INDUSTRIAL RANGE OF ELASTOMERIC MOUNTING SYSTEM

HUTCHINSON®
PAULSTRA

MOUNTING

APPLICATIONS

	HIGH RADIAL FLEXIBILITY	HIGH AXIAL FLEXIBILITY	LOW FREQUENCY	HIGH SHEAR FLEXIBILITY	PRIMARILY AXIAL LOADING		
	RADIAFLEX®	PAULSTRADYN®	EVIDGOM®	SANDWICH	STABIFLEX	PAULSTRAFLOAT®	S.C.
							
Pages	p. 60	p. 64	p. 68	p. 71	p. 74	p. 77	p. 82
FANS	■	■	■				
AIR CONDITIONING	■	■	■				
PUMPS	■	■				■	
COMPRESSORS	■	■	■		■	■	
GEARBOXES					■	■	■
GENERATING SETS	■	■	■	■	■	■	■
IC ENGINES					■	■	■
PLANT CABS					■	■	■
VIBRATING TABLES/SCREENS	■	■	■				
HOPPERS	■	■	■				
MACHINE TOOLS				■	■		
PRESSES GUILLOTINES				■	■		
GANTRIES				■			
CIVIL ENGINEERING				■			
CEILING, PIPEWORK							
LABORATORY EQUIPMENT	■	■				■	
ELECTRICAL ENCLOSURE MOBILE OF FIXED INSTALLATION	■	■					
TRANSFORMERS		■		■			
FRAGMENTERS		■	■	■			
SIEVES	■		■				
COMPUTERS							
SHIPBOARD ELECTRONICS						■	
PROTECTION AGAINST BUMP AND SHOCK							
COVERS OR ENCLOSURES							

In general :
For fixed installations: RADIAFLEX, PAULSTRADYN and BECA. For mobile installations : STABIFLEX, S.C.,S.T.C.
Avoid using the mount with the rubber to metal bond area in tension. These mounts should only be used in compression or shear.

APPLICATION GUIDE

PRIMARILY AXIAL LOADING			SAME AXIAL & RADIAL FREQUENCY					ACOUSTIC
S.T.C.	NIVOFIX®	TRAXIFLEX®	SPECIAL PACKAGING	ARDAMP®	SPECIAL ELECTRONICS	BECA	VIBMAR*	STRASONIC
								
p. 86	p. 104	p. 107	p. 131	p. 128	p. 114 à 127	p. 134	p. 172	p. 151 à 167

Recommended application Admissible application

RADIAFLEX ®

DESCRIPTION

Metalwork : mild steel, plated.
Natural rubber, bonded, cylindrically shaped.
Welded fixings : 5 styles (single side threaded stud, single side threaded hole, double threaded stud, double threaded hole,combination fixing).

European thread standards are not always consistent with French thread standards so Paulstra has created the Radiaflex® Europe range based on those standards.
The end stop version is now available with a threaded hole in addition to the threaded stud.

CHARACTERISTICS

The design of the RADIAFLEX® mount gives the following basic characteristics:

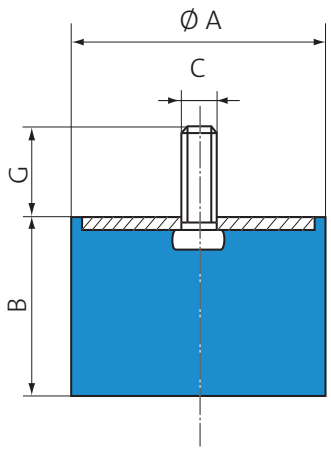
- Radial elasticity greater than axial elasticity.
- The rubber works in :
  - compression (axial),
  - shear (radial),
  - compression/shear according to the fixing method.

Advantages :
- Simple to fix.
- Simple and economical.
- Extensive range :
  - 13 stud diameters.
  - Several heights for each diameter.
  - 5 methods of fixing.

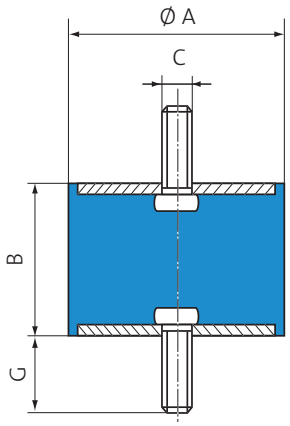
- Recommendations :
  Operation in shear is very useful for vibration isolation provided that the radial forces are not too great.

DIMENSIONS AND COMPRESSIVE LOADS

Single stud fixing



Double stud fixing



Ø A (mm)	B (mm)	C	G (mm)	Compression		Ref.
				Max. load (daN)	Deflection (mm)	
12,5	10 13,5 15 20	M5	10	12 11 10 8	2 2,5 3 3,5	**511110 511128 511115 511125**
16	10 15	M4	10	20	2 3	**511150 511151**
	10 15 20 25	M5	12	20 20 15 15	2 3 4 5	**511292 511294 511296 511298**
20	5 8,5	M6	10	77 40	0,6 1,5	**511206 511200/11**
	8,5 15 20 25 30	M6	16,5	40 35 30 30 25	1,5 4 5 5,5 7	**511200 511215 511220 511225 511230**
25,5	10 15 20 30	M6	18	80 60 50 50	2 3,5 5 8	**511158 511155 511159 511160**
	5 10 15	M8	20	82 80 60	0,6 2 3,5	**511265/50 511265 511270**
	15	M8	12	60	3,5	**311270/13**
	19 22 25 30 40	M8	20	55 50 50 50 50	4,5 5,5 6 8 10	**511251 511275 511280 511285 511290**
30	15 22 30 40	M8	25	90 80 70 60	3,5 6 8 9	**511308 511310 511312 511314**
40	30 40	M8	20	120 120	7 10	**511157 511161**
	20 25 35 40 45	M10	25	160 150 120 120 120	5 6 8 10 11	**511450 511401 511452 511454 511456**
50	25 35 45	M10	25	300 250 190	6 9 11	**511525 511535 511545**
60	22 25 36 45	M10	25	350 400 300 250	3 6 9 11	**513601 511625 511635 511645**
70	35 50 70	M10	25	450 350 300	9 12 14	**511735 511750 511770**
80	25 30 40 70 80	M14	45 35 35 35 35	1 100 950 600 500 450	6 8 10 17 19	**513801 511830 511840 511870 511880**

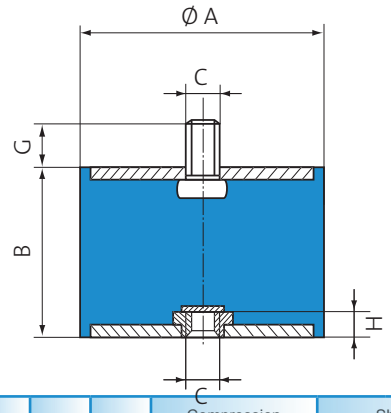
Threaded hole fixing on request (except Ø 12.5).
See current price list for availability of items.

Threaded studs

Ø A (mm)	B (mm)	C	G (mm)	Compression		Shear*		Ref.
				Max. load (daN)	Deflection (mm)	Max. load (daN)	Deflection (mm)	
10	8	M3	6	10	1,6	1,25	0,9	**see p. 115**
12	8	M3	6	12	1,2	1,5	0,75	**see p. 115**
12,5	10 15 20	M5	10	12 10 8	2 3 3,5	1,5 2,5 2,5	1,5 2 4	**521293 521128 521295**
16	10 15	M4	10	20	1,5 3	2,5	1,5 2	**521650 521651**
	10 15 20 25	M5	12	20 20 15 15	1,5 3 4 5	2,5 2,5 2,5 2	1,5 2 4 5	**521292 521294 521296 521298**
20	8,5 15 20 25 30	M6	16,5	40 35 30 30 25	0,6 3 4,5 5,5 7	5 5 5 4,5 4,5	1 2,5 3,5 4,5 4,5	**521178 521249 521297 521299 521319**
25,5	10 15 20 30	M6	18	80 60 50 50	1,5 2,5 2 7,5	8 8 8 8	1,5 2,5 4 6	**521655 521656 521652 521653**
	10 15 22 25 30 40	M8	20	80 60 50 50 50 50	1,5 2,5 4 5,5 7,5 10	8 8 8 8 8 6,5	1,5 2,5 4 4,5 6 6	**521340 521341 521251 521342 521343 521344**
30	15 22 30 40	M8	25	90 80 70 60	3 5 8 9	11 11 11 11	2,5 4 6 7,5	**521308 521310 521312 521314**
40	30 40	M8	20	150 120	6 10	20 20	5,5 7,5	**521181 521657**
	20 28 35 40 45	M10	25	160 150 120 120 120	4 6 8 10 11	20 20 20 20 20	3 5,5 6,5 7,5 9	**521450 521401 521452 521454 521456**
50	25 35 45	M10	25	300 250 190	6 8 11	25 25 25	4,5 7 9	**521580 521581 521582**
	45	M10	15	190	11	25	9	**521582/15**
60	25 36 45	M10	25	400 300 250	5 8 11	30 30 30	4,5 7 9	**521601 521603 521641**
70	35 50 70	M10	25	450 350 300	8 11 14	35 35 35	6,5 11 15	**521705 521710 521711**
80	40	M12	28	600	9	40	7	**521658**
	30 30 40 70 80	M14	45 35 35 35 35	950 950 600 500 450	7 7 9 17 19	40 40 40 40 40	5 5 7 15 17	**521803 521840 521841 521842 521843**
100	40 55 80	M16	47	1 100 900 750	8 12 19	60 60 60	7 10 17	**521908 521909 521910**

* The shear characteristics are measured under Axial Load.

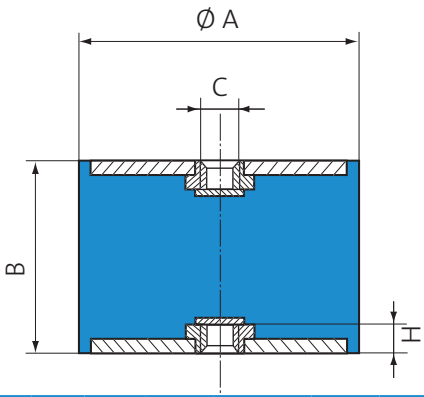
Combination fixing



Ø A (mm)	B (mm)	C	G (mm)	H (mm)	Compression		Shear*		Ref.
					Maxi. load (daN)	Deflection (mm)	Max. load (daN)	Deflection (mm)	
16	10 15	M4	10	2	20	1,5 3	2,5	1M5 2M5	520053 520054
	10 15 20 25	M5	12	3	20 20 15 15	1,5 3 4 5	2,5 2,5 2,5 2	1,5 2 4 5	520010 520011 520012 520013
20	15 20 25 30	M6	16,5	4	35 30 30 25	2,5 4,5 5,5 7	5 5 4,5 4,5	2,5 5 4,5 4,5	520015 520016 520017 520018
25,5	15 20 30	M6	18	4	60 50 50	2,5 3,5 7,5	8 8 8	8,5 4 6	520052 520055 520057
	22 25 30 40	M8	20	6	50 50 50 50	3,5 5 7,5 10	8 8 8 6	4 4,5 6 6	520021 520022 520023 520024
30	15 22 30 40	M8	25	6	90 80 70 60	3 4,5 7,5 9	11 11 11 11	2,5 4 6 7,5	520025 520026 520027 520028
40	30 40	M8	20	6	150 120	4,5 10	20 20	5,5 7,5	520056 520058
	20 28 35 40 45	M10	25	8	160 150 120 120 120	4 5 7,5 10 11	20 20 20 20 20	3 5,5 6,5 7,5 9	520029 520030 520031 520032 520033
50	45	M10	15	8	190	11	25	9	520036/15
	35 45	M10	25	8	250 190	8 11	25 25	7 9	520035 520036
60	36 45	M10	25	8	300 250	8 10	30 30	7 9	520038 520039
70	35 50 70	M10	25	9	450 350 300	7,5 10 14	35 35 35	6,5 11 15	520040 520041 520042
80	40	M12	28	10	600	8	40	7	520059
	40 70 80	M14	35	12	600 500 450	8 17 19	40 40 40	7 15 17	520044 520045 520046
100	40 55 80 100	M16	47	14	1 100 900 750 600	8 12 19 23	60 60 60 60	7 10 17 20	520100 520101 520102 520103

Ø 16 mounts with threaded holes are fitted with RAPID nuts.
Maximum torque 1.8 m.N.

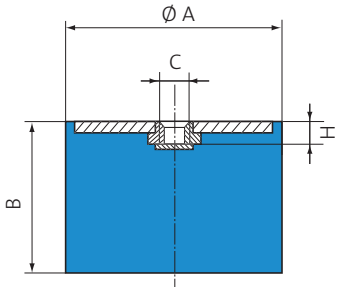
Threaded hole fixing



Ø A (mm)	B (mm)	C	H (mm)	Compression		Shear*		Ref.
				Max. load (daN)	Deflection (mm)	Max. load (daN)	Deflection (mm)	
16	10 15	M4	2,5	20 20	1,5 3	2,5 2,5	1,5 2	520550 520551
	10 15 20 25	M5	3	20 20 15 15	1,5 3 4 5	2,5 2,5 2,5 2	1,5 2 4 5	520500 520501 520502 520503
20	15 20 25 30	M6	4	35 30 30 25	2,5 4,5 5,5 7	5 5 4,5 4,5	2,5 3,5 4,5 4,5	520505 520506 520507 520508
25,5	20 30	M6	4	50 50	3 7,5	8 8	4 6	520554 520555
	22 25 30 40	M8	6	50 50 50 50	3 4,5 7,5 10	8 8 8 6	4 4,5 6 6	520511 520512 520513 520514
30	22 30 40	M8	6	80 70 60	4 7,5 9	11 11 11	4 6 7,5	520516 520517 520518
40	30 40	M8	6	150 120	4,5 10	20 20	5,5 7,5	520552 520553
	28 35 40 45	M10	8	150 120 120 120	4,5 7 10 11	20 20 20 20	5,5 6,5 7,5 9	520520 520521 520522 520523
50	35 45	M10	8	250 190	7 10	25 25	7 9	520525 520526
60	36 45	M10	8	300 250	7 9	30 30	7 9	520528 520529
70	35 50 70	M10	9	450 350 300	7 9 14	35 35 35	6,5 11 15	520530 520531 520532
80	40	M12	10	600	7	40	7,5	520556
	40 70 80	M14	12	600 500 450	7 17 19	40 40 40	7 15 17	520534 520535 520536
100	40 55 60 75 80 100	M16	14	1 110 900 1 100 600 750 600	8 12 8 10 19 23	60 60 180 140 60 60	7 10 10 12 17 20	520541 520542 520545 520546 520543 520547

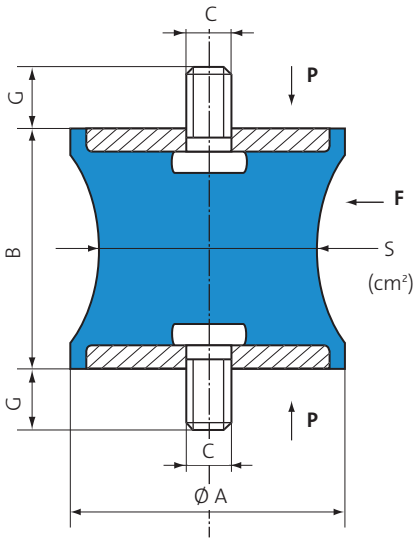
See current price list for availability of items.
*** Shear characteristics are measured under axial load.**

One threaded hole



Ø A (mm)	B (mm)	C	H (mm)	Compression		Ref.
				Maxi. load (daN)	Deflection (mm)	
16	10 15	M4	2,5	20 20	2 3	511152 511153
20	15	M6	4	35	4	511154
25,5	15 20 30	M6	4	60 55 50	3,5 5,5 8	511164 511162 511163
30	22	M8	6	80	6	511156
50	20	M10	10	343	3,4	511168

Diabolo mounts

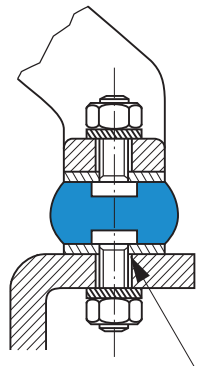


Ø A (mm)	B (mm)	C	G (mm)	S (cm²)	Compression (P)		Shear* (F)		Ref.
					Max. load (daN)	Deflection (mm)	Max. load (daN)	Deflection (mm)	
12,5	14	M5	10	0,3	3	1,4	0,5	1,2	**521300**
20	19	M6	16,5	1,6	12	2,5	3	5	**521201**
40	28	M10	25	3,1	30	5	2,5	4,5	**521403**
57	44	M8	20	5	40	5	7	5	**521571**
57	44	M8	20	9,5	75	5	12	6	**521572**
60	60	M10	25	19,5	150	8	30	10	**521602**
80	70	M14	35	38,5	300	9,5	55	9,5	**521801**
95	76	M16	45	50	400	9,5	70	8	**521951**

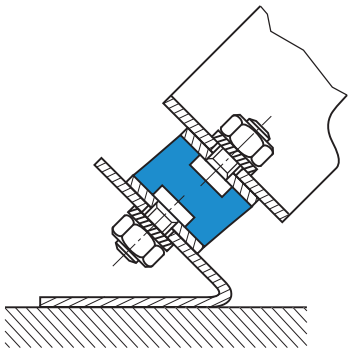
See current price list for availability of items.
* Shear characteristics' are measured under axial load.

Ø A (mm)	B (mm)	C	G (mm)	S (cm²)	Compression		Shear*		Ref.
					Max. load (daN)	Deflection (mm)	Max. load (daN)	Deflection (mm)	
80	60	M14	15,5	38,5	250	5	70	8	**521802**

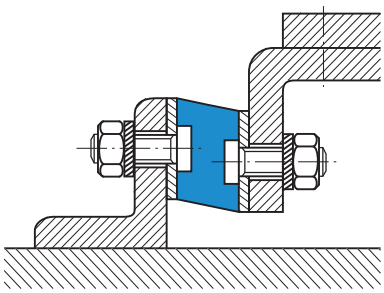
ASSEMBLY



Compression



Compression/Shear



Shear

The fixing holes for the Radiaflex mounts should have a chamfer with a depth equal to the pitch of the thread.

Ex. 521401 : M10 x 150 chamfer = 1,5 mm
521951 : M16 x 200 chamfer = 2 mm

PAULSTRADYN ®

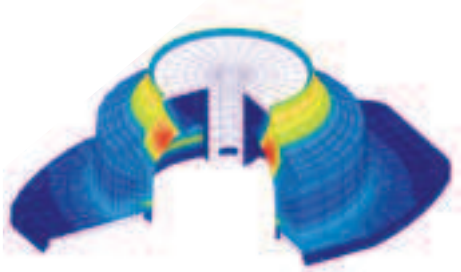
Natural frequency : (1)
- axial : 7Hz
- radial : 3 to 5,5 Hz

AVANTAGES

- Better than 90% isolation at 1.500 rpm (25 Hz).
- Constant height over wide load range.
- Stabilised characteristics during Service Life.
- Simple to fit.
- 500 hours protection against salt spray*.
- Design.

*When mounted according to the recommendations given in the catalogue.

Resilient Element = SILTECH
- Low increase of stiffness with frequency
- Low creep



Finite element modeling (FEM) was used when designing the Paulstradyn® series resulting in the lowest possible elastomer stresses and most efficient performance for a high deflection mount of this type.

APPLICATIONS

Antivibration isolation for static equipment :
- rotating machinery such as fans, air-conditioning, pumps, compressors, generator sets.
- pipeworks, ceilings, transformers, electrical enclosures.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS

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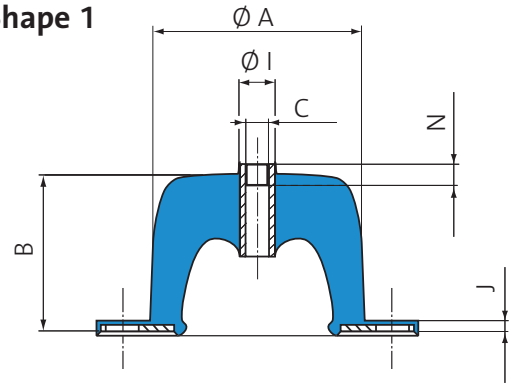
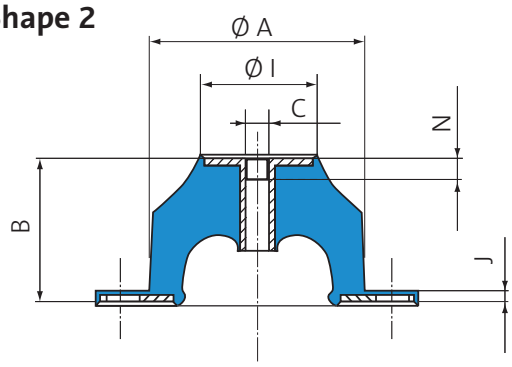
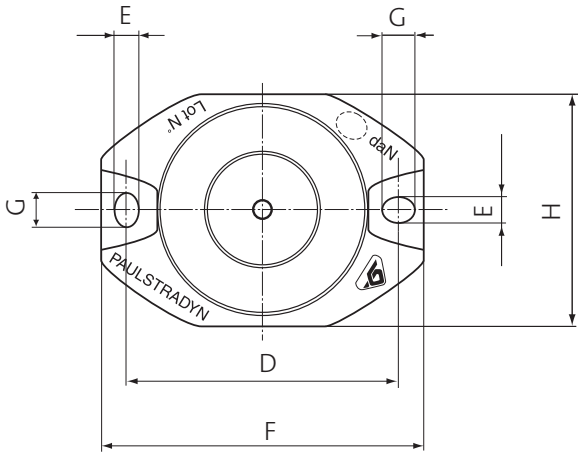
DIMENSIONS

Shape 1



Shape 2





Designation	Ref.	Nominal load NL (daN)	Shape	Dimensions (mm)										
				Ø A	B*	C	D	E	F	G	H	Ø I	J	N
Paulstradyn® 4	**533701**	4	1	40	40	M6	52	6,2	64	6,2	44	12	2,5	6
7	**533702**	7												
12	**533703**	12												
Paulstradyn® 20	**533704**	20	2	60	40	M6	76	6,2	90	8,2	64	32	2,5	6
30	**533705**	30												
50	**533706**	50												
Paulstradyn® 70	**533707**	70	2	80	40	M8	100	8,2	122	12,2	84	48	2,5	12
100	**533708**	100												
130	**533709**	130												
Paulstradyn® 160	**533710**	160	2	100	40	M10	124	10,2	152	16,2	104	68	3	10
200	**533711**	200												
260	**533712**	260												
Paulstradyn® 325	**533713**	325	2	150	40	M12	182	12,2	214	20,2	154	116	4,5	10
400	**533714**	400												
500	**533715**	500												
Paulstradyn® 640	**533716**	640	2	200	40	M16	240	14,2	280	24,2	204	159	5,5	20
820	**533717**	820												
1050	**533718**	1050												
1350	**533719**	1350												

* Height, unloaded 40 mm, under load 32 mm (see Technical Characteristics).
NL: Nominal static load with mounting under axial compression.

