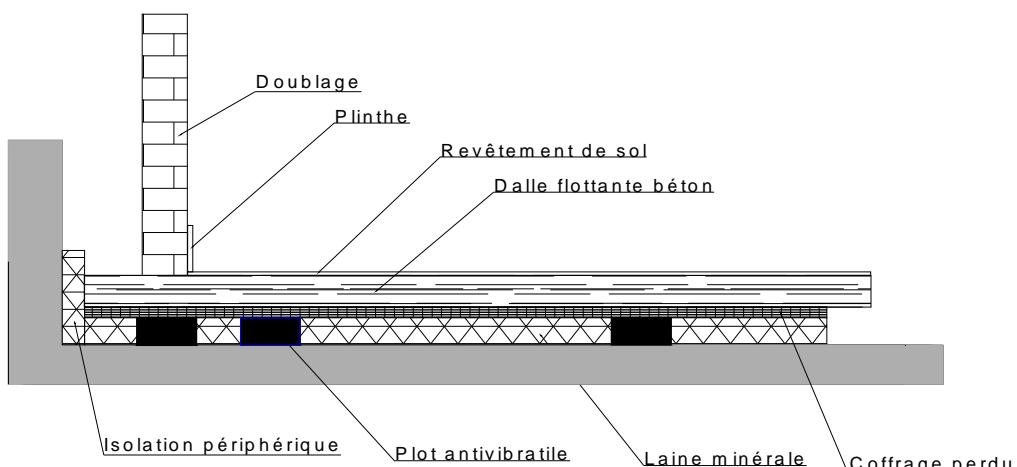
Mineral wool for increased acoustic insulation

Training and site supervision

Moulded and uncut rubber insulator with a form factor designed to increase elasticity under load

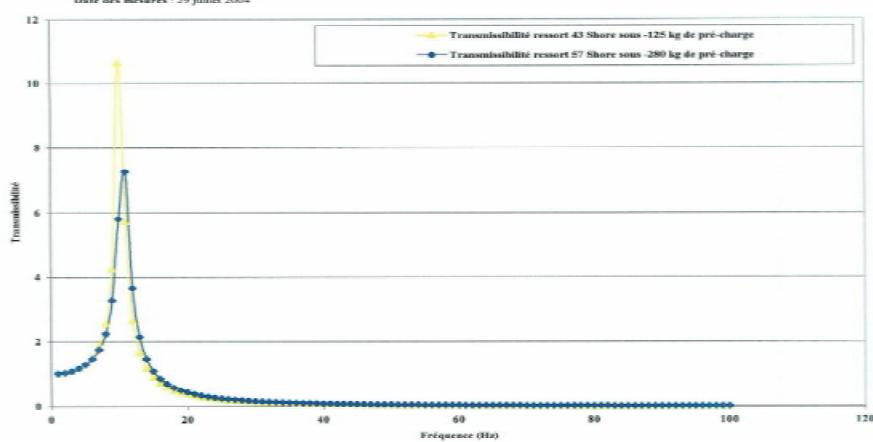
Elastomer first transformation not recycled for increased performance and longevity

Materials	Wood CTBS thickness 19 Rubber spring NR 50 mm Mineral wool 45 mm
Size	1000x1000 mm - 1500x1000 mm
Height	68 mm
Number of isolators	1000 x 1000 4 1500 x 1000 6
Load	60 to 900 kg/m ² (0.90 N/cm ²) typ 145 or 155
Coefficient de friction	0.8
Temperature	- 20° C / + 70° C
Installation	Simple, no tools, easy to install Cutting to the dimensions of the slabs PLAKISOL are fixed between them by metal fixing plate of our supply



Essais dynamiques de ressorts élastomères

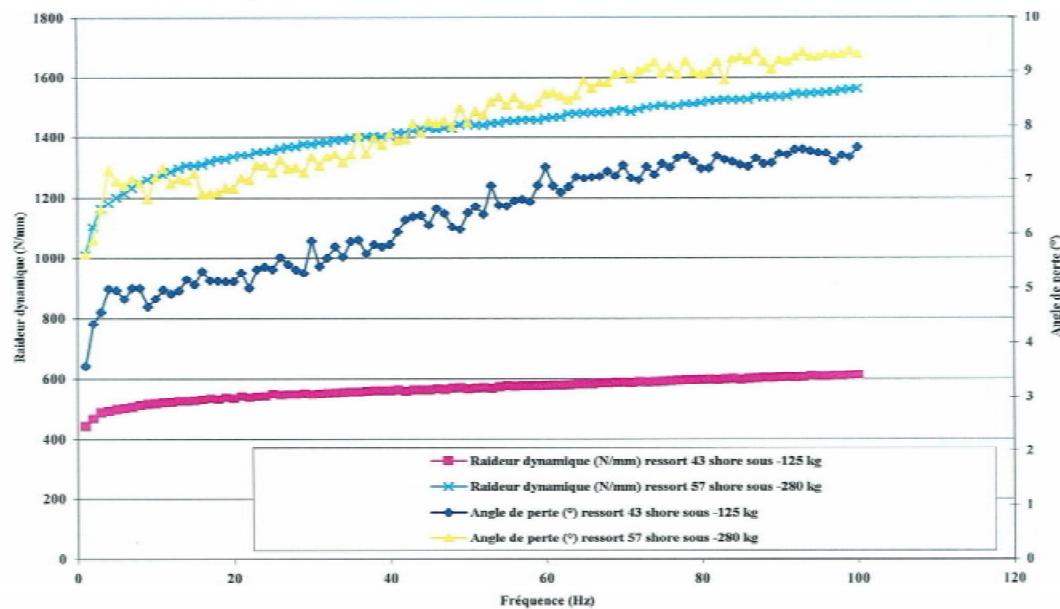
Déroulement des essais
Moyen d'essai : machine dynamique Schenck VHF/7
Fréquence de sollicitation : 1 à 100 Hz ; 100 points de mesure ; incrément linéaire
Amplitude dynamique : ±50 µm , mode d'essai dyn B
Température d'essai : ambiante
Date des mesures : 29 juillet 2004



PRE-MANUFACTURED MODULAR FLOATING FLOOR

Essais dynamiques de ressorts élastomères

Moyen d'essai : machine dynamique Schenck VHF7
 Fréquence de sollicitation : 1 à 100 Hz ; 100 points de mesure ; incrément linéaire
 Amplitude dynamique : $\pm 50 \mu\text{m}$: mode d'essai dyn B
 Température d'essai : ambiante
 Date des mesures : 29 juillet 2004



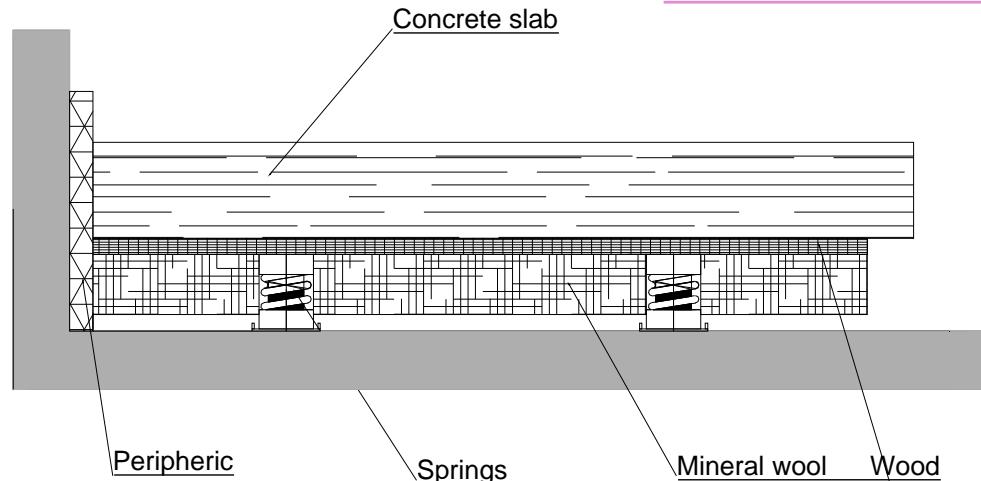
Force/compression performance table on request + test report

The Natural frequency of the slab being a function of its mass, we will communicate this value by calculation note according to the Loads specifications