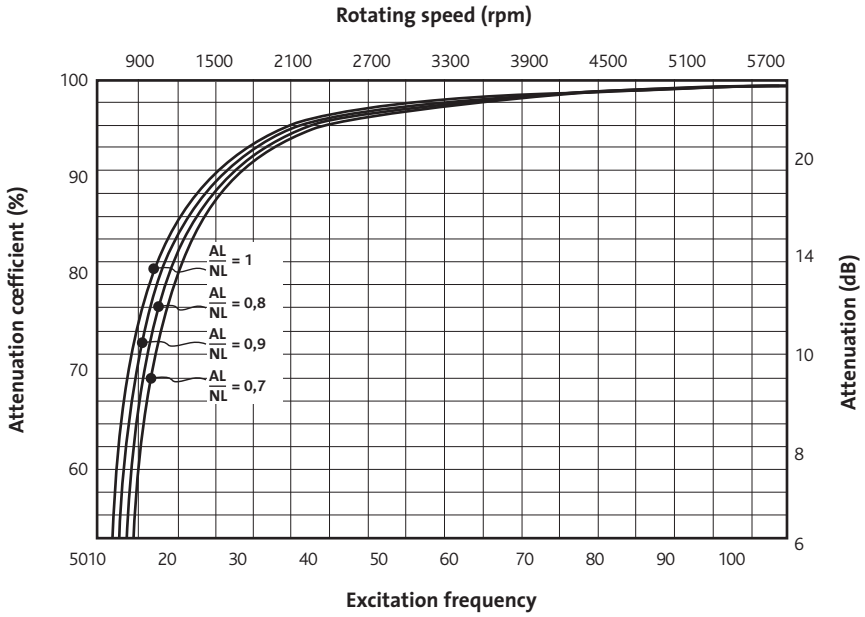
TECHNICAL CHARACTERISTICS

The vibration attenuation and height characteristics under nominal loads are **stabilised after one month under a load at 20°C.**

Common characteristics

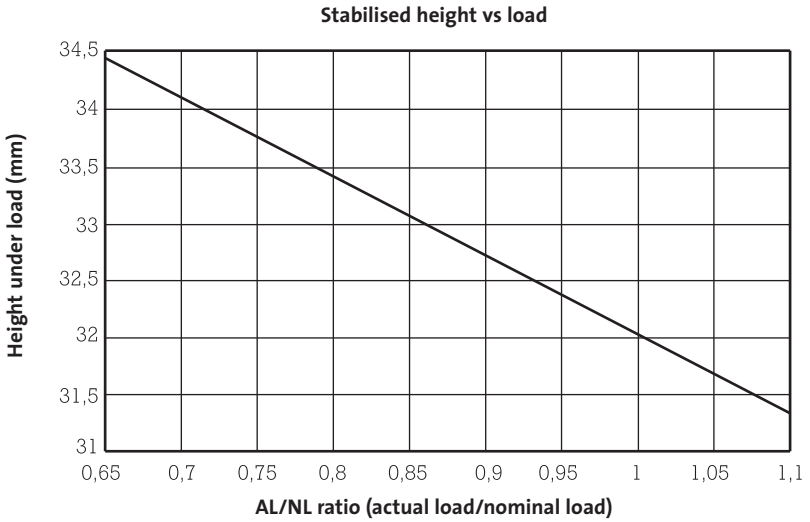
- Natural axial frequency : 7 Hz, with nominal load.
- Natural radial frequency : 3 to 5.5 Hz.
- Maximum displacement :
  - axial : 12 mm
  - radial : ± 10 mm.

Vibration attenuation



$\frac{AL}{NL}$ = Ratio $\frac{\text{actual load}}{\text{nominal load}}$

Height under load



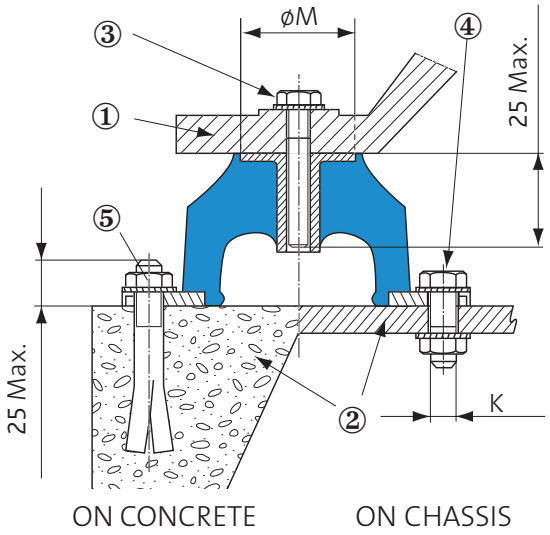
Temperature	Operating temperature : - 20 °C to + 70 °C.
Other characteristics*	Good dynamic performance at high frequency Withstand fatigue and shocks. Reduced creep.

* Detailed Technical Characteristics can be sent on request. Ask us for details.

MOUNTING

Standard Mounting

❶machine base or foot
dimensions > Ø M*
❷supporting structure (floor)
dimensions > base of mounting F*
* to ditribute the load and resist corrosion.
❸screw Ø C**
screw Ø K, a washer is required between the
❹screw head and the PAULSTRADYN®**
❺screw Ø K, a washer is required between the screw head and the PAULSTRADYN®**
** nuts and screws grade 4.6 minimum.



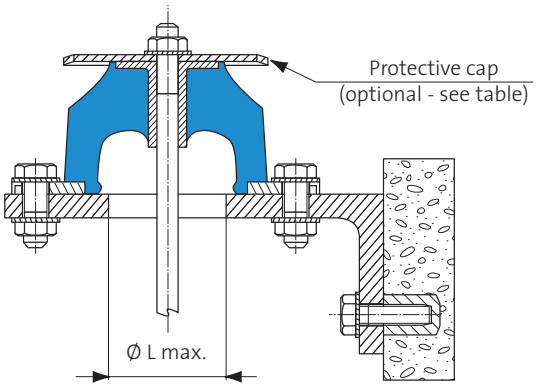
Shape 1

Recommended torque

Diameter K (mm)	M6	M8	M10	M12
Torque N.m	2	5	12	20

Note : Do not paint the mountings after fitting.

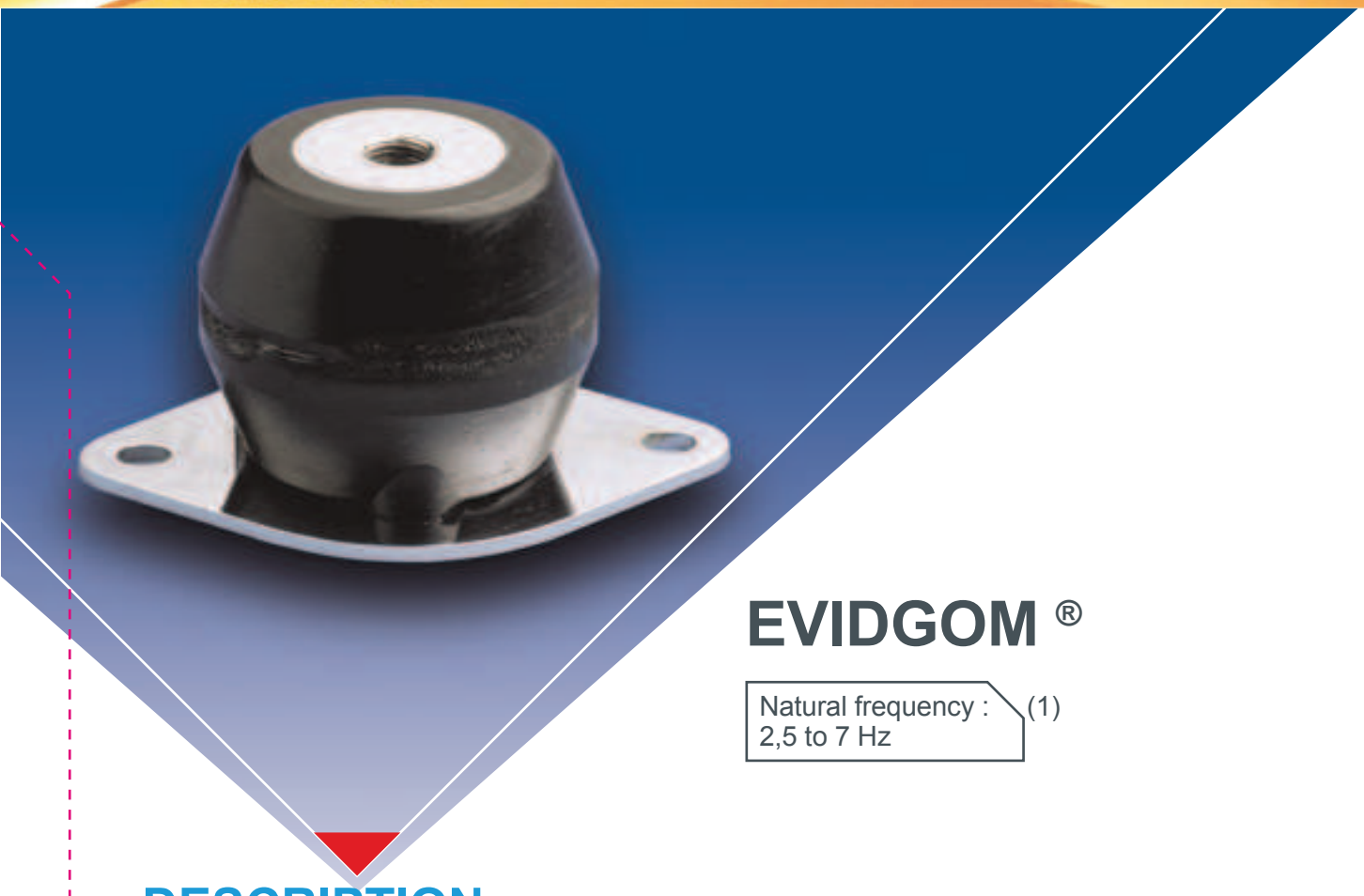
Alternative mounting



Shape 2

Mounting and cap references

Paulstradyn® references	Dimensions (mm)			Protective cap reference (optional)
	K shape 1	L max. shape 2	M min. shape 1	
533701, 533702, 533703	M5	27	14	**342919**
533704, 533705, 533706	M5	40	34	**342356**
533707, 533708, 533709	M6	46	50	**342733**
533710, 533711, 533712	M8	47	70	**342734**
533713, 533714, 533715	M10	99	118	**342353**
533716, 533717, 533718	M12	127	162	**342354**
533719				



EVIDGOM ®

Natural frequency : (1)
2,5 to 7 Hz

DESCRIPTION

The EVIDGOM® mount is formed from two thick conical membranes, joined at their bases to create a highly elastic mounting.
There are three variations :

- All rubber EVIDGOM®.
- EVIDGOM® with bonded fixing.
- EVIDGOM® with a diamond or square mounting plate (fixing plate supplied as a separate kit).

OPERATION

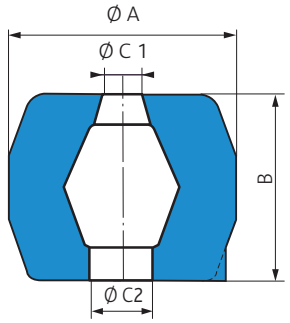
The design of the EVIDGOM® mount gives the following basic characteristics:
- A very high axial elasticity.
- Very low natural frequency (a few Hertz).
- Progressive buffer against shocks or accidental overload.

Advantages :
- As the load/deflection curve has a point of inflection, a suspension may be designed to have a sub-tangent greater than the static deflection.
- The elastomer used provides intrinsic damping with a corresponding ability to absorb energy which gives appreciable advantages over metallic springs.

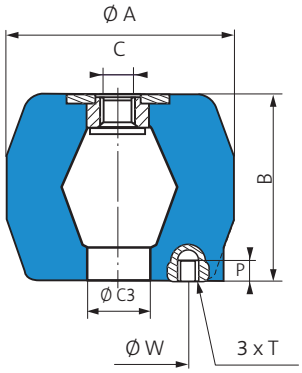
Recommendations :
- The selection of a low natural frequency (large deflection) must not be allowed to endanger the stability of the suspension (tall equipment).
- In certain cases (use under maximum load) the use of side stops is recommended.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

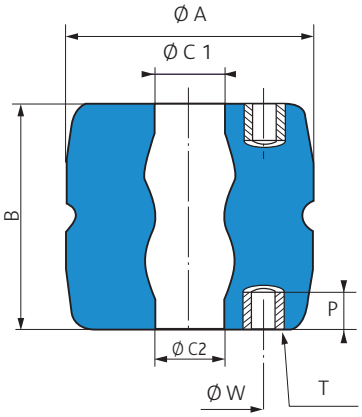
DIMENSIONS



Shape 1



Shape 2

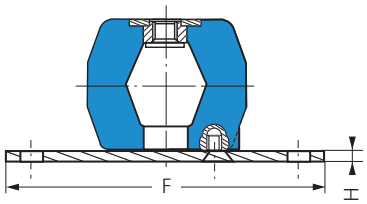


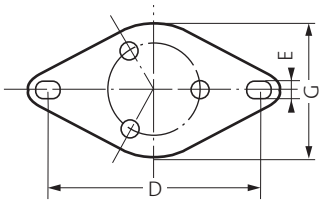
Shape 3

Ø A (mm)	B (mm)	EVIDGOM® reference				C	Ø C1 (mm)	Ø C2 (mm)	Ø C3 (mm)	Ø W (mm)	T	P (mm)
		All rubber	Shape	With fixings	Shape							
34	25	**810002**	1	-	-	-	8	8	-	-	-	-
40	55	**810003**	1	-	-	-	14	14	-	-	-	-
50	70	**810005**	1	-	-	-	14	14	-	-	-	-
60	40	-	-	**810780**	2	M10	-	25	25	40	M6	6
85	70	**810006**	1	**810766**	2	M16	20	30	30	60	M8	8
95	90	**810008**	1	**810768**	2	M16	20	30	30	60	M8	8
108	90	**810009**	1	**810769**	2	M16	20	30	34	70	M10	10
120	110	**810012**	1	-	-	-	20	30	-	-	-	-
140	120	**810013**	1	**810773**	2	M16	25	40	35	70	M10	10
125	140	**810014**	1	**810784**	2	M16	25	30	25	70	M10	10
140	90	**810019**	1	**810779**	2	M16	28	12	28	70	M10	10
140	56	**810020**	1	**810770**	2	M16	30	30	30	70	M10	10
155	150	**810015**	1	**810775**	2	M16	25	30	30	90	M14	14
188	180	**810016**	1	**810776**	2	M24	40	40	40	90	M14	14
250	230	-	-	**810733**	3	-	70	70	-	150	6 X M24	40
350	290	-	-	**810736**	3	-	85	85	-	196	8 X M24	40

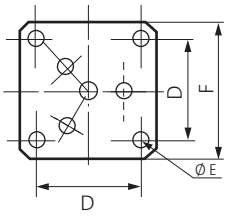
See current price list for availability of items.

Lower fixing plate





Shape a



Shape b

EVIDGOM® reference	Fixing pack reference	Shape	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
810780	**337566**	a	98/102	8,2	117	65	5
810766	**337567**	a	124/128	10,2	158	110	5
810768	**337567**	a	124/128	10,2	158	110	5
810769	**337568**	a	178/182	10,2	214	150	6
810773	**337568**	a	178/182	10,2	214	150	6
810784	**337568**	a	178/182	10,2	214	150	6
810779	**337568**	a	178/182	10,2	214	150	6
810770	**337568**	a	178/182	10,2	214	150	6
810775	**337569**	b	170	10,5	200	-	8
810776	**337569**	b	170	10,5	200	-	8

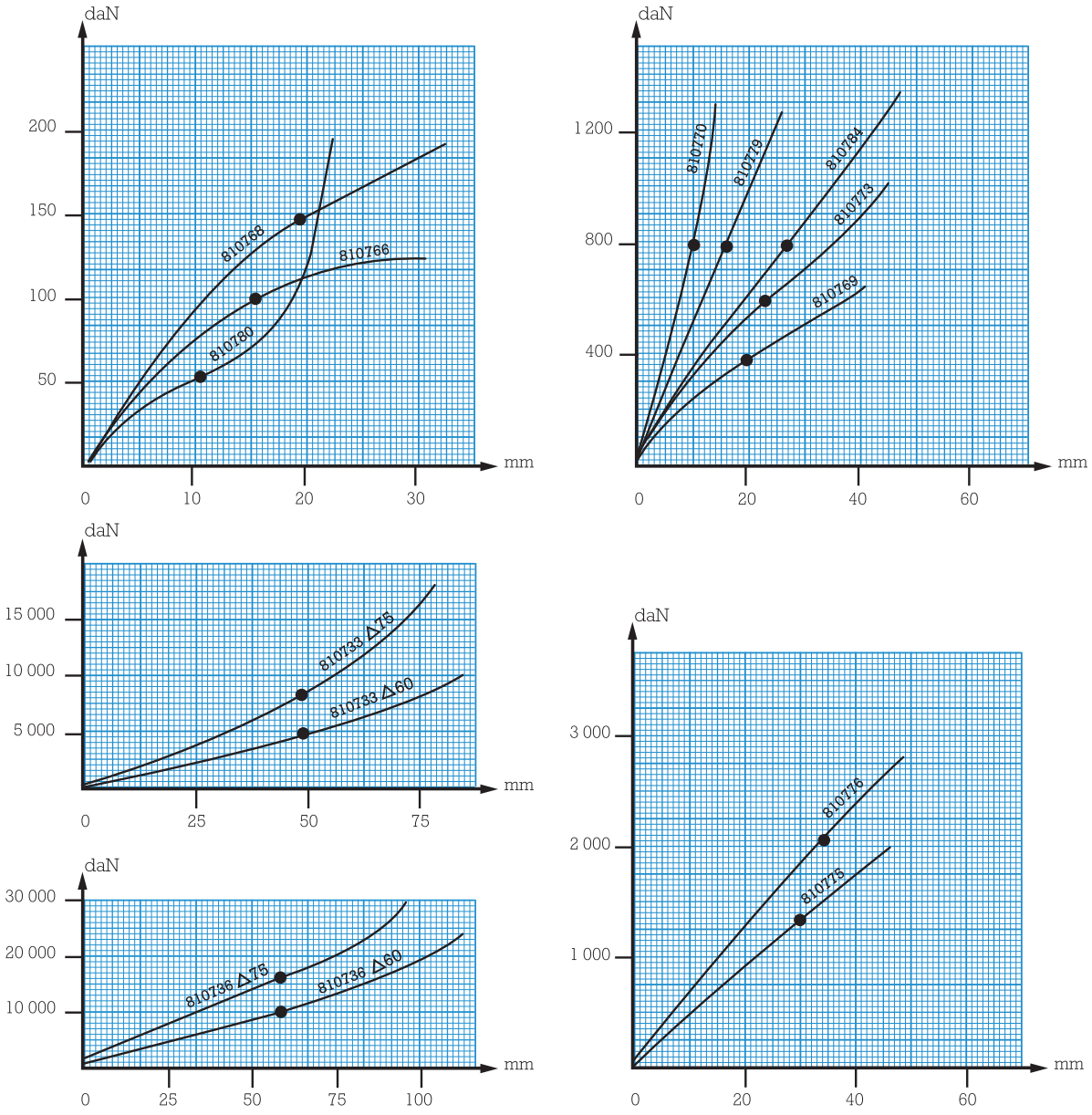
OPERATING CHARACTERISTICS

Nominal static load (daN)	Deflect. ± 15% (mm)	Ø A (mm) under nominal charge	Height B (mm)	Reference
5-15	5	40	25	**810002**
10-40	11	50	55	**810003**
20-80	14	63	80	**810005**
15-60	10	80	40	**810780**
25-100	15	105	70	**810766**
35-150	18	124	90	**810768**
100-400	20	136	90	**810769**
100-390	23	134	110	**810012**
150-600	24	175	120	**810773**

Nominal static load (daN)	Deflect. ± 15% (mm)	Ø A (mm) under nominal charge	Height B (mm)	Reference
200-800	26	170	140	**810784**
200-800	16	175	90	**810779**
200-800	10	166	56	**810770**
325-1300	30	175	150	**810775**
500-2000	35	240	180	**810776**
1250-5000	50	345	230	**810733Δ60**
2000-8000	50	345	230	**810733Δ75**
2250-9000	60	500	290	**810736Δ60**
3500-14000	60	500	290	**810736Δ75**

See current price list for availability of items.

LOAD/DEFLECTION CURVES IN AXIAL COMPRESSION



"SANDWICH" MOUNTS

Natural frequency : (1)
5 to 13 Hz

DESCRIPTION

The SANDWICH mount comprises one or more layers of elastomer bonded to flat, parallel metallic plates. These mountings may be cylindrical or rectangular. They are designed to withstand very high compressive loads. The range of mechanical characteristics is gover-ned by the hardness of the rubber and the number of intermediate metallic plates.

These mountings can support compression from 20 to 100 bars.

The metal plates usually receive a phosphate anti-corrosion treatment.

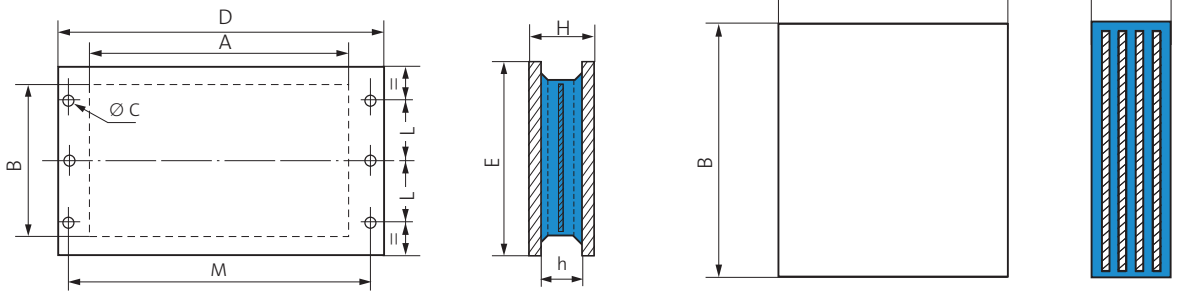
The elastomer is polychloroprene which provides a high resistance to atmospheric exposure.

OPERATION

The design of the SANDWICH mount gives the following basic characteristics :

- Very slim,
- Large surface area,
- Stackable mountings,
- The suspended equipment is free to move in all directions,
- High ratio of axial stiffness to radial stiffness,
- Very high axial loads.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.



Shape A **Shape B**

MOUNTINGS WITH FIXING PLATES (shape A)

Ref. without intermediate plate	Ref. with intermediate plate	A (mm)	B (mm)	D (mm)	E (mm)	H (mm)	h (mm)	Nr holes x Ø C (mm)	L (mm)	M (mm)	Weight (kg)
539608	**539607**	182	142	255	170	49	40	6 x 9	58	235	5
539612	539933	372	252	460	300	61	50	6 x 13	100	430	18
539613	-	702	252	805	300	61	50	6 x 17	95	765	35
-	539267	160	110	230	110	58	44	4 x 15	35	202	5
539821	-	283	140	380	140	76	60	6 x 18	50	340	9,5

See current price list for availability of items.

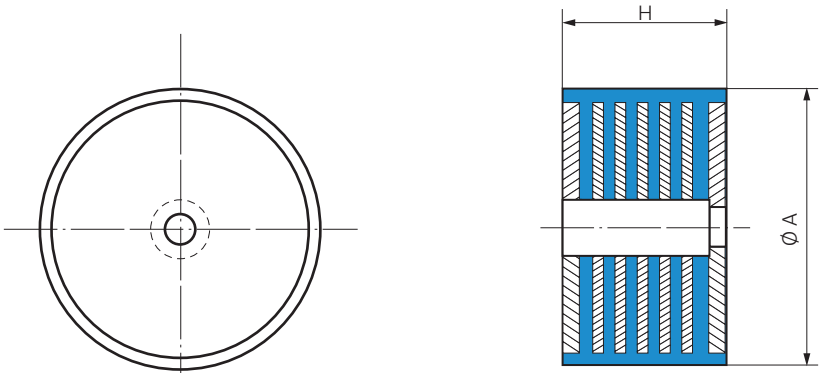
Nominal static load (daN)	Deflection (mm)	Reference	Hardness
1000-4000	8	539821	50
1250-5000	7	**539608**	60
2500-10000	6	**539607**	45
6250-25000	3,5	539267	70
3750-15000	5	**539607**	60

Nominal static load (daN)	Deflection (mm)	Reference	Hardness
5000-20000	6	**539612**	45
7500-30000	7	**539612**	60
11250-45000	5	**539613**	60
15000-60000	4	539933	60

MOUNTINGS WITH FIXING PLATES (shape B)

Reference	A (=D) (mm)	B (=E) (mm)	H (mm)	Maximum static load (daN)
539832	200	165	38	95 000
539823	220	220	270	150 000
539833	240	200	38	145 000
539992	250	250	140	200 000
539820	400	300	78	380 000
539835	405	255	61	310 000
539537	500	500	66,5	870 000
539890	510	410	82	700 000
539939	600	500	125	1 000 000
539520	650	650	152	1 500 000
539924	702	252	50	450 000
539903	800	250	190	480 000
539701	750	750	300	2 000 000
519821	200	190	60	115 000
519822	260	230	60	185 000
519823	280	180	60	143 000

CYLINDRICAL MOUNTINGS

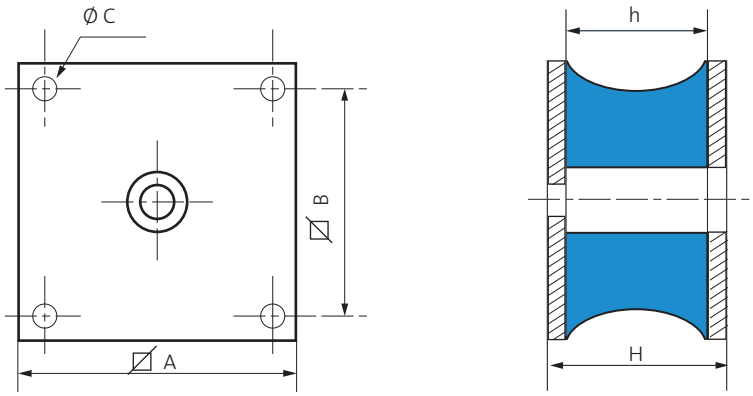


Dimensions can change. Please contact us.

Reference	Ø A (mm)	H (mm)	Nominal static load (daN)
539904	115	54	1 500
544051	150	110	12 000
539796	200	94,5	18 000
539983	200	90	5 000
539539	275	275	5 000
539938	320	19	100 000
539937	350	105	110 000
539900	400	117	150 000
544078	600	167	300 000
544079	600	285	433 000
544080	860	300	650 000

Various types of fixing are available. Consult us for information.

DOMINANTLY RADIAL MOUNTINGS



Dimensions can change. Please contact us.

Reference	Ø A (mm)	h (mm)	Ø B (mm)	H (mm)	Ø C (mm)	Shear		Compression (daN)
						(mm)	(daN)	
534646	150	62	120	70	12,5	20	200	1 500
534647	150	62	120	70	12,5	20	150	1 000
534455	232	74	190	86	16,5	25	500	2 000
534456	232	74	190	86	16,5	25	625	3 500
539898*	180	88	146	100	13	10	400	3 000
539917*	180	66	146	76	13	10	250	1 500
539940	300 x 480	318	430 x 219	350	18	70	4 500	13 000
539806	360 x 200	100	330 x 170	120	18	30	1 200	3 000
544051*	240 x 160	100	190 x 110	110	17	50	1 800	10 000

* Multilayer laminated part.

Various types of fixing are available.Please consult us for information.

STABIFLEX

Natural frequency : (1)
6 to 11 Hz

DESCRIPTION

The STABIFLEX mount comprises a conical rubber section bonded between inner and outer metal parts.

- Centre axis with threaded hole.
- Square (4 holes) or diamond base (2 holes) with clearance hole.
- Bonded natural rubber, anti-slip bead.
- Cup to protect the rubber and distribute the load.

OPERATION

The design of the STABIFLEX mount gives the following basic characteristics :

- Axial elasticity two or three times higher than radial elasticity.
- The rubber works in shear/compression.
- Progressive buffer against shocks or accidental overload.
- Anti-slip (may be placed directly on the ground).

Advantages :

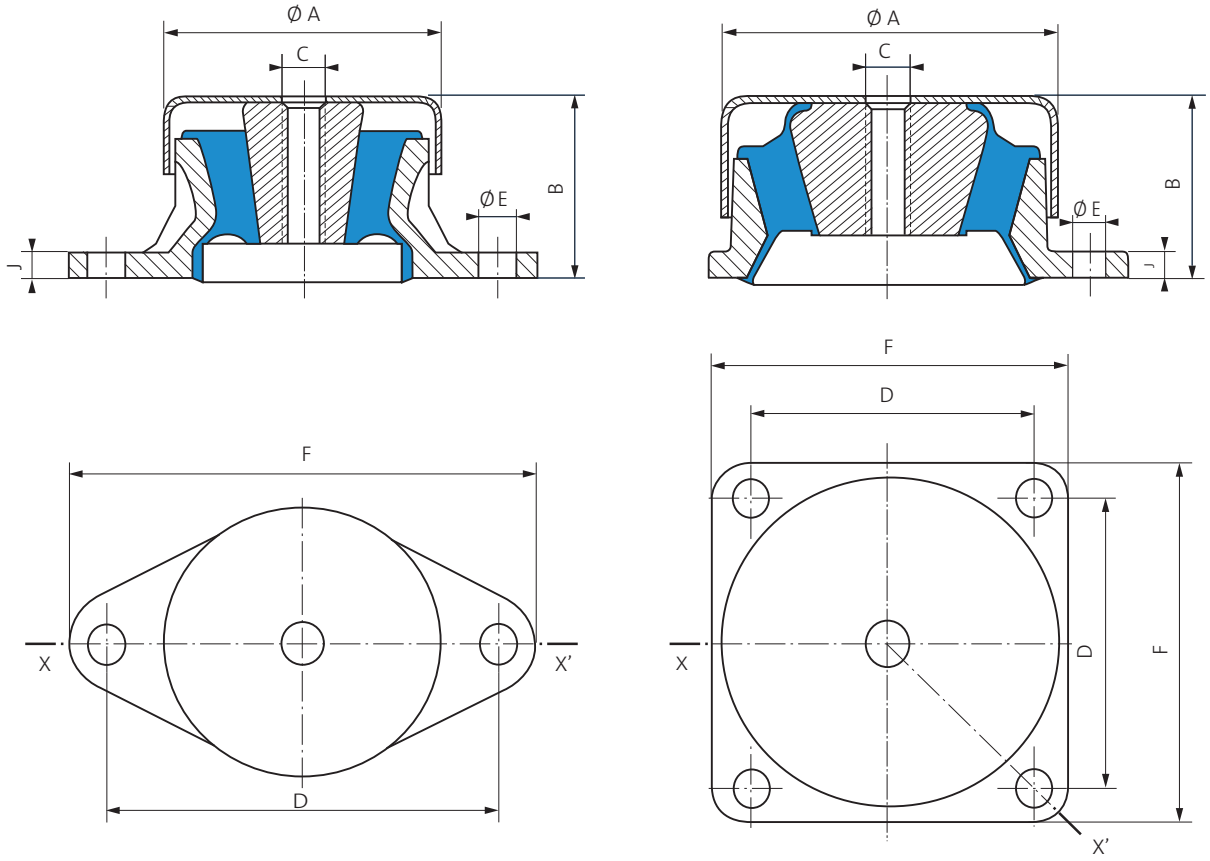
- The machine may be placed with its mounts directly on the ground.
- Speed of fixing.
- Easy movement of suspended machinery.
- Rubber protected against harmful liquids.
- Extensive range : 3 hardnesses of rubber for 5 existing types, allowing the mount to be optimised as a function of the load and forcing frequency.
- May be used with an anti-rebound washer.

Recommendations :

- In order not to affect the performances of the mounting system, all external connections must be flexible.
- STABIFLEX mounts must be fitted so that the vibration input is in the axial direction.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS



STABIFLEX - diamond base

STABIFLEX - square base

Type	Reference	Hardness	Ø A (mm)	B (mm)	C	D (mm)	E (mm)	F (mm)	J (mm)	Weight (g)
Diamond base	**530603** **530613**	45.60.75 45.60.75	69 84	41 51	M12 M12	98 115	9 11	114 137	6 7	250 450
Square base	**530622** **530642** **530652***	45.60.75 45.60 45.60.75	100 133 133	52 69 69	M12 M16 M16	90 114 114	11 13 13	114 144 144	7 9 9	1000 2300 2700

* Part identified by the letter “R” (reinforced)

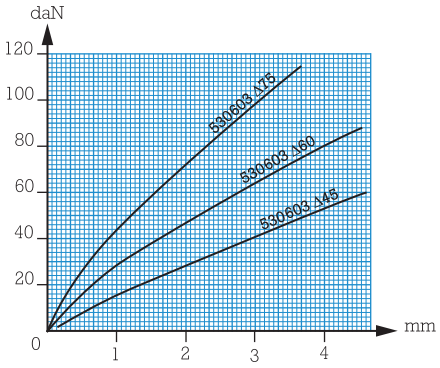
See current price list for availability of items.

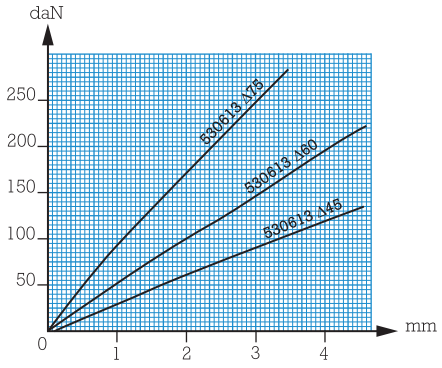
OPERATING CHARACTERISTICS

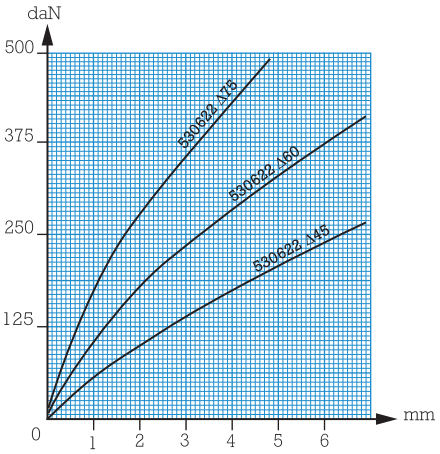
Nominal static load (daN)	Deflection (mm)	Reference	Hardness
10 - 42	3,5	**530603**	45
15 - 60	3	**530603**	60
20 - 93	3,5	**530613**	45
30 - 125	4	**530603**	75
40 - 165	3,5	**530613**	60
50 - 210	5	**530622**	45
65 - 260	3	**530613**	75

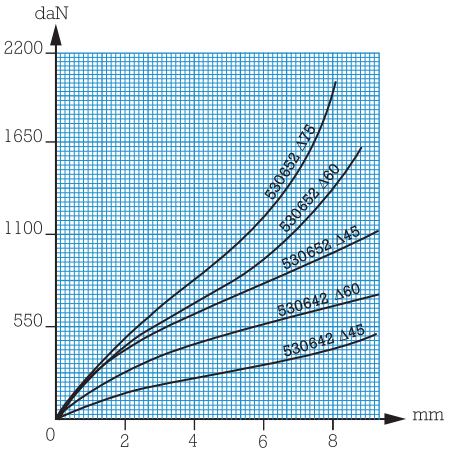
Nominal static load (daN)	Deflection (mm)	Reference	Hardness
65 - 275	4,5	**530622**	60
95 - 380	3,5	**530622**	75
110 - 450	8	**530642**	45
175 - 700	8	**530642**	60
250 - 1000	8	**530652**	45
325 - 1300	8	**530652**	60
450 - 1800	8	**530652**	75

LOAD/DEFLECTION CURVES IN AXIAL COMPRESSION



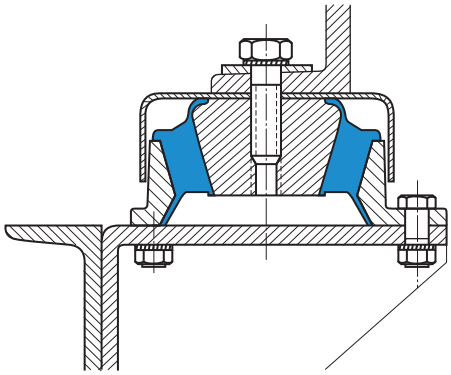


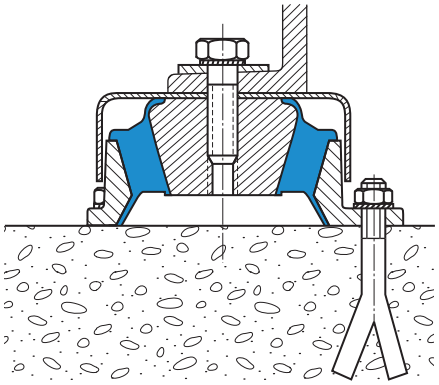




ASSEMBLY

- **Standard fixing methods**

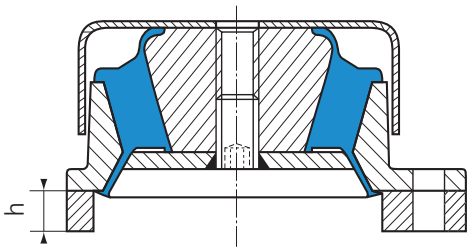




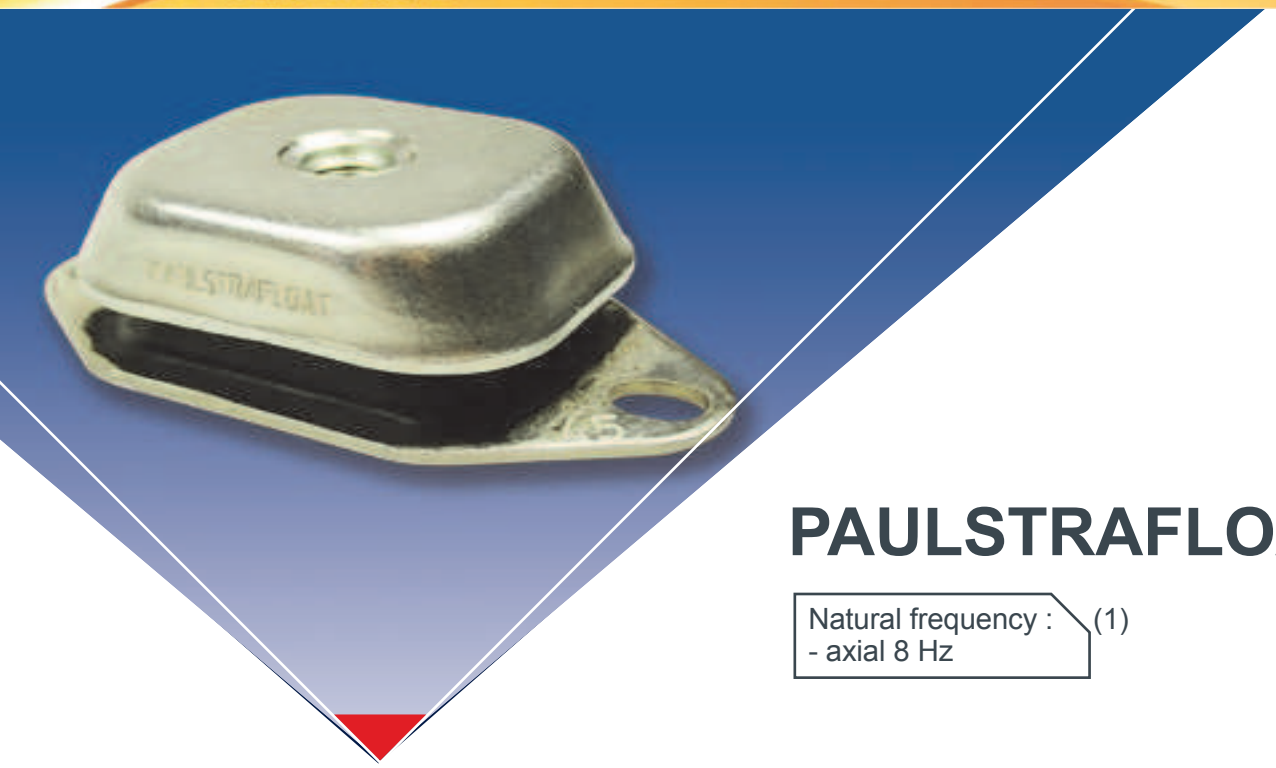
- **Fixing with anti-rebound washer**
  - The anti-rebound washer (not supplied) is fixed to the lower side of the centre axis.
  - In this case, do not forget to fit a spacer.

Spacer thickness required :

530603	h: 2 mm
530613	h: 4 mm
530622	h: 7 mm
530642	h: 14 mm
530652	h: 14 mm



All our mounts are identified by conventional markings, either a paint spot or figures indicating the hardness: grey = hardness 45, green = hardness 60, blue = hardness 75.



PAULSTRAFLOAT

Natural frequency : (1)
- axial 8 Hz

DESCRIPTION

Paulstrafloat® mount of rectangular design is composed of :
- Diamond base (2 holes) with clearance hole
- Cup to protect the rubber and distribute the load
- Progressive stiffness and rebound for protection against shocks

OPERATION

The design of the Paulstrafloat® mount gives the following basic characteristics :
- Differents stiffness in 3 axis : vertical - longitudinal (length) - width
- The rubber works in shear/compression
- Set position control with the slots
- Higher axial stiffness
- This mount is suitable for mobile equipment

Advantages :
- The machine may be placed with its mounts directly on the ground
- Quick installation
- Rubber protected against harmful liquids
- Extensive range : 3 hardnesses of rubber for 3 existing types, allowing the mount to be optimized as a function of the load and forcing frequency
- Anti-rebound and fail-safe

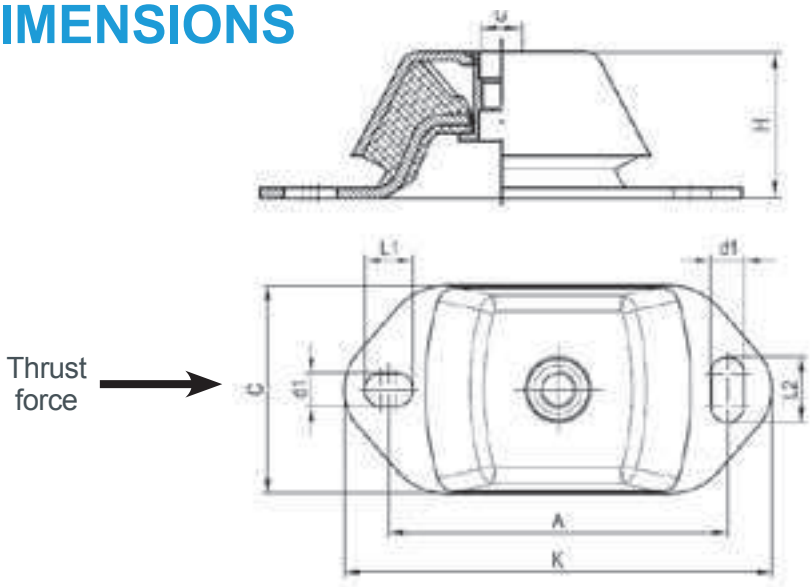
Recommandations :
Paulstrafloat® mounts must be installed on the longitudinal axis to handle thrust force.

APPLICATIONS

Paulstrafloat® mount is perfectly suitable for shipboard equipment, motor suspension, transports and boarding equipment. Used for static applications : generator, pump, fan …

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

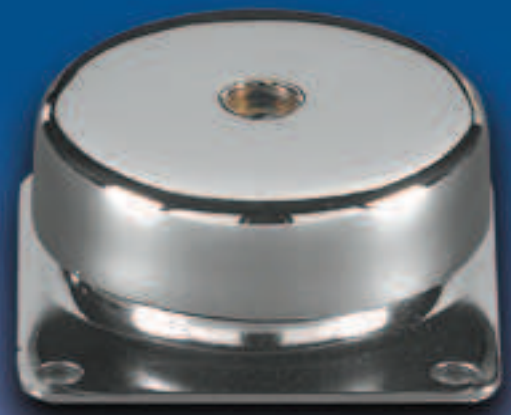
DIMENSIONS



References	Hardness	C	A	K	H	d1	L1	L2	G
544395	45/55/65	112	182	230	70	18	26	39	M20
544396	45/55/65	75	140	183	50	13	20	30	M16
544397	45/55/65	60	100	120	38	11	14	14	M12

OPERATING CHARACTERISTICS

References	Hardness	Max. load (daN)	Max. deflection under load (mm)	Max. load with thrust force (daN)
544397	45	60	5.5	40
	55	70		60
	65	110		90
544396	45	160		100
	55	220		145
	65	310		220
544395	45	350		250
	55	550		390
	65	810		565



CUPMOUNT

Natural frequency : (1)
25 to 35 Hz

DESCRIPTION

The CUPMOUNT is made of rubber rings that are each compression fit between two profiled metal structural components and the core.

- Internal structural element or core has an integral tapped hole.
- External structural element or base has four equally spaced mounting holes conforming to industry standard geometry and dimensions for cup style mounts.

FONCTIONNEMENT

The design of the CUPMOUNT gives the following basic characteristics :

- The ratio of radial and axial rigidity of the elements is 1/1, which allows excellent stability.