Reference	Permanent load Minimum recommended Per plate (In Kg/m ²)	Permanent load Max recommended Per plate (m ²)	Load dynamic Max.	overload
PL 1000.50.145	180	600	280 kg	880 kg
PL 1500.50.145	270 (180 kg)	900 kg (600 kg)	420 kg	1320 kg
Reference	Permanent load Minimum recommended Per plate (In Kg/m ²)	Permanent load Max recommended Per plate (m ²)	Load dynamic Max.	overload
PL 1000.50.155	320	900	500 kg	1400 kg
PL 1500.50.155	480 (320 kg)	1350 kg (900 kg)	750 kg	2100 kg
Reference	Deflection / minimum Load mm	Deflection / maximum Load mm	Stiffness	Load max. permanente
PL 1000.50.145	2	5		1200 N/mm
PL 1500.50.145	2	5		1800 N/mm
PL 1000.50.155	2	5		1800 N/mm
PL 1500.50.155	2	5		2700 N/mm

PRE-MANUFACTURED MODULAR FLOATING FLOOR

Natural frequency 3.5 - 4.5 Hz
Vertical Static



Materials	Wood panel CTBS ep 18 mm	Steel spring isolator	Semi-rigid mineral wool 75 mm
Sizes	1000x1000 mm et 1500x1000 mm		
Height		133 mm	
Height under Max. load		113 mm	
Number of isolators by plate	1000 x 1000 = 4		1500 x 1000 = 6
Friction Coef		0.4	
Temperature		- 40° C / + 150° C	
Installation	Simple, sans outillage, pose simple	Découpage aux dimensions des dalles	Les plaques sont fixées entre elles par des tôles de notre fourniture

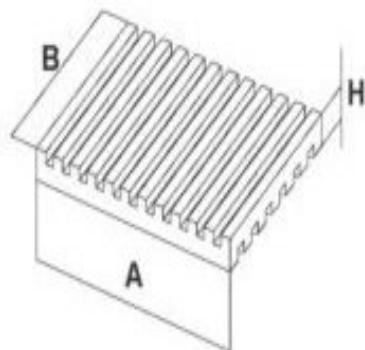
• Natural frequency of the floating slab being a function of its mass, we will communicate this value by calculation note according to the loads specifications.

Reference	Permanent load Minimum recommended	Permanent load Max recommended	Load dynamic Max.	overload
PL 1000.VR.4.150	240 kg	480 kg		
PL 1500.VR 6.150	360 kg (240 kg)	720 kg (480 kg)	900 kg	180 kg
Reference	Permanent load Minimum recommended Per plate (In Kg/m²)	Permanent load Max recommended Per plate (m²)	Load dynamic Max.	overload
PL 1000.VR.4.250	400 kg	800	1000 kg	1400 kg
PL 1500.VR 6.250	600 (400 kg)	1200 kg (800 kg)	1500 kg	300 kg
Reference	Deflection minimum Load mm	Deflection maximum Load mm	Stiffness Load max.	
PL 1000.VR 4.150	10	20	240 N/mm	
PL 1500.VR.6.150	10	20	360 N/mm	
PL 1000.VR 4.250	10	20	400 N/mm	
PL 1500.VR.6.250	10	20	600 N/mm	

PLAKISOL 45

2 SIDED GROOVED PLATE

PLAKISOL[®]
PADS



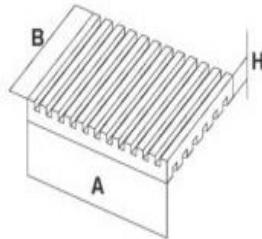
Elastomer	NBR High elasticity Profile grooved 2 faces
Dimensions	450x450x08 225x225x08 100x100x08 50x50x08 + cut
Coef. Friction	0.7
Temperature	- 25° C / + 80° C
Mounting	Surface pad > the support surface Overlapping of thicknesses is possible for 3 or 4 thicknesses of 2mm sheet metal
Precision leveling	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Vibration isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
lateral stability	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 450x450		±5	Kg/cm ²	kg	0.10	0.20	0.40	0.60	0.80

typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 450x450		±5	Kg/cm ²	kg	0.30	1	1.60	2.00	2.60

typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 450x450		±5	Kg/cm ²	kg	1.5	2.5	3.5	4.5	5