Advantages :

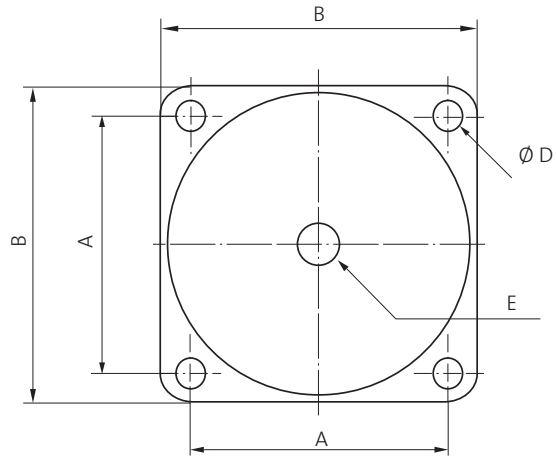
- Four models, load capacity of 1 to 1000 daN.
- Support iso-stiffness into axial and radial.
- Can be assembled multidirectional. Effective in compression, traction and shear.
- Chloroprene resistant to oils.
- Easy and fast to install.

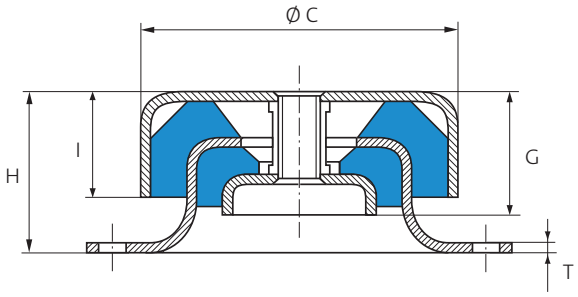
APPLICATIONS

Moteurs, pompes, air conditionné, ventilateurs, transformateurs. Le CUPMOUNT convient également pour la suspension sur véhicules ainsi que pour les fixations murales et aux plafonds.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS CHARACTERISTICS





Reference 530906

Paulstra reference	*Barry Controls* reference*	A (mm)	B (mm)	Ø C (mm)	Ø D (mm)	E	G (mm)	H (mm)	I (mm)	T (mm)	Weight (kg)
530906 11/14	*C1000*	49,5	60	58	5,2	M6	20	28	18	1,6	0,2
530906 21/26	*C2000*	63,5	75	76	6,4	M10	30	38	25	2,3	0,4
530906 31/34	*C3000*	143	175	168	13,5	M16	65	90	59	4,7	4,5
530906 41/44	*C4000*	108	133	124	11,9	M16	19	63	38	4	1,8

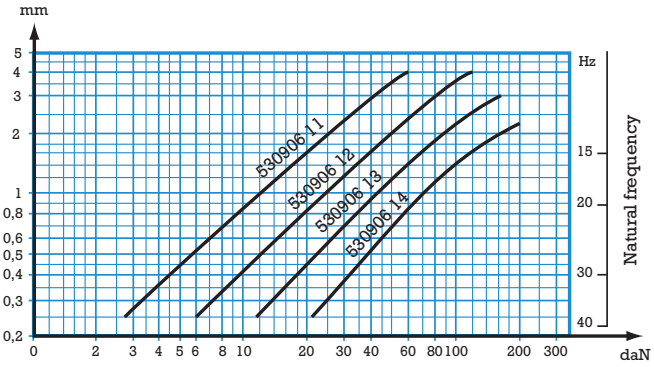
*Barry Controls part numbers are given as a reference only.

OPERATING CHARACTERISTICS

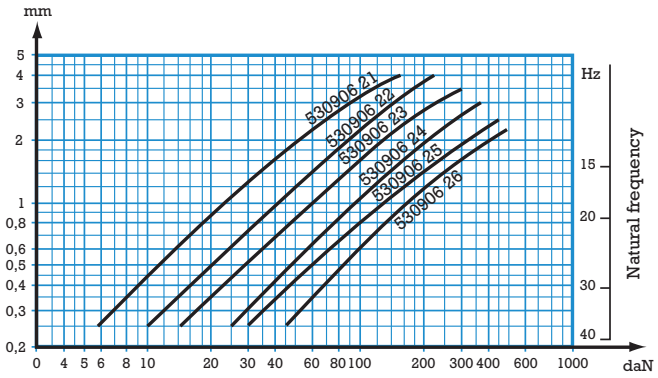
Paulstra reference	*Barry Controls** reference	Maximum load (daN)	
		Mobile application	Statique application
530906 11	*C1010*	6,5	13
530906 12	*C1015*	14	28
530906 13	*C1035*	26	52
530906 14	*C1050*	45	90
530906 21	*C2020*	13	26
530906 22	*C2040*	24	48
530906 23	*C2060*	34	68
530906 24	*C2075*	60	120
530906 25	*C2090*	72	144
530906 26	*C2125*	92	184
530906 41	*C4100*	70	140
530906 42	*C4135*	118	236
530906 43	*C4200*	160	320
530906 44	*C4300*	250	500
530906 31	*C3125*	90	180
530906 32	*C3175*	125	250
530906 33	*C3300*	165	330
530906 34	*C3500*	330	660

*Barry Controls part numbers are given as a reference only.

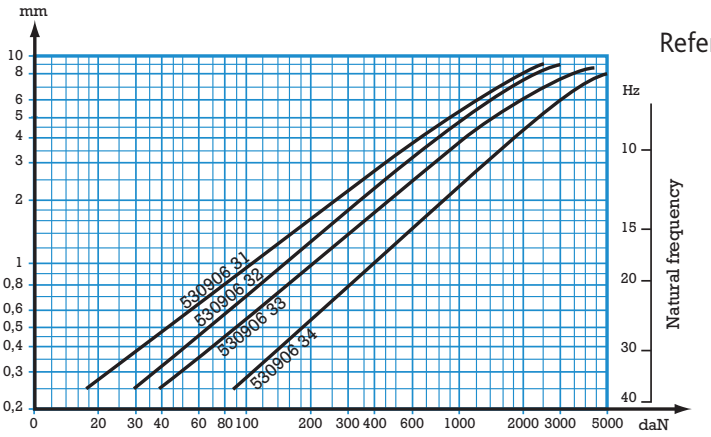
LOAD/DEFLECTION CURVES IN AXIAL COMPRESSION



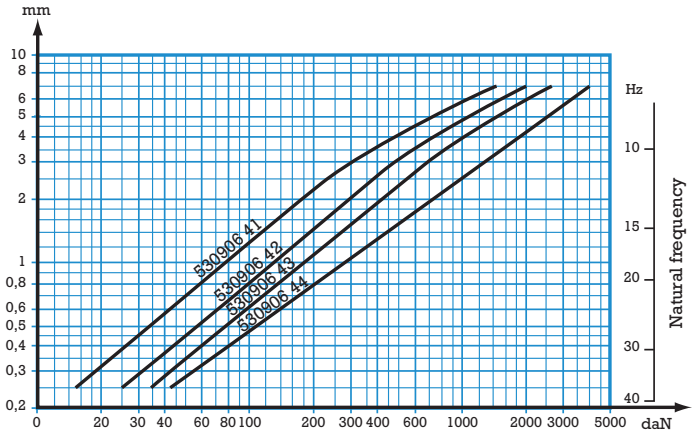
Reference 530906 11/14



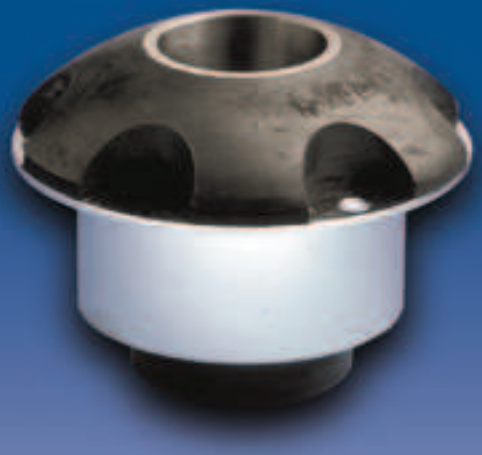
Reference 530906 21/26



Reference 530906 31/34



Reference 530906 41/44



S.C. MOUNTS

Natural frequency : (1)
6 to 30 Hz

DESCRIPTION

The S.C. mount comprises an annular section bonded between the inner tube and outer housing. The outer housing has a mounting flange (4 different types).

OPERATION

The design of the S.C. mount gives the following basic characte-ristics :

- Axial elasticity four times higher than radial elasticity.
- The rubber works in shear.
- Progressive buffer against shocks or accidental overload, provided that a large metal washer is used to bear against the rubber dome.
- Can be used as a fail safe assembly when fitted as in shape 1.

Advantages :

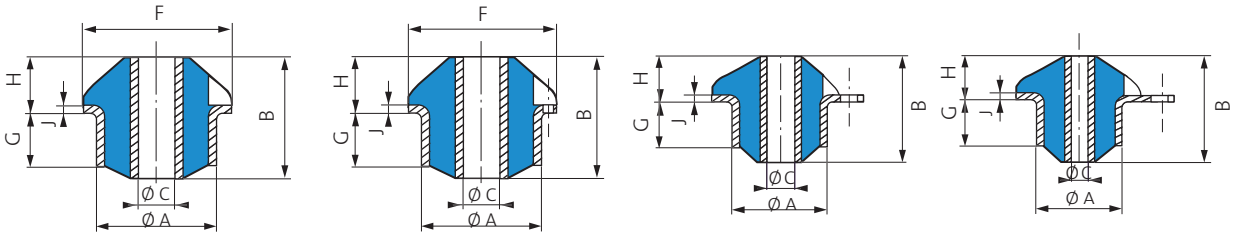
- Extensive range: 3 hardnesses of rubber for 20 existing types, allowing the mounting to be opti mised as a function of the load and exciting frequency.

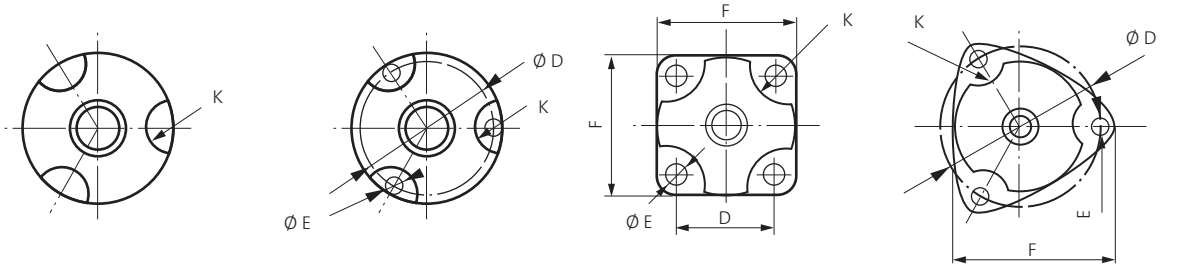
Recommendations :

- In order not to affect the performance of the mounting system, all external connections must be flexible.
- S.C. mounts must be fitted so that the vibration input is in the axial direction.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS





Shape a | Shape b | Shape c | Shape d

TYPE	Reference				Ø A (mm)	B (mm)	Ø C (mm)	Ø D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	K (mm)	Weight (g)
	With fixing holes		Without fixing holes												
S.C. 000	**531201**	Shape c	–	–	20	11	6,2	19	3,2	25	3	7	1	4	8
S.C. 00	**531301**	Shape c	–	–	26	28	8	26	5,2	36	12,5	11,5	1,5	12	40
S.C. 01	–	–	**531401**	Shape a	37,5	40	12,1	–	–	48	18	18	2	8	110
S.C. 02	–	–	**531402**	Shape a	37,5	51	12,1	–	–	48	24	18	2	8	130
S.C. 10	**531216**	Shape d	–	–	49,1	47	12,2	69	8,2	72	20	18	2	12	190
S.C. 11	**531611**	Shape d	–	–	49,1	60	12,2	69	8,2	72	31	18	2	12	290
S.C. 20	–	–	**531701**	Shape a	55,7	55	18,2	–	–	70	27	19	3	10	370
S.C. 21	–	–	**531702**	Shape a	55,7	70	18,2	–	–	70	39	19	3	18	480
S.C. 21	**531240**	Shape d	–	–	57,2	70	18,2	86	10,5	90	39	19	3	18	500
S.C 30	**531259**	Shape b	–	–	65	75	20,2	78	8,5	90	29	28	3	18	560
S.C. 31	**531261**	Shape d	–	–	66,5	93	20,2	95	8,5	107	47	28	3	18	780
S.C. 40	**531714**	Shape d	–	–	76	90	22,2	100	8,5	112	42	28	3	18	880
S.C.41	**531327**	Shape d	–	–	76	110	22,2	100	8,5	112	49	28,5	3	18	960
S.C. 41	–	–	**531902**	Shape a	74	110	22,2	–	–	100	49	28	3	18	960
S.C. 50	**531939**	Shape d	–	–	87,5	100	40,2	114	8,5	127	47	33	3	20	1300
S.C. 51	**531947**	Shape b	–	–	86	120	40,2	104	10,5	120	63	33	4	22	1500
S.C. 70 réd.	**531933**	Shape b	–	–	118	98	60,2	145	10,5	164	36	46	4	22	2200
S.C. 70	**531932**	Shape b	–	–	118	140	60,2	145	10,5	164	66	46	4	22	3000
S.C. 71	**531931**	Shape b	–	–	118	170	60,2	145	10,5	164	96	46	5	30	3800
S.C. 80	**531940**	Shape b	–	–	170	167	80	204	12,2	230	95	53	5	30	7100
S.C. 81	**531941**	Shape b	–	–	170	185	80	204	12,2	230	113	53	5	30	7700

See current price list for availability of items.

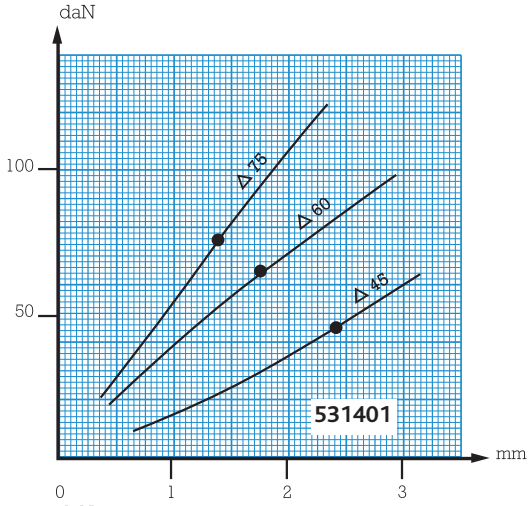
OPERATING CHARACTERISTICS

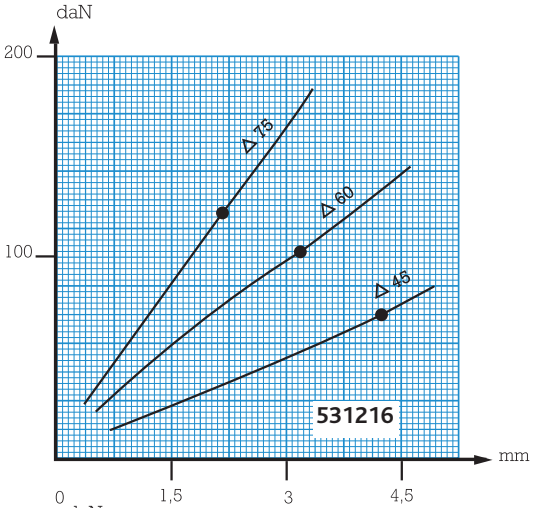
Nominal static load (daN)	Deflect. (mm)	Reference	Hard. Shore A
1-6	1	**531201**	45
2-8	0,8	**531201**	60
2-10	0,5	**531201**	75
5-20	1,5	**531301**	45
7-30	1,2	**531301**	60
10-40	0,8	**531301**	75
10-50	2,5	**531401**	45
15-65	1,8	**531401**	60
15-65	2,5	**531402**	45
15-70	4	**531216**	45
20-80	1,5	**531401**	75
20-85	1,8	**531402**	60
20-85	4	**531611**	45
25-100	3	**531216**	60
25-100	3,5	**531701**	45
25-110	1,5	**531402**	75
30-120	2	**531216**	75
30-120	3	**531611**	60
30-135	3,5	**531240**	45
30-135	3,5	**531702**	45
35-150	1,5	**531611**	75

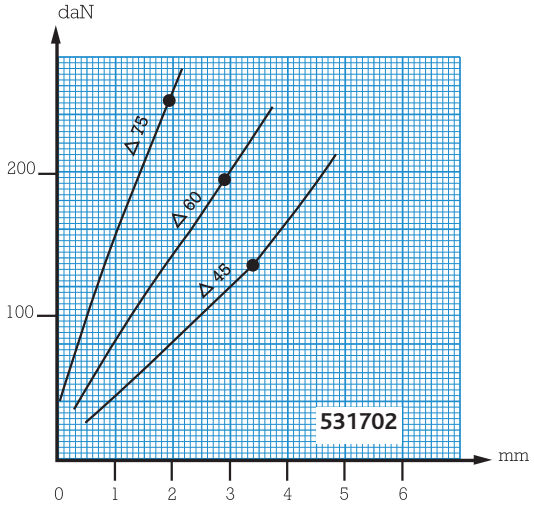
Nominal static load (daN)	Deflect. (mm)	Reference	Hard. Shore A
35-150	3	**531701**	60
40-175	5	**531259**	45
45-180	2	**531701**	75
45-190	3	**531240**	60
45-190	3	**531702**	60
55-225	5	**531714**	45
60-240	3,5	**531259**	60
60-250	2	**531240**	75
60-250	2	**531702**	75
60-250	5	**531261**	45
60-250	5	**531327**	45
60-250	5	**531902**	45
75-300	2	**531259**	75
80-320	4,5	**531714**	60
80-325	4,5	**531939**	45
85-350	3,5	**531261**	60
90-360	4,5	**531327**	60
90-360	4,5	**531902**	60
95-380	3	**531714**	75
100-400	4,5	**531947**	45
105-420	2	**531261**	75

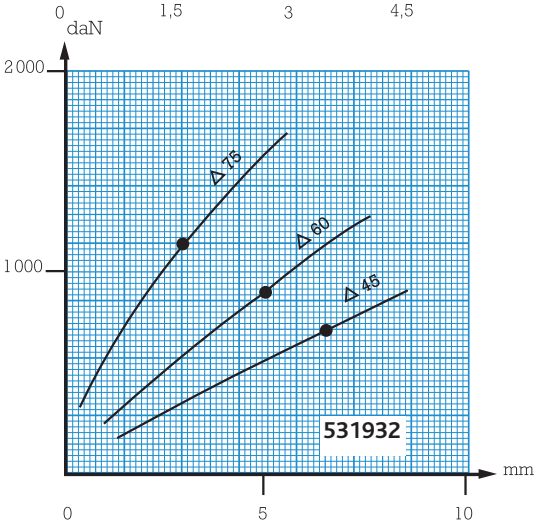
Nominal static load (daN)	Deflect. (mm)	Reference	Hard. Shore A
110-450	3,5	**531939**	60
110-450	3	**531327**	75
110-450	3	**531902**	75
110-450	6,5	**531933**	45
135-550	2,5	**531939**	75
135-550	3,5	**531947**	60
150-600	5	**531933**	60
165-670	2,5	**531947**	75
175-700	6,5	**531932**	45
210-850	6,5	**531931**	45
225-900	5	**531932**	60
275-1100	3	**531932**	75
275-1100	5	**531931**	60
310-1250	11	**531940**	45
350-1400	3	**531931**	75
400-1600	11	**531941**	45
450-1800	8,5	**531940**	60
525-2100	8,5	**531941**	60
575-2300	5	**531940**	75
650-2600	5	**531941**	75

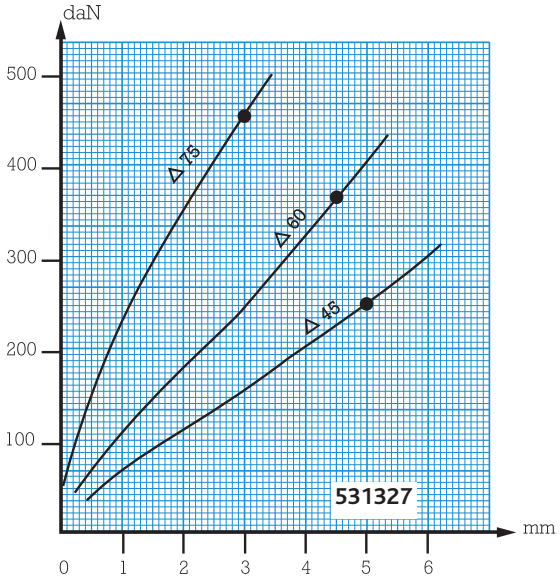
LOAD/DEFLECTION CURVES IN AXIAL COMPRESSION

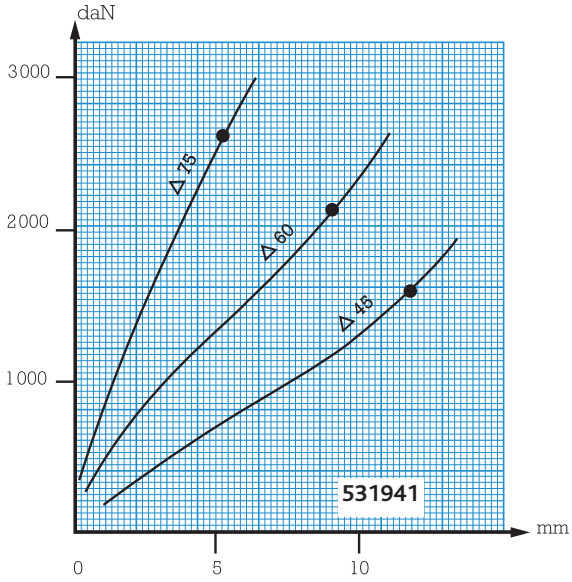






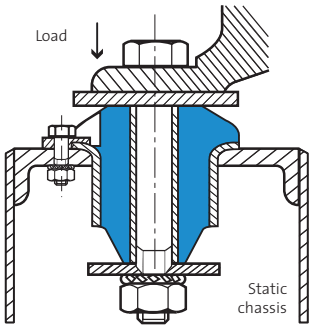




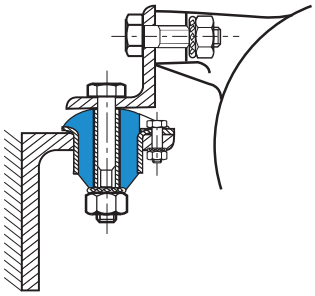


ASSEMBLY

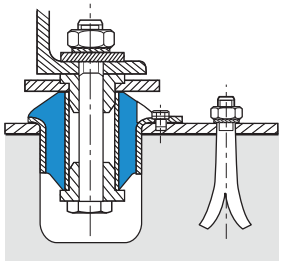
Standard Installations



Shape 1 - Fixing between the equipment and a metallic chassis (failsafe in mobile applications).

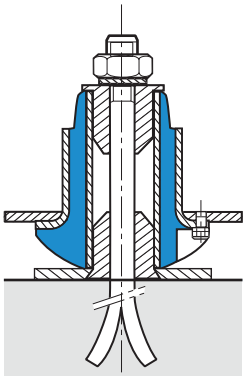


Shape 2 - Fixing between two brackets onto a vertical surface (non failsafe).

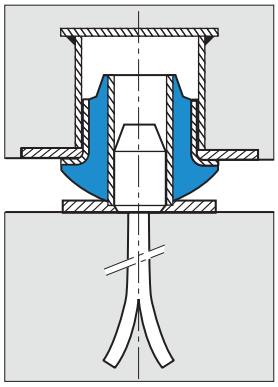


Shape 3 - Fixing between the equipment and concrete (using locating rings).

Reversed Installations

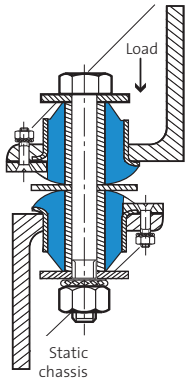


Shape 4

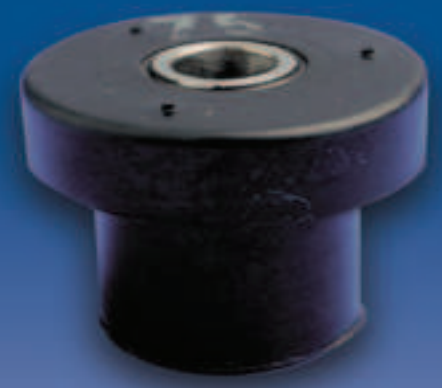


Shape 5 - Fixing between inertia base and foundation. The inertia base increases the suspended mass and thus reduces the amplitudes of the vibrations as well as lowering the natural frequency.

Tandem Mounting



Shape 6 - Two mounts fixed face to face. Provides twice the deflection under the same load.



S.T. C

Natural frequency : (1)
10 to 25 Hz

DESCRIPTION

The S.T.C. mount comprises a rubber ring bonded to a central tube.

- Inner tube : mild steel.
- Bonded rubber in the form of a ring at the top with a collar below which is used for fixing.

OPERATION

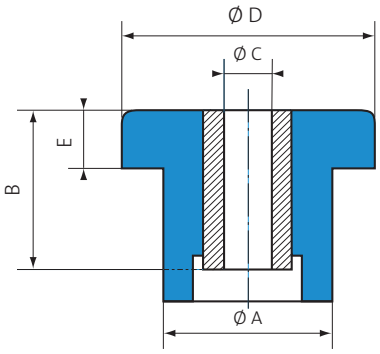
The design of the S.T.C. mount gives the following basic characteristics :

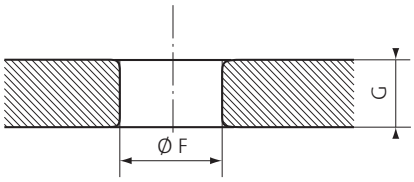
- The rubber works in compression.
- Anti-rebound.
- Can be used as safety mounting.

Advantages :
- Simple to fix.
- Simple and economical.
- Extensive range of loads.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS





Reference	Ø A (mm)	B (mm)	Ø C (mm)	Ø D (mm)	E (mm)	Ø F (mm)	G (mm)
539887	20,6	17,5	10	27,7	5,6	20,6	8
539190	31,5	25,4	13	44,5	10,4	31,5	10
539886	34,3	35	13	50,8	13,5	34,3	16
539191	41,1	44,5	16	63,5	15,7	41,1	19
***539920**	38	23	16	64	16	38,5	19
539951	56,6	50,8	20	95	25,4	56	20

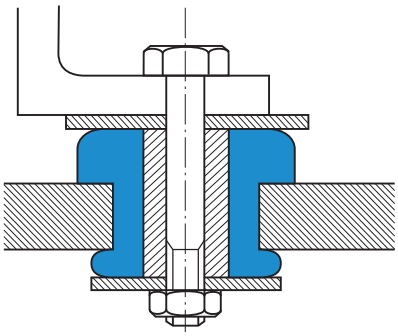
* This S.T.C. is mounted in pairs : see shape 2.
See current price list for availability of items.

OPERATING CHARACTERISTICS

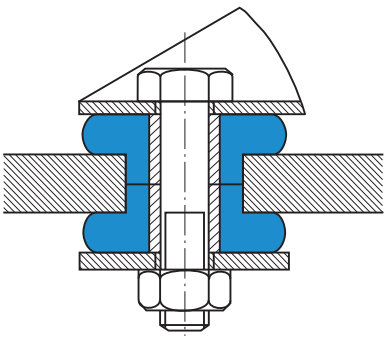
Reference	Hard. Shore A	Nominal static load (daN)	Deflection (mm)
539887	45 60	8-35 10-50	0,7 0,7
539190	45 60	15-75 25-100	1,2 1,2
539886	60 75	35-150 80-330	1,2 1,2

Reference	Hard. Shore A	Nominal static load (daN)	Deflection (mm)
539191	60 75	60-250 125-500	2 2
539920	45 75	100-400 250-1000	2 1
539951	45 65	175-700 250-1000	3 3

ASSEMBLY



Shape 1



Shape 2 (For **539920**)

MOUNT 22000

Natural frequency : (1)
8 to 18 Hz

DESCRIPTION

The 22000 mount is made of two parts of elastomer bonded to a central tube.
- Interior reinforced: cylindrical tube.
- Elastomer: chloroprene. Range of five different stiffnesses.

OPERATION

The design of the 22000 mount gives the following basic characteristics.
- Elastomer element resistant to oils, supporting axial and radial loadings.
- Axial to radial stiffness of 1 : 1.
- Absorb vibrations and reduce noise in all directions.

Advantages :
- Good isolation against structural noises.
- Chloroprene resistant to oils.
- Simple and economical.
- Simple to fix.
- Five sizes for a load capacity under axial pressure from 15 to 2100 kg and under radial pressure until 650 kg.
- Anti-rebound effect when it is assembled with a washer.

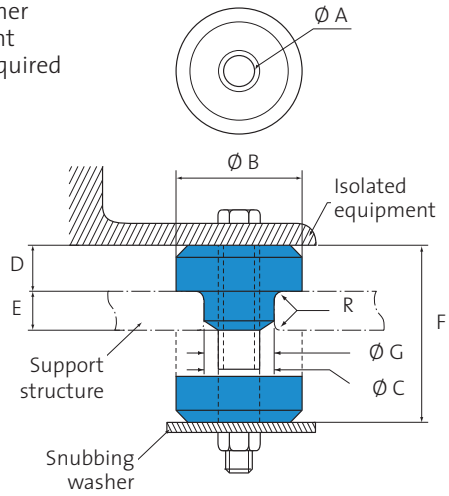
APPLICATIONS

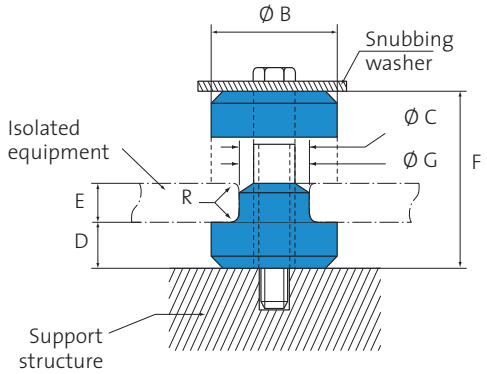
22000 mounts can be used in static or mobile applications, such as : pumps, compressors, generators,electronic equipment, HVAC equipment, engines with internal combustion, transmissions, plant cabs, radiators, etc.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS CHARACTERISTICS

G: Ø mounting hole
C: Ø elastomer
F: Free height
R: Radius required

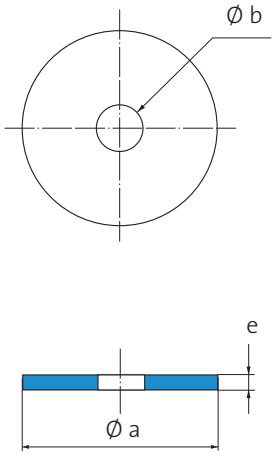




E : support structure thickness can be E1 or E2 depending on the required load and natural frequency (see technical chart next page).

Paulstra reference	Barry Controls* reference	Ø A (mm)	Ø B (mm)	Ø C (mm)	D (mm)	F (mm)	Mounting hole		Weight (g)
							Ø G (mm)	R (mm)	
530903 11 to 15	***22001-11 to 15***	10,4	33,2	20,1	12,3	31,7	19	1	43
530903 21 to 25	***22002-11 to 15***	13,5	47,7	33	19,8	49,2	31,7	1,5	142
530903 31 to 35	***22003-11 to 15***	16,7	64,8	40,1	22,8	61,7	38,1	2,3	313
530903 41 to 45	***22004-11 to 15***	23,8	88,9	58,4	25,4	73,1	57,1	3	670
530903 51 to 55	*22005-11 to 15*	27	123,9	64,8	31,7	85,8	63,5	3	1306

* Barry Controls part numbers are shown as a reference only.



Zinc plated steel washers are recommended for the assembly of the mount.
They make it possible to carry out debouncing.

Paulstra reference*	Washer*			
	Ø a (mm)	Ø b (mm)	e (mm)	Weight (g)
530903 11 to 15	39,6	10,3	2,2	24
530903 21 to 25	54,1	13,5	3,4	54
530903 31 to 35	71,3	16,7	4,7	140
530903 41 to 45	98,5	23,8	6,3	368
530903 51 to 55	133,3	27,0	9,5	991

* Not supplied

OPERATING CHARACTERISTICS

The maximum loadings depend on the compression of the assembly by comparing the thicknesses E_1 and E_2.

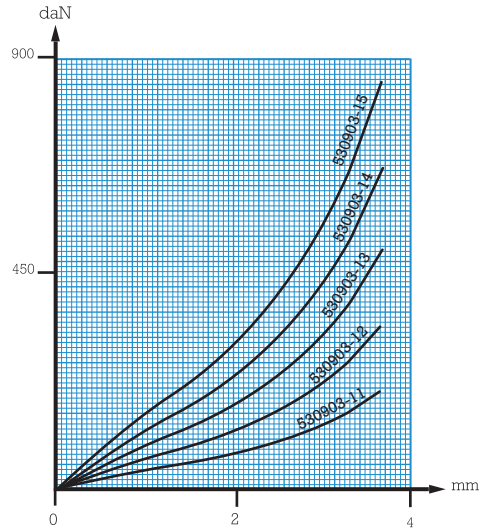
Paulstra reference	*Barry Controls* reference*	Support structure thickness E_1 Load per mount				Support structure thickness E_2 Load per mount				Colour marking
		Axial (daN)	Radial (daN)	Fo (Hz)	E_1 (mm)	Axial (daN)	Radial (daN)	Fo (Hz)	E_2 (mm)	
530903 11	***22001-11***	18	9			18	9			Red & White
530903 12	***22001-12***	40	13			40	13			Yellow & White
530903 13	***22001-13***	63	18	15	9,5	63	18	15	9,5	Green & White
530903 14	***22001-14***	113	22			113	22			Blue & White
530903 15	***22001-15***	136	27			136	27			Purple & White
530903 21	***22002-11***	59	22			27	18			Red & White
530903 22	***22002-12***	79	29			54	36			Yellow & White
530903 23	***22002-13***	109	40	12	14	72	56	15	12,5	Green & White
530903 24	***22002-14***	172	75			118	81			Blue & White
530903 25	***22002-15***	286	127			172	127			Purple & White
530903 31	***22003-11***	95	40			40	31			Red & White
530903 32	***22003-12***	159	63			68	47			Yellow & White
530903 33	***22003-13***	222	102	11	22	102	72	15	19	Green & White
530903 34	***22003-14***	390	175			147	111			Blue & White
530903 35	***22003-15***	604	313			227	163			Purple & White
530903 41	***22004-11***	122	61			68	50			Red & White
530903 42	***22004-12***	231	104			136	100			Yellow & White
530903 43	***22004-13***	350	156	10	28,5	181	136	15	25,5	Green & White
530903 44	***22004-14***	531	268			227	181			Blue & White
530903 45	***22004-15***	954	443			272	263			Purple & White
530903 51	*22005-11*	518	109			136	68			Red & White
530903 52	*22005-12*	877	154			227	100			Yellow & White
530903 53	*22005-13*	1 172	277	10	32	318	136	15	25,5	Green & White
530903 54	*22005-14*	1609	404			409	213			Blue & White
530903 55	*22005-15*	2072	640			545	300			Purple & White

See current price list for availability of items.

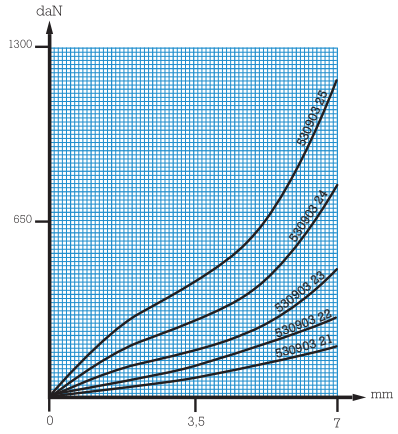
* Barry Controls part numbers are shown as a reference only.

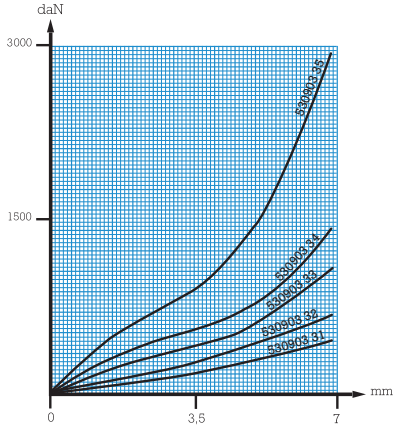
LOAD/DEFLECTION CURVES IN AXIAL COMPRESSION

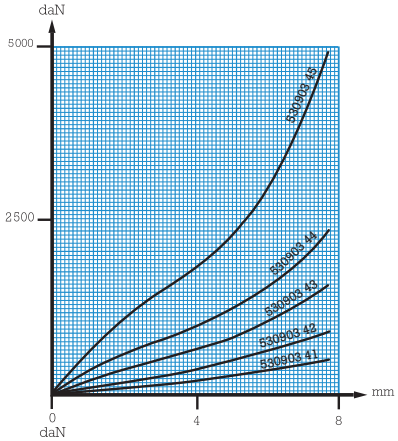
Support structure thickness E_1 and E_2

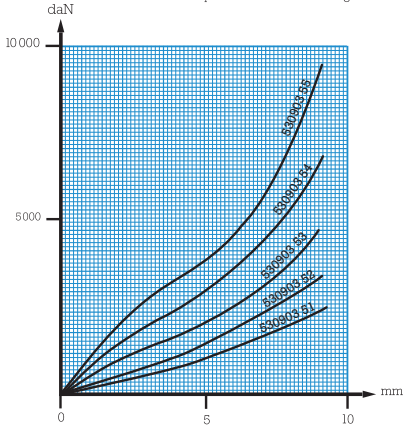


Support structure thickness E_1

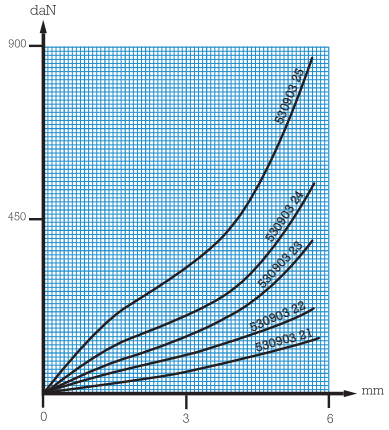


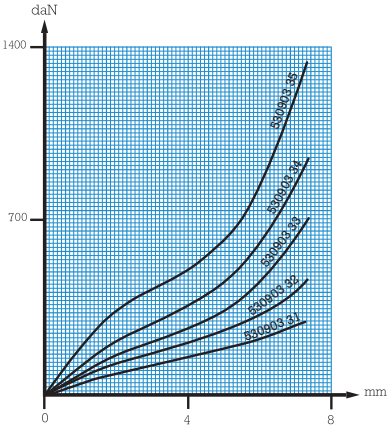


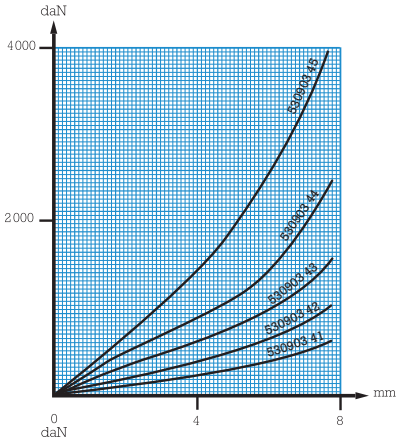


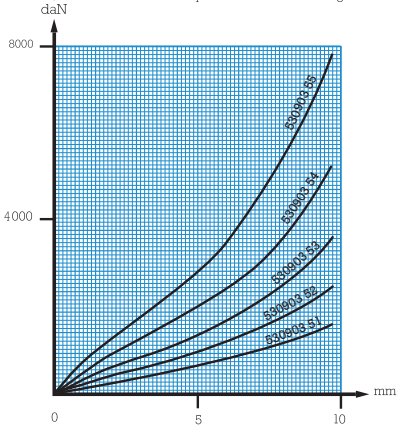


Support structure thickness E_2









TRIAXDYN

DESCRIPTION

This anti-vibration mount comprises two elastomers which are assembled into a casting and pre-loaded.

The mounting is designed to offer :
- a large deflection (in axial),
- different stiffness in three axis,
- built-in stops to limit movement in all directions.

Note : The mount body can be modified to offer alternative interface dimensions providing the internal interface with the elastomer is maintained.

APPLICATIONS

This mount has been designed to isolate engines or cabs in fixed or mobile applications with a high level of isolation and shock protection. Its compact design enables fail safe suspension of loads from 150 to 280 kg.

It is suitable for :
- Engine mounting,
- Cab mounting,
- Equipment mounting.

DIMENSIONS CHARACTERISTICS

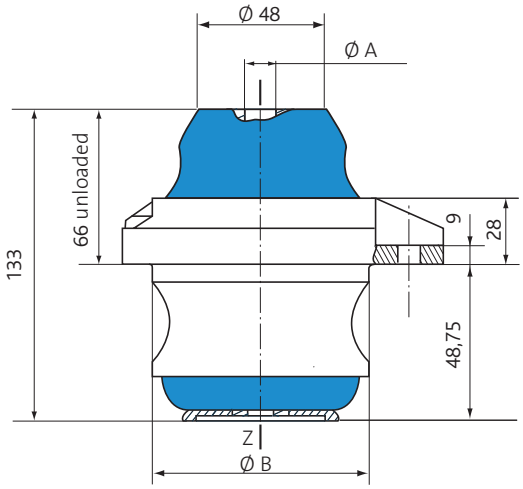
- Nominal load :
  - 150 to 280 kg.
  Possibility to extend, on request, the load range up to 350 kg.

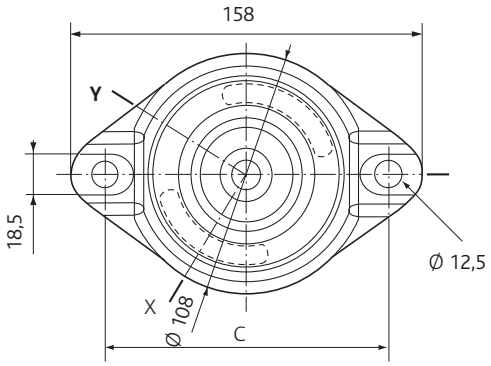
- Different stiffness in three axis (for a hardness 50) :
  - Axial on Z : 500 N/mm,
  - Radial on X (in direction of voids) : 350 N/mm,
  - Radial on Y (at 90 deg. to voids) : 500 N/mm.
  The geometry of the part provides low dynamic stiffness in the vertical dimension.

- Maximum deflection :
  - Axial : ± 10 mm, ± 4 g,
  - Radial : ± 6 mm, ± 2.5 g.

- Operating temperature:
  - 40 up to + 80°C.

- Salt spray protection 400 h. for external aluminium metalwork.





Mounting :

Reference	Ø A (mm)	Ø B (mm)	C (mm)
905233	12,4	94	128

ENGINE MOUNTING SYSTEMS

Natural frequency : (1)
6 Hz

DESCRIPTION

This engine mount is made of one conical elastomeric element enclosed in a cast iron assembly. A built-in adjustable stop limits the vertical and lateral displacement during shock. This mount is available in four different alternatives depending on the type of upper fixing needed.
It can be supplied with or without levelling system and with a threaded hole or a threaded stud.

OPERATION

This mount has been designed to suspend fixed or mobile generators which require a high level of vibration isolation and shock protection. The load per mount varies from 600 kg to 2300 kg. This load range is covered by 5 different variants (12 to 16) clearly identified by a coloured marking (see table).

This mount is available in four different alternatives depending on the type of upper fixing needed:
- 905201 : No levelling system - M24 x 3.00 threaded hole,
- 905202 : Built-in levelling system - M24 x 3.00 threaded hole,
- 905203 : No levelling system - M24 x 3.00 threaded stud,
- 905206 : Built-in levelling system - M24 x 3.00 threaded stud.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

OPERATING CHARACTERISTICS AND DIMENSIONS

- Load range :
  Please refer to the chart below for the different variants and their colour marking.

- Deflection under static load : 6,5 to 11 mm
  Natural frequency : 5 to 6,5 Hz.

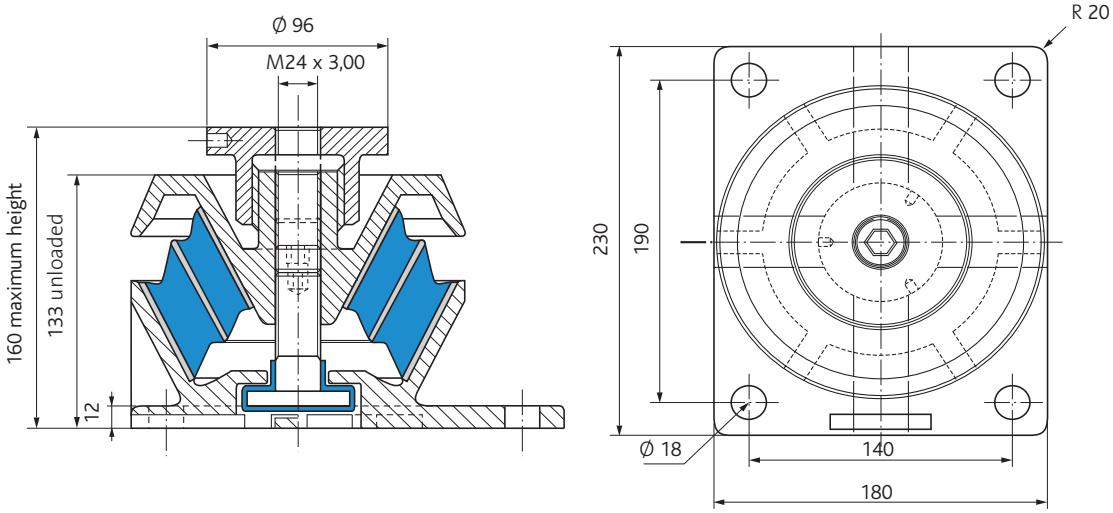
- Maximum displacement :
  Vertical (Axial) : ± 6 mm.
  Lateral (Radial) : ± 4 mm.