2 SIDED GROOVED PLATE



Features

- Resists aging
- Easy to cut
- Cost
- Perfect adhesion and grip on the ground
- Wide load range
- No fluid retention

typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 225x225		±5	Kg/cm ²	kg	0.10	0.20	0.40	0.60	0.80
PLAKISOL 45.225-335	08	35	0.80	390	0.30mm (28.9Hz)	0.48mm (22.8 Hz)	0.81mm (17.6 Hz)	1.10mm (15 Hz)	1.40mm (13.30Hz)
typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 225x225		±5	Kg/cm ²	kg	0.30	1	1.60	2.00	2.60
PLAKISOL 45.225-345	08	45	2.60	1300	0.50mm (22.3Hz)	0.78mm (17.9 Hz)	1mm (15.8 Hz)	1.17mm (12.13 Hz)	1.40mm (13.40Hz)
typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 225x225		±5	Kg/cm ²	Kg	1.5	2.5	3.5	4.5	5
PLAKISOL 45.225-365	08	65	5	2400	0.58mm (21.8Hz)	0.81mm (18.6 Hz)	1.05mm (16.4 Hz)	1.30mm (14.90 Hz)	1.42mm (14.25Hz)
typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 100x100		±5	Kg/cm ²	kg	0.10	0.20	0.40	0.60	0.80
PLAKISOL 45.100-335	08	35	0.80	80	0.30mm (28.9Hz)	0.48mm (22.8 Hz)	0.81mm (17.6 Hz)	1.10mm (15 Hz)	1.40mm (13.30Hz)
typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 100x100		±5	Kg/cm ²	kg	0.30	1	1.60	2.00	2.60
PLAKISOL 45.100-345	08	45	2.60	260	0.50mm (22.3Hz)	0.78mm (17.9 Hz)	1mm (15.8 Hz)	1.17mm (12.13 Hz)	1.40mm (13.40Hz)
typ	H	Hardness	Load	Load	Deflection under Load (Natural frequency en Hz)				
					Load in kg/cm ²				
Plakisol	mm	Shore A		Max					
AxB 100x100		±5	Kg/cm ²	Kg	1.5	2.5	3.5	4.5	5
PLAKISOL 45.100-365	08	65	5	500	0.58mm (21.8Hz)	0.81mm (18.6 Hz)	1.05mm (16.4 Hz)	1.30mm (14.90 Hz)	1.42mm (14.25Hz)

DAMPER ISOLATOR HIGH PERFORMANCE



Elastomer	VIBRADAMP [®]
Dimensions	500 x 500 x 25mm ou 52mm 250x250x25mm 100x100x25 mm
Load capacity	1 à 8 kg/cm ²
Friction coef.	0.6
Temperature	-30° +70°
Rapport de rigidité Statique/ dynamique	3
Damping C/Cc	0.12
Resistance	Oils, greases, chemicals agents
Profil	1 side with holes to increase elasticity the other side with anti-slip profile.
Combinaison	Mounting Multi-thickness combined

Precision leveling	<input type="checkbox"/>				
Vibration isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shock damping	<input checked="" type="checkbox"/>				
Oil Grease Ozone resistance...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Construction-borne noise isolation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
lateral stability	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

typ	Dimensions	Hardness	Load
Plakisol	mm	Shore A	Max.
IM		±5	Kg
IM 50.25.50	500x500x25	50	7.500
IM 50.25.70	500x500x25	70	20.000
IM 25.25.25	250x250x25	50	1.875
IM 25.25.25	250x250x25	70	5.000
IM 10.25.25	100x100x25	50	300
IM 10.25..50	100x100x25	70	500

typ	Thick- ness	Hard- ness	Load	Deflection (Natural frequency Hz)							
				Plakisol	mm	Shore A	Max.	Load in kg/cm ²			
IM	±5	Kg/cm ²	0.50	1	2	2.5	3	5	8		
IM xx.25.50	25	50	3	0.71 (18Hz)	1.50 (13 Hz)	2.66 (10 Hz)	3.30 (9 Hz)	4.00 (7.9Hz)			
IM xx.50.50	52	50	3	1.76 (12 Hz)	3.00 (10.2Hz)	5.63 (7.7 Hz)	6.87 (7.03Hz)	8.00 (6.6 Hz)			
IM xx.25.70	25	70	8	0.81 (18.6 Hz)	1.30 (14.9 Hz)	1.55 (13.7 Hz)	1.81 (12.8 Hz)	2.85 (10.4Hz)	4.25 (7.7Hz)		
IM xx.50.70	52	70	8	1.62 (13.4 Hz)	2.62 (10.8 Hz)	3.14 (9.9 Hz)	3.66 (9.3 Hz)	5.78 (7.6Hz)	8.50 (6.3Hz)		



since 1961

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