- Structural resistance :
  Vertical (Axial) : ± 4 g.
  Lateral (Radial) : ± 2 g.

- Operating temperatures : - 10°C up to + 70°C.

- Unit weight : 11.5 to 12.8 kg (depending on the variant).

Load range (daN)	Variant	Colour
600 - 850	12	White
850 - 1 150	13	Yellow
1 100 - 1 450	14	Green
1 400 - 1 900	15	Blue
1 700 - 2 300	16	Purple

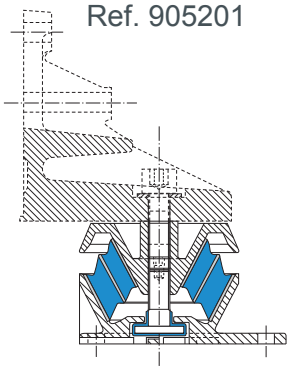


ASSEMBLY

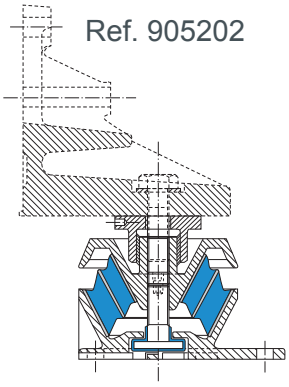
Reference 905202

The installation of these mounts and the adjustments of their limit stops once loaded are detailed in an assembly procedure supplied with the mounts.

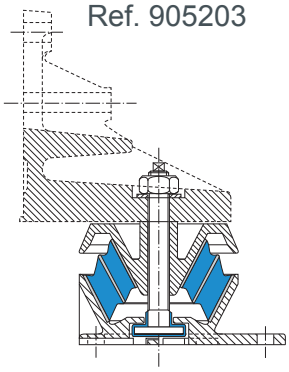
Ref. 905201



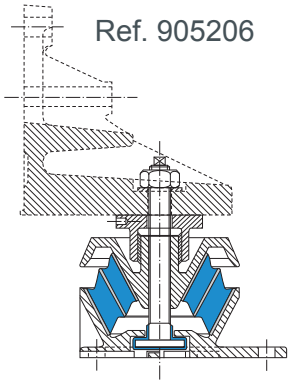
Ref. 905202



Ref. 905203



Ref. 905206



Cylindrical stop | Conical progressive stop | LEVAFLEX progressive stop | EVIDGOM stop

STOPS

See : Supports and Bump stops

DESCRIPTION

There are several types of stops :
- Cylindrical or DIABOLO stops.
- Conical progressive stops.
- LEVAFLEX progressive stops with central cavity.
- EVIDGOM stops.

OPERATION

The design of the PAULSTRA elastic stops gives the following basic characteristics :

- Highly deformable allowing high energies to be absorbed.
- Progressive absorption of energy due to the carefully designed shape.

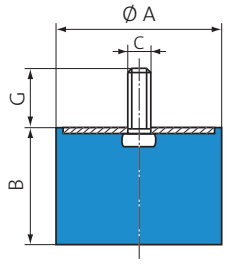
Advantages :
- By comparison with rigid stops, PAULSTRA elastic stops are quiet and avoid hammering and deterioration of equipment.

Recommendations :
- The stops must be fitted so that, on impact, the axis of the stop is perpendicular to the contact surface.
- On impact, the external diameter of the stop increases: this must be allowed for when fixing.

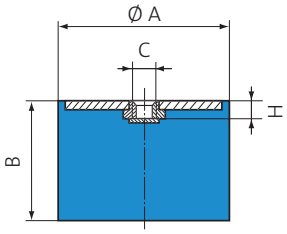
DIMENSIONS AND OPERATING CHARACTERISTICS

CYLINDRICAL STOPS

Shape 1



Shape 2

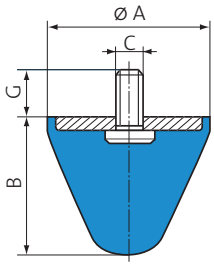


Ø A (mm)	B (mm)	C	G (mm)	Shape	H (mm)	Max. load (daN)	Deflect. (mm)	Energy (joules)	Reference
12,5	10	M5	10	1	-	12	2	0,12	**511110**
	13,5					11	2,5	0,13	**511128**
	15					10	3	0,16	**511115**
	20					8	3,5	0,14	**511125**
16	10	M4	10	1	-	20	2	0,20	**511150**
	15		10	1	-		3	0,30	**511151**
	10		-	2	2,5		2	0,20	**511152**
	15		-	2	2,5		3	0,30	**511153**
	10	M5	12	1	-	20	2	0,20	**511292**
	15					20	3	0,30	**511294**
	20					15	4	0,30	**511296**
	25					15	5	0,30	**511298**
20	15	M6	-	2	4	35	4	0,70	**511154**
	8,5	M6	16,5	1	-	40	1,5	0,30	**511200**
	15					35	4	0,70	**511215**
	20					30	5	0,70	**511220**
	25					30	5,5	0,80	**511225**
	30					25	7	0,80	**511230**
25,5	10	M6	18	1	-	80	2	0,80	**511158**
	15		18	1	-	60	3,5	1,00	**511155**
	20		18	1	-	50	5	1,20	**511159**
	30		18	1	-	50	8	2,00	**511160**
	15		-	2	4	60	3,5	1,00	**511164**
	20		-	2	4	55	5,5	1,20	**511162**
	30		-	2	4	50	8	2,00	**511163**

Ø A (mm)	B (mm)	C	G (mm)	Shape	H (mm)	Max. load (daN)	Deflect. (mm)	Energy (joules)	Reference
25,5	10	M8	20	1	-	80	2	0,80	**511265**
	15					60	3,5	1,00	**511270**
	19					55	4,5	1,20	**511251**
	22					50	5,5	1,30	**511275**
	25					50	6	1,50	**511280**
	30					50	8	2,00	**511285**
	40					50	10	2,50	**511290**
30	22	M8	-	2	6	80	6	2,40	**511156**
	15	M8	25	1	-	90	3,5	1,50	**511308**
	22					80	6	2,40	**511310**
	30					70	8	2,80	**511312**
	40					60	9	2,70	**511314**
40	30	M8	20	1	-	120	7	4,60	**511157**
	40					120	10	6,00	**511161**
	20	M10	25	1	-	160	5	4,00	**511450**
	25					150	6	4,50	**511401**
	35					120	8	4,80	**511452**
	40					120	10	6,00	**511454**
	45					120	11	6,60	**511456**
50	25	M10	25	1	-	300	6	9,00	**511525**
	35					250	9	11,20	**511535**
	45					190	11	10,00	**511545**
60	25	M10	25	1	-	400	6	12,00	**511625**
	36					300	9	13,50	**511635**
	45					250	11	13,70	**511645**
70	35	M10	25	1	-	450	9	20,00	**511735**
	50					350	12	21,00	**511750**
	70					300	14	21,00	**511770**
80	25	M14	45	1	-	1100	6	33,00	**513801**
	30		35			950	8	38,00	**511830**
	40		35			600	10	30,00	**511840**
	70		35			500	17	42,50	**511870**
	80		35			450	19	43,00	**511880**

See current price list for availability of items.

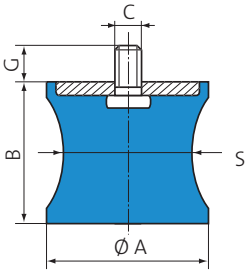
CONICAL PROGRESSIVE STOPS



Reference	Ø A (mm)	B (mm)	C	G (mm)	Repetitive shocks			Exceptionnal shock energy (joules)	Weight (g)
					Energy (joules)	Deflect. (mm)	Reaction (daN)		
512251	25,5	19	M8	20	3	8	100	9	20
512307	30	30	M8	25	6	15	140	18	37
512301	30	30	M6	13,5	6	15	140	18	30
512515	50	50	M10	25	30	25	340	90	85
512501	50	50	M8	20	30	25	340	90	75
512516	50	64	M10	25	40	32	370	120	150
512502	50	64	M8	35	40	32	370	120	150
512517	50	58	M10	25	37	28	400	110	130
512503	50	58	M8	15	37	28	400	110	120
512608	60	40	M10	25	27	18	550	70	140
512601	60	40	M14	62	27	18	550	70	200
512700	72	58	M10	25	50	26	550	150	290
512721	72	58	M12	30	50	26	550	150	300
512951	95	80	M16	45	120	37	1 100	350	750

See current price list for availability of items.

DIABOLO STOPS

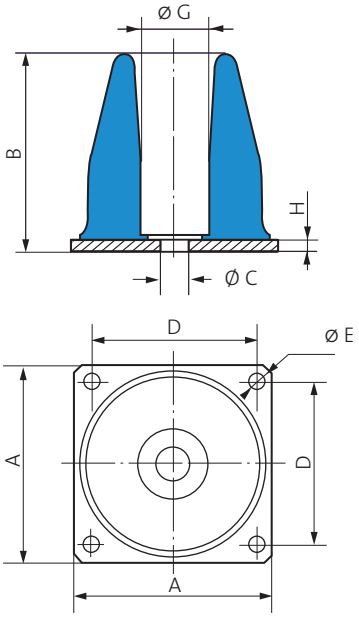


Reference	S (cm²)	Ø A (mm)	B (mm)	C	G (mm)	Max. instant. load (daN)	Deflect. (mm)	Max. static load (daN)	Deflect. (mm)	Energy (joules)	Weight (g)
511571	5	57	42	M8	20	100	10	40	4	1	60
511572	9,5	57	42	M8	20	200	12	75	5,5	2	80
511601	19,5	60	57	M10	25	350	15	150	8	6	190
511801	38,5	80	65	M14	30	800	16	300	9,5	15	500
511951	50	95	70	M16	35	1 000	18	400	9,5	20	790

LEVAFLEX PROGRESSIVE STOPS

Reference	A (mm)	B (mm)	Ø C (mm)	D (mm)	Ø E (mm)	Ø G (mm)	H (mm)	Weight (g)
514085	85	85	8,5	69	8,5	20	5	600
514110	110	110	12,5	90	8,5	30	6	1 200
514130	130	130	19	106	11	40	6	2 000
514160	160	160	23	132	11	45	8	3 000
514200	200	200	28	168	13	60	10	7 000

See current price list for availability of items.

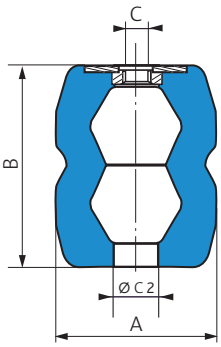


Repetitive shocks			Exceptional shock energy (joules)	Reference hardness
Energy (joules)	Corresponding deflection (mm)	Reaction (daN)		
170	40	1 200	500	**514085/60**
280	40	1 700	850	**514085/75**
330	50	1 800	1 000	**514110/60**
550	50	3 400	1 500	**514110/75**
600	65	2 800	1 800	**514130/60**
650	60	3 000	1 900	**514130/75**
1 050	75	4 500	3 000	**514160/60**
1 200	90	4 000	3 600	**514200/60**
1 300	70	6 000	3 900	**514160/75**
2 200	85	7 800	6 600	**514200/75**

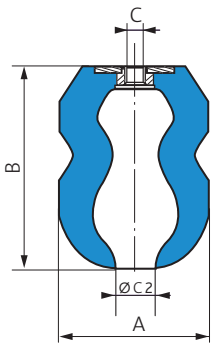
See current price list for availability of items.

EVIDGOM STOPS

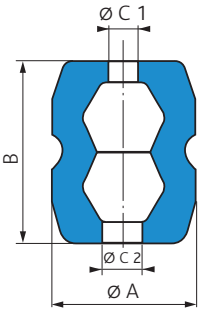
Repetitive shocks			Exceptional shock energy (joules)	Reference
Energy (joules)	Corresponding deflection (mm)	Reaction (daN)		
31	30	190	95	**810644**
100	50	580	300	**810645**
110	45	600	330	**810666**
180	67	750	540	**810642**
350	75	1 250	1 050	**810653**
360	65	1 400	1 100	**810655**
400	85	1 500	1 200	**810669**
300	70	900	-	**810784**
600	75	1 625	-	**810775**
1 050	90	2 375	-	**810776**
2 500	90	5 500	-	**810733/60**
7 100	150	11 000	-	**810732/60**
9 500	200	9 500	-	**810731/60**
13 000	130	18 000	-	**810732/75**
17 500	175	19 000	-	**810731/75**
21 000	200	25 000	-	**810735/60**
29 000	250	35 000	-	**810734/60**
41 000	200	70 000	-	**810735/75**
50 000	250	55 000	-	**810734/75**



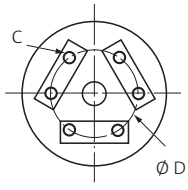
Shape 1



Shape 2



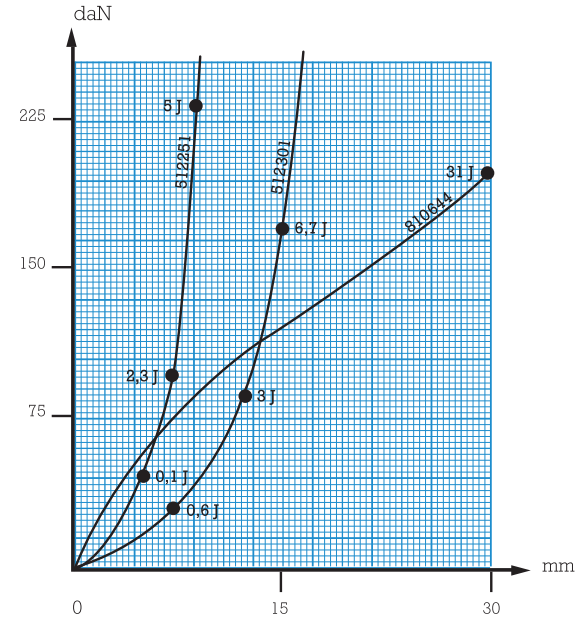
Shape 3

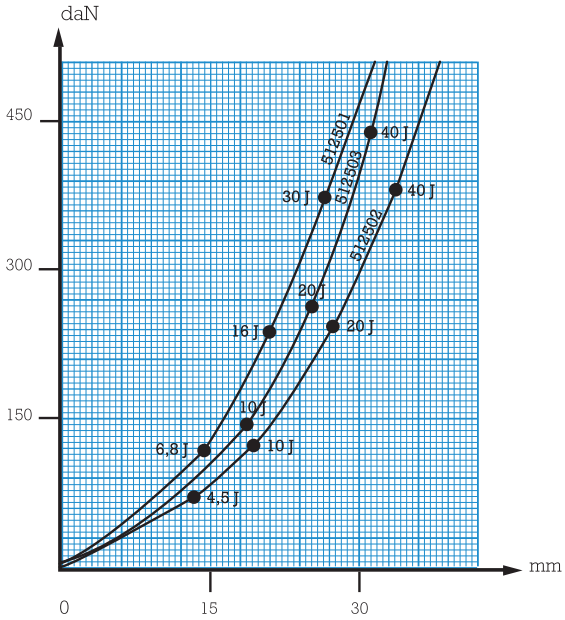


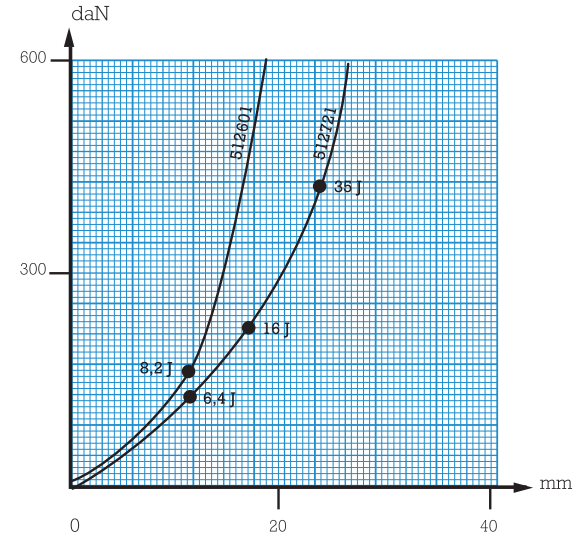
Stop reference	Shape	All rubber Évidgom reference	Ø A (mm)	B (mm)	C	Ø C1 (mm)	Ø C2 (mm)	Ø D (mm)	Ø A under load (mm)
810642	1	**810022**	85	120	M16	20	30	-	114
810644	1	**810004**	55	55	M10	14	14	-	72
810645	2	**810035**	66	93	M16	20	14	-	100
810653	1	**810023**	100	130	M16	20	30	-	140
810655	1	**810025**	110	132	M16	20	30	-	142
810666	2	**810046**	76	90	M16	20	14	-	98
810669	2	**810029**	110	150	M16	20	30	-	155
810731	3	-	250	400	6 x M24	70	70	150	360
810732	3	-	250	315	6 x M24	70	70	150	380
810733	3	-	250	230	6 x M24	70	70	150	370
810734	3	-	350	500	8 x M24	85	85	196	445
810735	3	-	350	395	8 x M24	85	85	196	500
810775	1	**810015**	155	150	M16	25	30	-	202
810776	1	**810016**	188	180	M24	40	40	-	256
810784	1	**810014**	125	140	M16	30	25	-	168

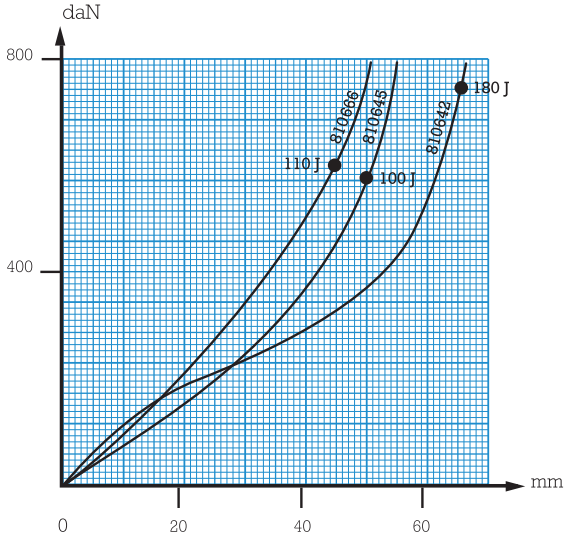
NOTE : The values are given for test conditions with an impact speed of 1 m/s. Consult us for speeds that are much higher.

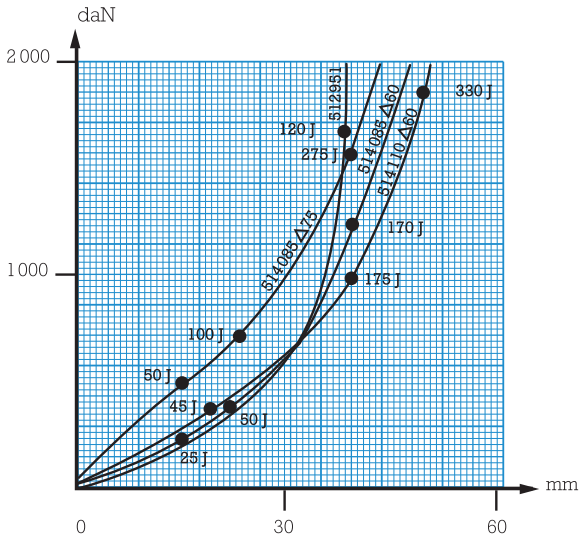
DEFLECTION CURVES AND ENERGY VALUES FOR PROGRESSIVE, LEVAFLEX AND EVIDGOM STOPS

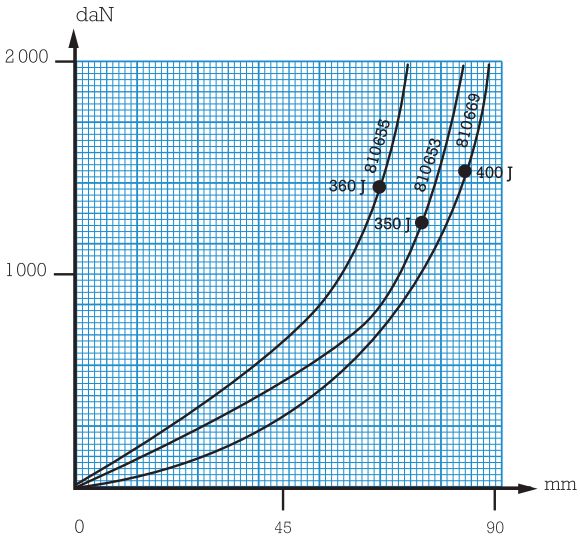


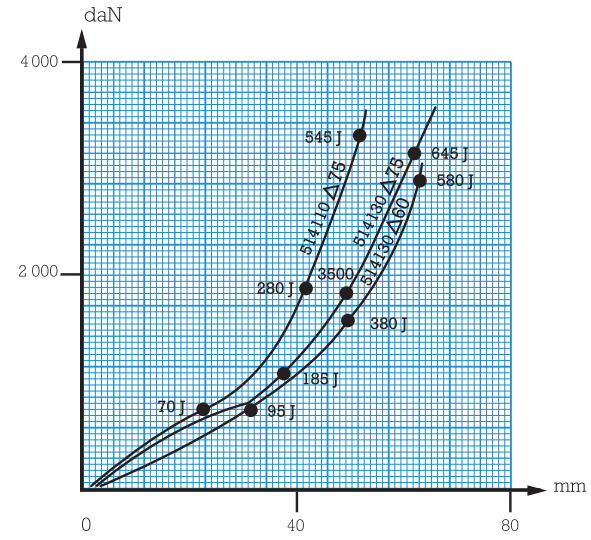


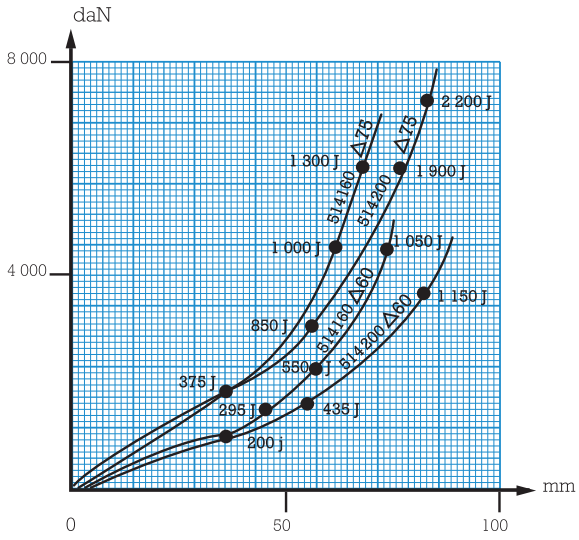


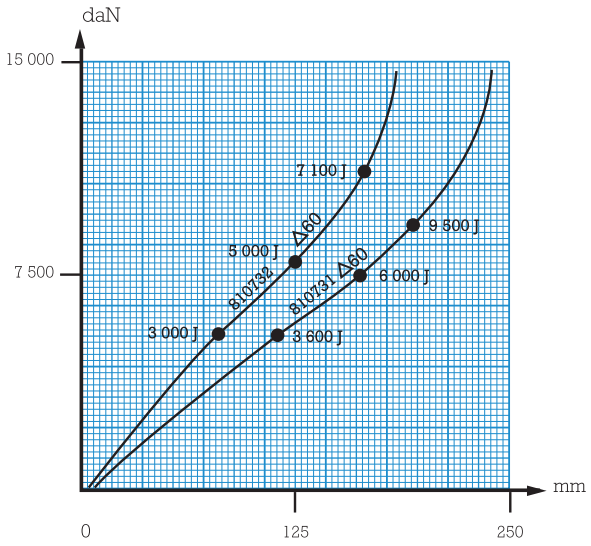


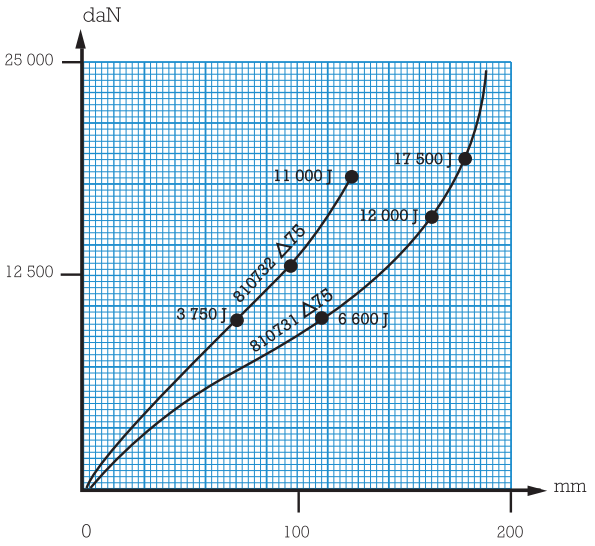


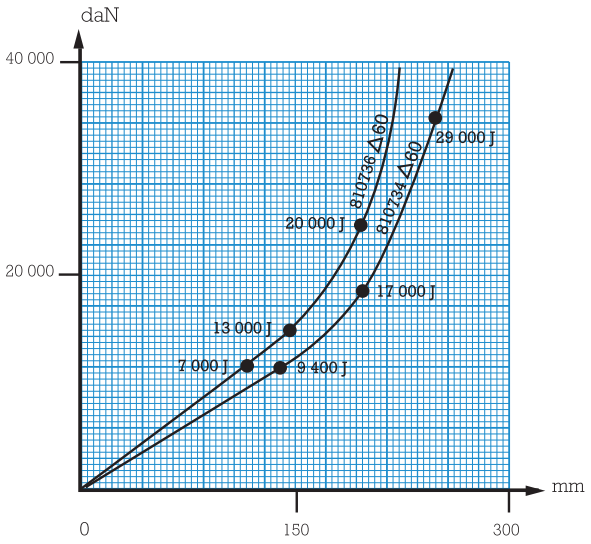


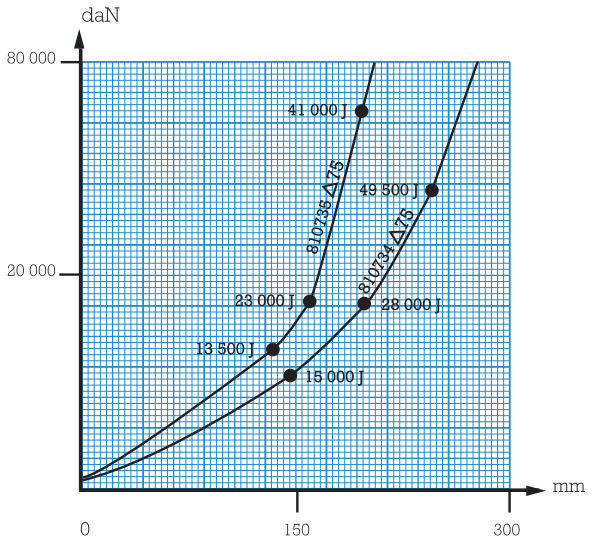

daN
4 000
2 000
0
40
80
mm
545 J
645 J
580 J
514110 Δ75
514130 Δ75
514130 Δ60
280 J
3500
380 J
185 J
70 J
95 J

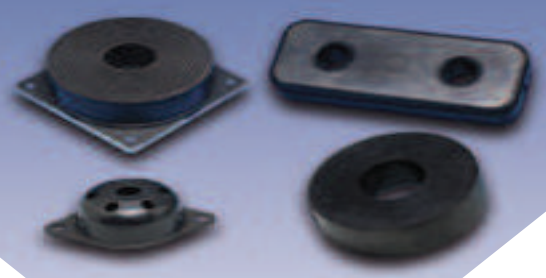

daN
8 000
4 000
0
50
100
mm
2 200 J
1 300 J
1 900 J
514160 Δ75
514200 Δ75
1 000 J
050 J
850 J
514160 Δ60
514200 Δ60
1 150 J
550
375 J
295 J
435 J
200 J


daN
15 000
7 500
0
125
250
mm
7 100 J
9 500 J
5 000 J
Δ60
B10732
B10731 Δ60
6 000 J
3 000 J
3 600 J


daN
25 000
12 500
0
100
200
mm
11 000 J
17 500 J
12 000 J
B10732 Δ75
3 750 J
B10731 Δ75
6 600 J

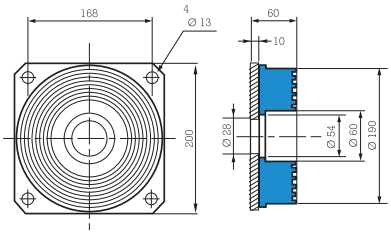

daN
40 000
20 000
0
150
300
mm
29 000 J
B10736 Δ60
20 000 J
B10734 Δ60
17 000 J
13 000 J
7 000 J
9 400 J


daN
80 000
20 000
0
150
300
mm
41 000 J
49 500 J
B10736 Δ75
B10734 Δ75
23 000 J
28 000 J
13 500 J
15 000 J

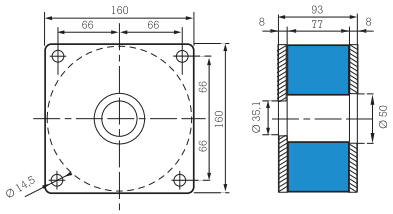


SUPPORTS AND BUMP STOPS

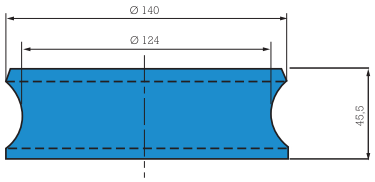
Reference: 514202 - Hardness: 75 -
Compressive load: 5000 daN - Deflection: 8 mm



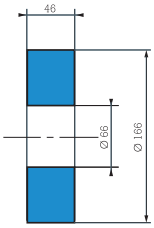
Reference: 534501 - Hardness: 60 -
Load: Compression: 2500 daN - Deflection: 15 mm
- Shear load: 300 daN - Deflection: 10 mm



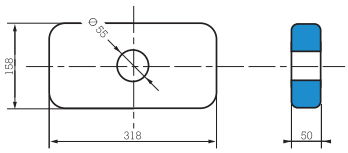
Reference: 813501 - Hardness: 60 -
Compressive load: 1000 daN - Deflection: 4 mm



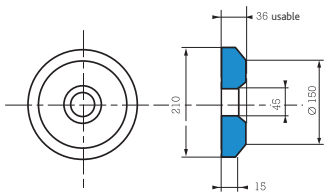
Reference: 817505 - Hardness 60 -
Compressive load: 1500 daN - Deflection: 5 mm



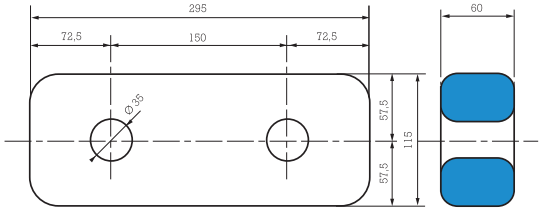
Reference: 813506 - Hardness 60 -
Compressive load: 4000 daN - Deflection: 2.4 mm



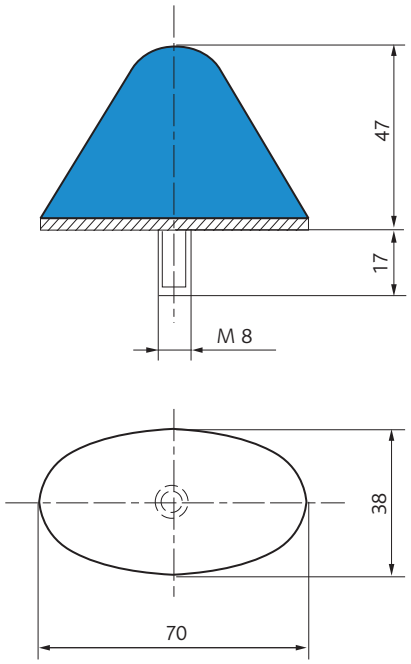
Reference: 817605 - Hardness 60 -
Compressive load: 2000 daN - Deflection: 1.4 mm



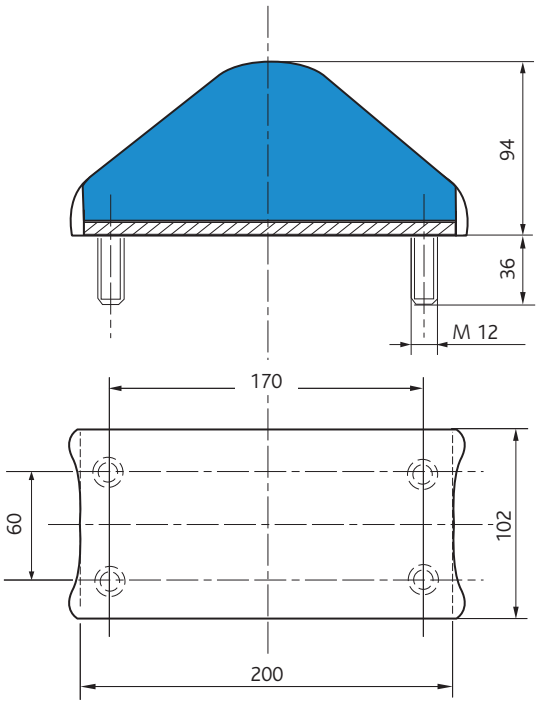
Reference: 813504 - Hardness 60 -
Compressive load: 3000 daN - Deflection: 9 mm



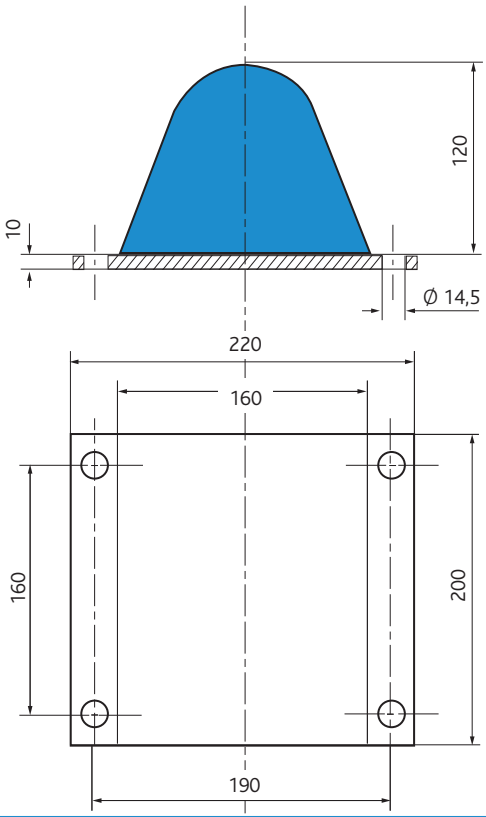
See current price list for availability of items.



Deflection: 14 mm
Max load: 150 daN
Reference **512389**



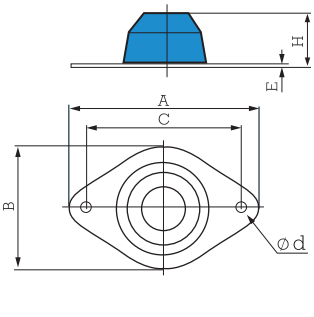
Deflection: 35 mm
Max load: 3000 daN
Reference **519186**



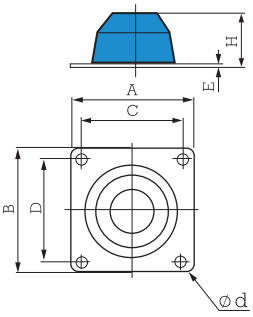
Deflection: 45 mm
Max load: 4800 daN
Reference **512991**

See current price list for availability of items.

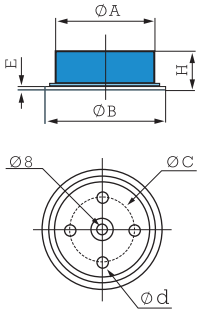
Shape1



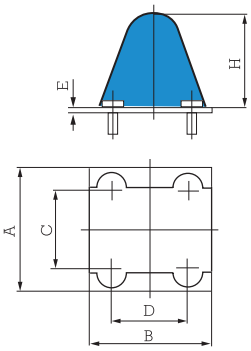
Shape2



Shape3

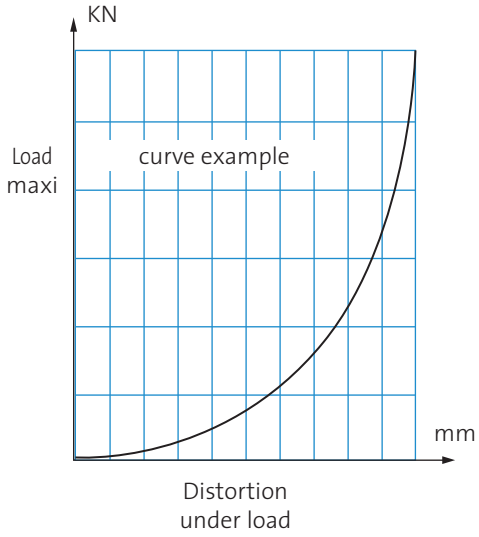


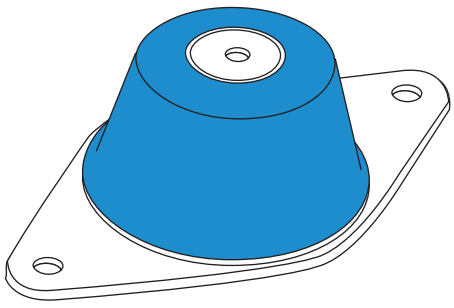
Shape4



See also stops range (p71)

Reference	Shape	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	H (mm)	Deflection under load (mm)	Load maxi (KN)	Ø d (mm)
E1V-3245-04	4	135	125	106	85	5	110		50	M10
E1V-3568-01	3	126		80		3	36	10	59	5/16 or M8
E1V-3892-01	2	196	140	174	118	5	85	40	25	13
E1V-3914-01	1	170	110	140		3	40	25	20	15
E1V-3921-01	1	170	110	140		3	50	31	28	15
E1V-3922-01	2	180	180	148	148	6	56	32	60	15
E1V-3927-01	1	170	110	140		3	40	25	28,5	15
E1V-3931-01	2	110	110	92	92	3	90		26	9
E1V-3932-01	1	170	110	140		3	30	15,5	50	15
E1V-3940-01	1	170	88	140		3	20	10	30	15
E1V-4031-01	1	170	110	140		3	65	41	25	15
E1V-4059-11	1	234	125	200		5	70	40	51,2	14
519805	1	170	110	140		3	50	31	28	15
519830	2	100	110	80	90	3	62	25	12,5	11





Advantages :
- sliding plate.
- integrated stop.
- progressive stiffness.

NIVOFIX®

See Vibrachoc metallic range
V43 - V44
V45 - V46

DESCRIPTION

The NIVOFIX® mount is an adjustable equipment foot comprising a circular disc bonded to a protected elastomer base. An adjustement screw permits the levelling.

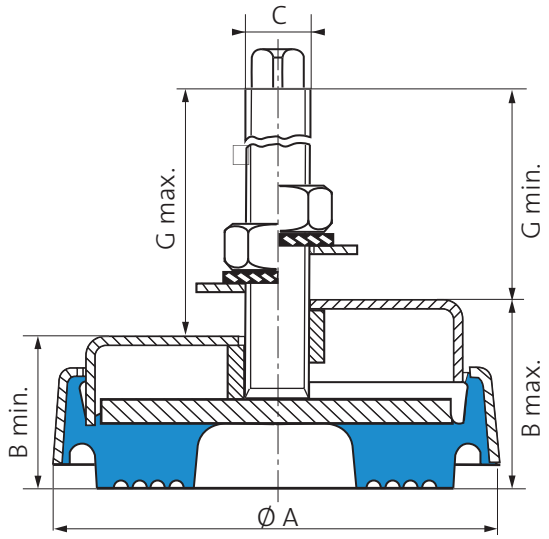
The elastomer base has anti-slip ridges.

OPERATION

The design of the NIVOFIX® mount gives the following basic characteristics :
- Accurate adjustment of the mount to correct the equipment's seating (adjustment screw, correction of altitude).
- Absorbs high frequency vibrations.
- Corrosion resistant (nitrile elastomer, protective shroud, galvanised metallic parts).
- Anti-slip sole (no need to fix).

Advantages :
- Speed of fixing,
- Simple removal of the equipment,
- No shimming.

DIMENSIONS



Reference Stainless steel	Reference Steel	Ø A (mm)	B (mm)			C	G (mm)		Weight (g)	Stud lenght (mm)
			B max. = B min. + adjustment				min.	max.		
530815	**530810**	65	31,5	26,5	5	M12	105	110	280	128
530825	**530820**	88	46	33	13	M16	114	127	690	150
530835	**530830**	133	58	46	12	M20	130	142	1820	173
-	**530840**	200	70	58	12	M24	145	157	5250	195
-	**530850**	260	83	65	18	M24	158	176	10000	215

See the current price list for availability of items

OPERATING CHARACTERISTICS

Reference	Nominal static load min. - max. (daN)	Deflection (mm)
530810	100 - 600	1 - 3,5
530815	100 - 600	1 - 3,5
530820	325 - 1300	2 - 4
530825	325 - 1300	2 - 4

Reference	Nominal static load min. - max. (daN)	Deflection (mm)
530830	650 - 2600	2 - 4
530835	650 - 2600	2 - 4
530840	1500 - 6000	1,5 - 3
530850	3000 - 12000	2 - 4

APPLICATIONS

NIVOFIX® mounts are used for all equipment requiring height adjustment.

Equipment already using NIVOFIX® mounts :

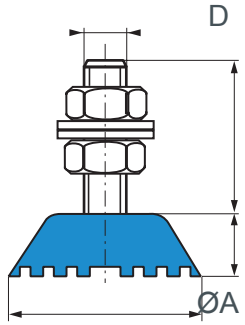
- Vertical mill
- Mortiser
- Multichuck drill
- Sheet metal bender
- Polisher
- Press
- Plane
- Horizontal mill
- Lathe
- Office equipment
  - accounting
  - computing
- Packaging machine
- Test equipment
- Printing press
- Gear cutter
- Textile machinery

MINIFIX®

DESCRIPTION

The MINIFIX® mount comprises an elastomer pad with an anti-slip ridged surface and a threaded stud allowing accurate height adjustment of equipment.
Made in two hardnesses (50 and 80 Sh) the MINIFIX® mount is perfectly suited to a variety of applications and is delivered complete with fixing nuts and washers. MINIFIX® mounting nuts and screws are made of steel or stainless steel.

CHARACTERISTICS



Référence Inox	Référence Acier	Dureté Elastomère	Couleur	Ø A (mm)	B (mm)	C (mm)	D	Plage d'utilisation (daN)
-	**530801**	50 SBR 80 Nitrile	gris noir	32	15	38	M8 tige	5 - 30 15 - 70
-	**530802***	50 SBR 80 Nitrile	gris noir	46	15	-	M10 écrou	10 - 80 25 - 200
530806	**530805**	50 SBR 80 Nitrile	gris noir	46	15	38	M10 tige	10 - 40 25 - 100
-	**530807**	50 SBR 80 Nitrile	gris noir	70	25,5	55,5	M12 tige	50 - 180 100 - 350

* Threaded centre hole.
See current price list for availability of items.

APPLICATIONS

Simple and economic, MINIFIX® mountings are particularly suitable for the installation of equipment such as :

- Electrical or electronic enclosures.
- Packaging equipment.
- Test and measuring equipment.
- Equipment for the food industry.
- Laboratory equipment.
- Household appliances.

TRAXIFLEX®

Natural frequency : 8 à 10 Hz (1)

See Vibrachoc metallic range: VE101 - VE111 VE112 - VE113

DESCRIPTION

The TRAXIFLEX® mount comprises two metallic U armatures joined by two bonded rubber blocks. It is available in two versions : male/female and female/female.

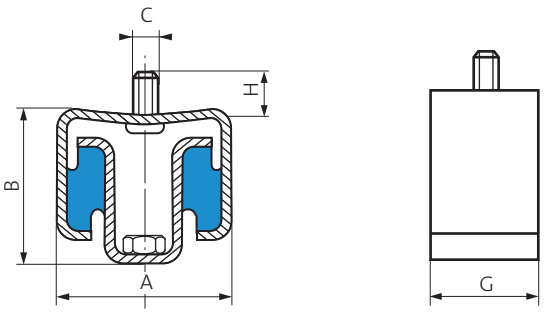
OPERATION

The design of the TRAXIFLEX® mount gives the following basic characteristics :
- Rubber works in compression-shear.
- The same deflection under nominal load for all types.
- Safety system in case of elastomer failure.

Advantages :
- Economic solution for suppressing structure borne noise.
- Several fixing methods.
- High resistance to atmospheric exposure :
  - galvanised armatures
  - chloroprene elastomer.
- Upper metallic part is shaped to simplify orientation while fixing.
- Two hardnesses of elastomer to extend the choice of mounting as a function of load.
- Filtration of vibration and the attenuation of the consequent noise.
- Allows movement due to thermal expansion.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS



Type	Reference		Hardness Shore A	A (mm)	B (mm)	C	G (mm)	H (mm)
	1 screw - 1 nut	2 nuts						
TR 12-30	535600	-	45-60	47	38	M7 x 1,50	16	7
TR 12-30	**53560361***	-	60	47	38	M6 x 1,00	16	17
TR 12-30	**535603**	-	45	47	38	M6 x 1,00	16	17
TR 12-30	-	**535623/61-M8**	60	47	38	M8 x 1,00	16	17
TR 40-80	**535611**	**535621**	45-60	55	47	M8 x 1,25	30	13
TR 100-250	**535612**	**535622**	45-60	74	50	M12 x 1,75	40	17

See current price list for availability of items.
*** Elastomer resistant to fire M1.**

OPERATING CHARACTERISTICS

Recommended load (daN)	Deflection (mm)	Reference		Hardness Shore A
		1 screw - 1 nut	2 nuts	
4-18	4	535600	-	45
4-18	4	**565603**	-	45
7-30	4	565600	-	60
7-30	4	**53560361***	-	60
7-30	4	-	**535623/61-M8***	60
10-52	4	**535611**	**535621**	45
20-80	4	**535611**	**535621**	60
20-80	4	**535611***	**535621**	60
20-92	4	**535612**	**535622**	45
30-136	4	**535612**	**535622**	60

TRAXIFLEX® mounts have been subjected to acoustic trials at the Centre Expérimental de Recherches et d'Études du Bâtimentet des Travaux Publics which has given the P.V nr. 554.6.078.
*** Elastomer resistant to fire M1.**

ASSEMBLY

When fixing, ensure that all the TRAXIFLEX® mounts are supporting the same load. It is necessary to ensure that they are all the same distance from the fixing surface (ceiling, girder, plank...).
TRAXIFLEX® mounts can be used to suspend pipework : the whole assembly being fixed to the ceiling.

- Suspending hot air ducts.
- Suspending a fan unit and distribution ducts.
- Suspending a hot air generator with continuous airflow.
- Suspending an integral cased air conditioner.

FLEX-LOC

DESCRIPTION

A flexible fixing resistant to oils, the majority of solvents and ageing.

OPERATION

The design of the FLEX-LOC mount gives the following basic characteristics :

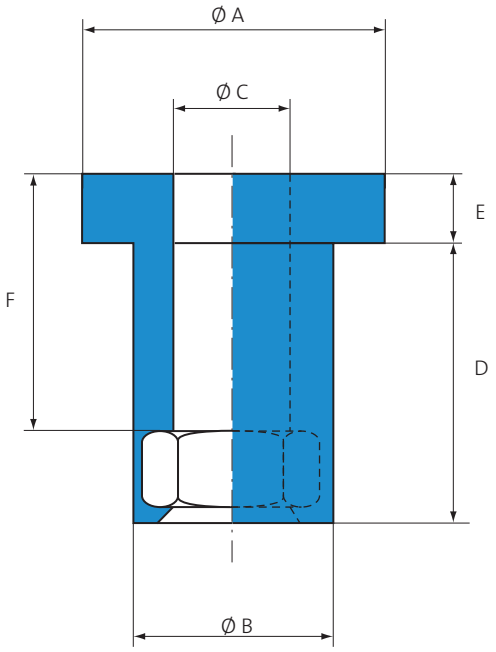
- The rubber works in :
  - compression (axial),
  - shear (radial),
  - compression/shear according to the fixing method.

Advantages :
- 80% reduction of vibrational energy transmitted from normal structural frequencies.
- Simple and economical.
- Simple to fix.
- Light weight.

APPLICATIONS

FLEX-LOC are suitable for the fixing of sheets, frameworks, engines, ventilators, electronic equipment, computers, etc.
They have, moreover, a function of insulation against the structure borne noises, unlike other fasteners.

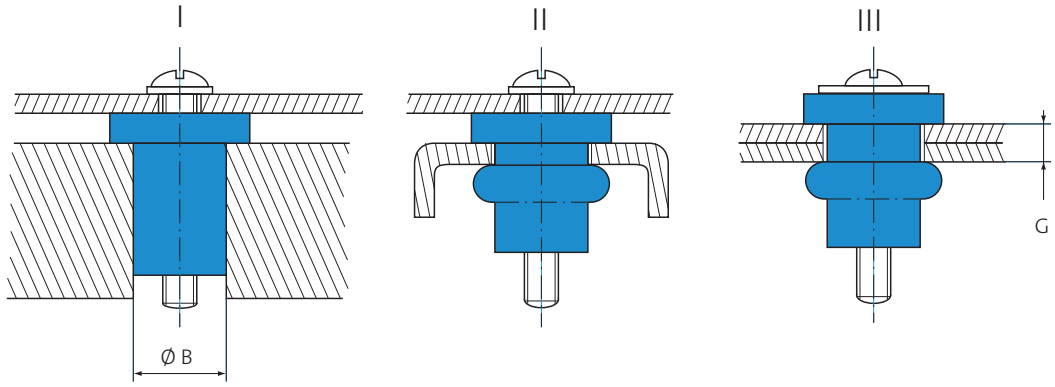
DIMENSIONS CHARACTERISTICS



Paulstra reference	*Barry Controls* reference*	Nut	Ø A (mm)	Ø B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
530909 03	*Q3*	M3	9	7,2	3,4	9	2,5	8
530909 04	*Q4*	M4	12	9,3	4,4	11,5	3	10,5
530909 05	*Q5*	M5	15	10,2	5,4	14,5	3,5	13
530909 06	*Q6*	M6	18	12,7	6,4	17	4	15
530909 07	*Q8*	M8	24	16,5	8,4	22	5	19,5

* Barry Controls part numbers are given for reference only.

OPERATING CHARACTERISTICS



Paulstra reference	*Barry Controls* reference*	Clearance hole Ø B (mm)	Plate thickness G (mm)	Torque range		Static load (daN)		
				I (Nm)	II or III (Nm)	I	II or III	
						Compression/ shear	Compression	Shear
530909 03	*Q3*	7,2-7,5	0,6-2,5	0,5	0,4	1	5	2,5
530909 04	*Q4*	9,3-9,6	0,8-3,3	0,6	0,5	1	7	3,5
530909 05	*Q5*	10,2-10,5	0,8-4,3	1,0	0,6	1,5	10	5
530909 06	*Q6*	12,7-13,0	1,5-5,0	3,5	0,9	3	14	7
530909 07	*Q8*	16,5-16,8	1,5-6,5	4,0	1,8	5	28	14

* Barry Controls part numbers are given for reference only.

RINGS AND BUSHINGS

Natural frequency : (1)
6 to 28 Hz

DESCRIPTION

These all elastomer parts are compatible with the majority of the industrial environments and have an operating temperature range of - 40°C to + 83°C.

OPERATION

A ring assembled with the associated bushing constitutes a flexible interface and a simple solution to decrease noise and vibrations.

- These supports can be installed in parallel for a greater load capacity and may also be stacked in series when greater deflection capacity is required.
- Bushings can be used in pairs, bushing end to bushing end, without rings for a more robust installation or where the structure thickness does not allow for a standard ring and bushing assembly.

Advantages :

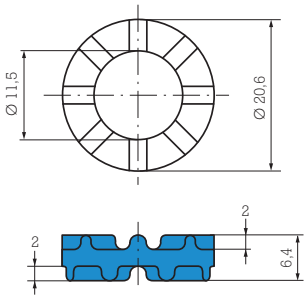
- Highly efficient noise reduction,
- Absorb schock and vibrations,
- Simple and economic,
- Four models in four stifnesses for load capacities going from 0.5 to 160 kg per isolator.

APPLICATIONS

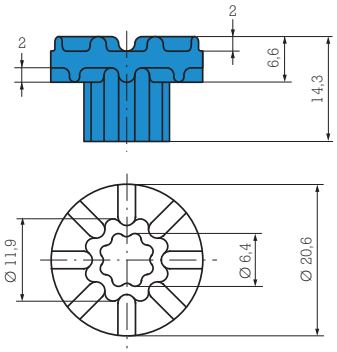
- Office machines, motors, fans, HVAC equipment, electronics equipment, telecommunication equipment; etc.

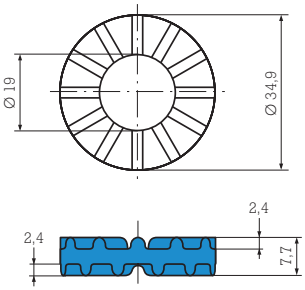
(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS CHARACTERISTICS

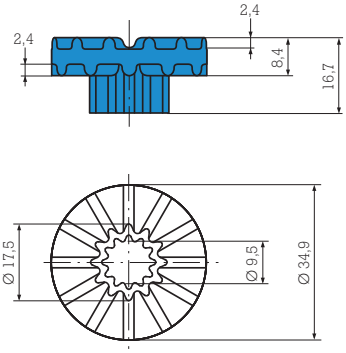


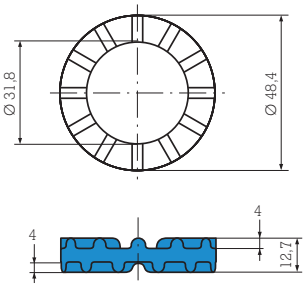
Shape 1



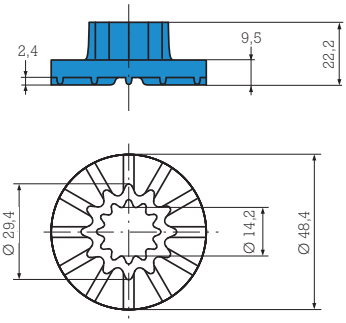


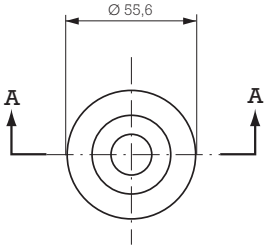
Shape 2



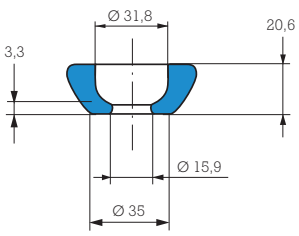


Shape 3

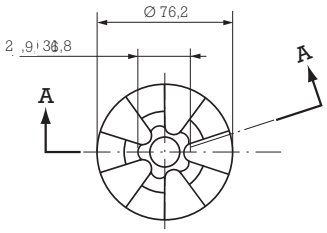




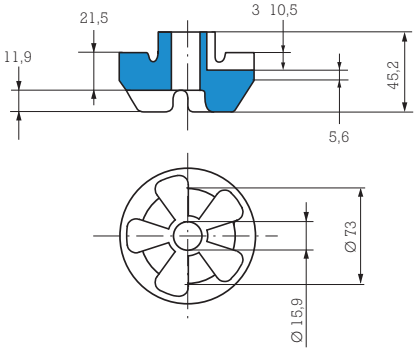
Coupe A - A



Shape 4



Coupe A - A



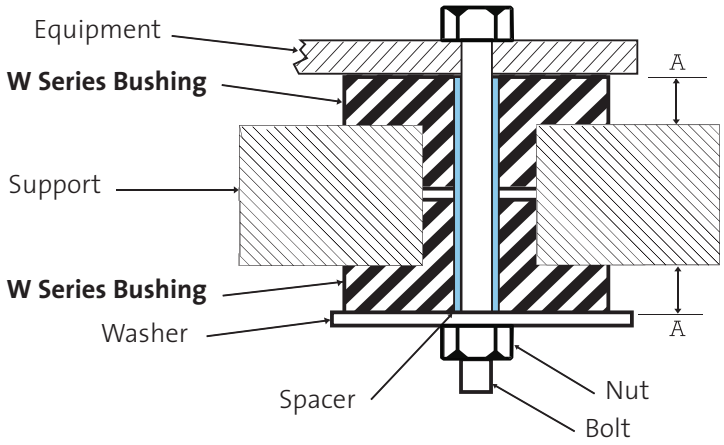
OPERATING CHARACTERISTICS

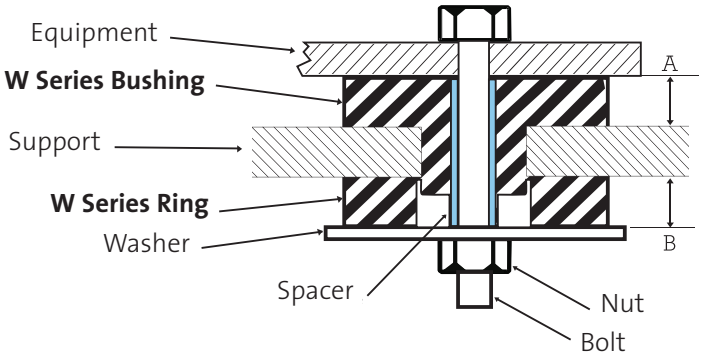
Group Paulstra reference *Barry Controls* reference*	Colour	Shape	Load range	
			Min. (daN)	Max. (daN)
530907 13 / 530908 13 *WR1-030 / WB1-030*	blue	1	0,4	1,8
530907 14 / 530908 14 *WR1-040 / WB1-040*	brown	1	0,9	2,7
530907 15 / 530908 15 *WR1-050 / WB1-050*	black	1	1,4	3,6
530907 16 / 530908 16 *WR1-060 / WB1-060*	grey	1	2,3	5,4
530907 43 / 530908 43 *WR4-030 / WB4-030*	bleu	3	4,5	16
530907 44 / 53090844 *WR4-040 / WB4-040*	brown	3	9	23
530907 45 / 530908 45 *WR4-050 / WB4-050*	black	3	13,6	27
530907 46 / 530908 46 *WR4-060 / WB4-060*	grey	3	18	74

Group Paulstra reference *Barry Controls* reference*	Colour	Shape	Load range	
			Min. (daN)	Max. (daN)
530907 33 / 530908 33 *WR3-030 / WB3-030*	blue	2	2,7	9
530907 34 / 530908 34 *WR3-040 / WB3-040*	brown	2	3,2	10,5
530907 35 / 530908 35 *WR3-050 / WB3-050*	black	2	4,5	11,4
530907 36 / 530908 36 *WR3-060 / WB3-060*	grey	2	6,8	16
530907 63 / 530908 63 *WR6-030 / WB6-030*	blue	4	27	55
530907 64 / 530908 64 *WR6-040 / WB6-040*	brown	4	50	73
530907 65 / 530908 65 *WR6-050 / WB6-050*	black	4	61	114
530907 66 / 530908 66 *WR6-060 / WB6-060*	grey	4	73	159

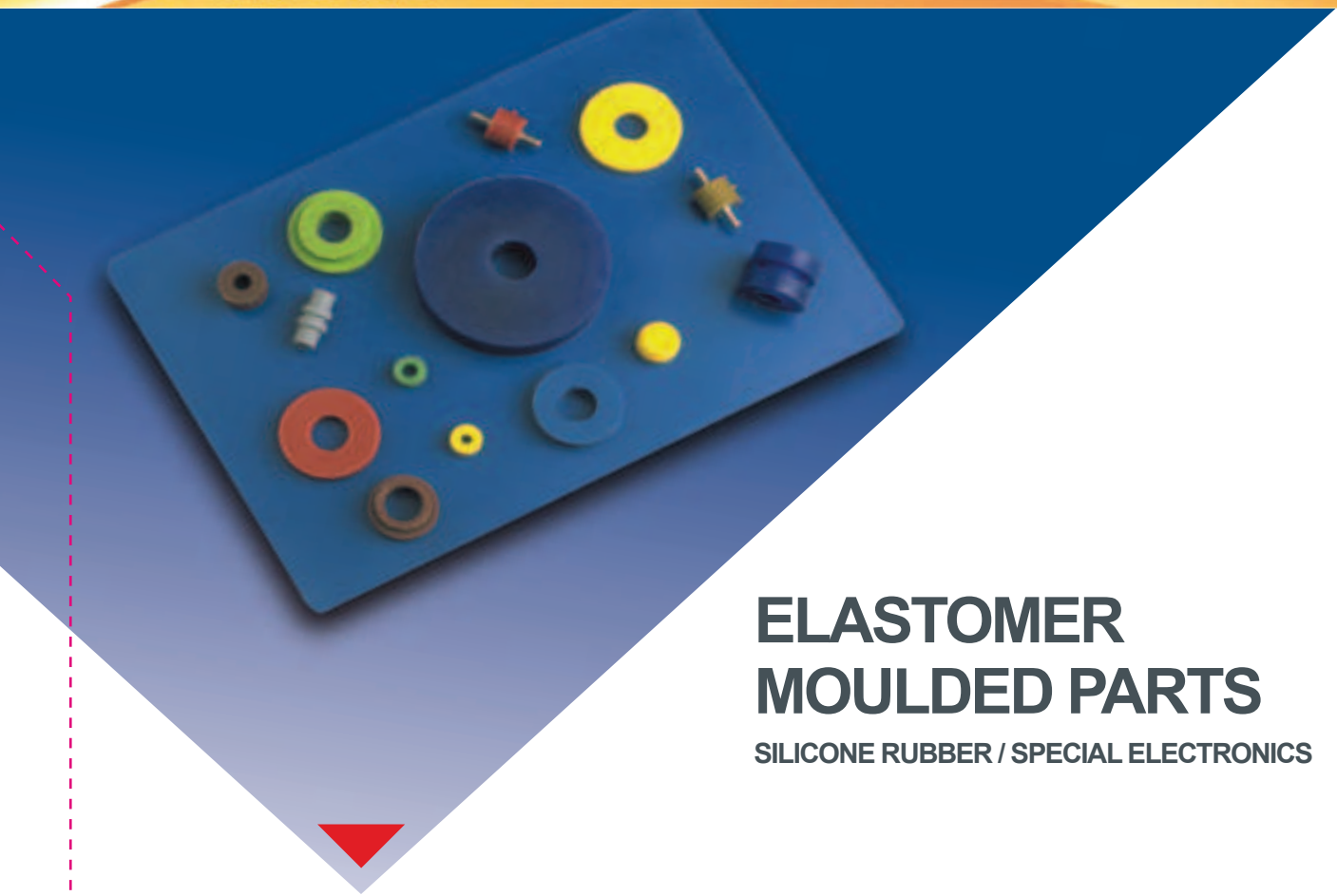
* Barry Controls part numbers are given as a reference only

ASSEMBLY





Dimensions (mm)		
	A	B
530907 1*	-	5,8
530908 1*	5,8	-
530907 2*	-	7,6
530908 2*	7,6	-
530907 3*	-	11,4
530908 3*	8,4	-
530907 4*	-	19,1
530908 4*	31,75	-



ELASTOMER MOULDED PARTS

SILICONE RUBBER / SPECIAL ELECTRONICS

CHARACTERISTICS

These parts are usually supplied in VHDS (very high density silicone) rubber and the full reference should include:

- the letter S,
- the appropriate grade which corresponds :
  - to the youngs modulus of the rubber under static compression in accordance with ASTM D945 (ref. 33 to 77),
  - or to the stiffness measured on a part (ref. 16 to 25).

These standard VIBRACHOC grades are shown in the following table:EPDM, butyle, nitrile.

Dureté	Couleur	Caractéristiques		
		G : Module de cisaillement (MPa)	G : Module d'élasticité (MPa)	Raideur (1)(2) en N/mm Tolérance : ± 10 %
		Tolérance : ± 15 %		
16 20 25	jaune bleu foncé noir			19 20 25
33 38 42 48 55 63 72 77	bleu clair gris marron vert sombre rouge brique orange vert clair bleu outremer	0,4 0,47 0,53 0,6 0,67 0,8 1,0 1,1	1,2 1,4 1,6 1,8 2,0 2,4 3,0 3,3	36 40 45 50 55 65 75 100

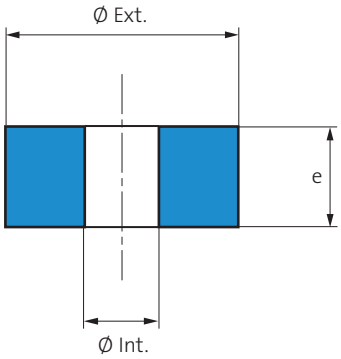
(2) linear region between 1 to 3 mm compression.

Example : E3RP0754S55 flat washer internal diameter 7, external diameter 30, height 6, in VHDS silicone, young modulus 2 MPa; washer colour: brick red.

Other elastomers may be used: natural rubber, neoprene, EPDM, butyl rubber, nitrile rubber.

DIMENSIONS

FLAT WASHERS



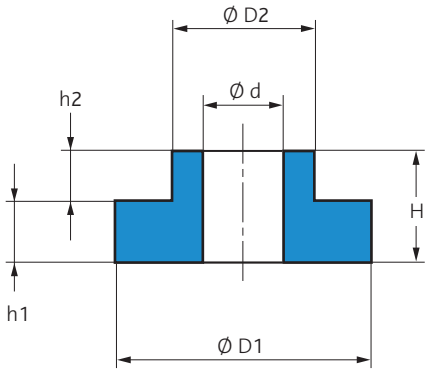
Reference	Ø Int. (mm)	Ø Ext. (mm)	e (mm)
E3RP2439	2	6	10
E3RP3419	2	7	1
E3RP2062	4	8	5
E3RP3291	4	9	3,4
E3RP2061	4	12	4
E3RP2667	5	12	5
E3RP2025	5	15	4
E3RP2024	5	22	4
E3RP2401	6	18	6
E3RP2282	6,1	12	6
E3RP2281	6,1	20	4
E3RP2959	6,4	12	3
E3RP2453	6,5	11,8	2,5
E3RP2403	6,5	13,5	10
E3RP3534	6,5	15	4,5
E3RP2402	6,5	18	14,5
E3RP3162	6,5	25	2
E3RP2882	7	12	4
E3RP0590	7	12	6
E3RP2883	7	16	6
E3RP0591	7	16	8
E3RP2404	7	30	3
E3RP0754	7	30	6
E3RP2148	7,4	11,5	7,5
E3RP2149	7,6	17,6	6
E3RP2454	7,7	11,8	7,7
E3RP2406	8	13	4
E3RP2405	8	16	4
E3RP0607	8	18	6
E3RP0608	8	18	8
E3RP0588	8	22	4
E3RP0777	8	24	4
E3RP2436	8	26	6
E3RP0609	8	26	10
E3RP2045	8,5	26	4

Reference	Ø Int. (mm)	Ø Ext. (mm)	e (mm)
E3RP2604	9	13	4
E3RP2605	9	19	4
E3RP2330	9	36	6
E3RP2181	9,5	20	6
E3RP2570	9,5	24	4
E3RP2446	9,5	26	4
E3RP3500	10	18	4
E3RP0613	10	20	6
E3RP2346	10	21	6
E3RP2437	10	22	4
E3RP0584	10	22	6
E3RP2345	10	24	6
E3RP2645	10	25	4
E3RP0614	10	26	6
E3RP0615	10	26	12
E3RP2435	10	30	6
E3RP0644	10	30	12
E3RP0585	10	34	6
E3RP0643	10	34	8
E3RP0586	10	34	12
E3RP2329	11	36	4
E3RP2328	11	36	6
E3RP0694	12	17	4
E3RP0695	12	18	4
E3RP0738	12	50	12
E3RP2407	14	22	6,5
E3RP3222	14	30	3
E3RP2408	16	29	7
E3RP2409	20	32	10,5
E3RP3532	20	38	3
E3RP0782	21	29	5
E3RP2434	22	38	17
E3RP0744	31	36	3
E3RP0745	36	44	3
E3RP2341	44,5	83	3,2

SILICONE RUBBER / SPECIAL ELECTRONICS

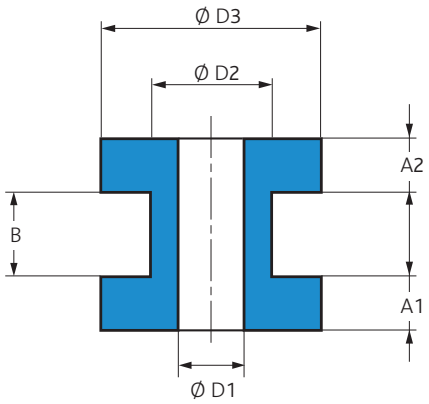
DIMENSIONS

FLANGED WASHERS



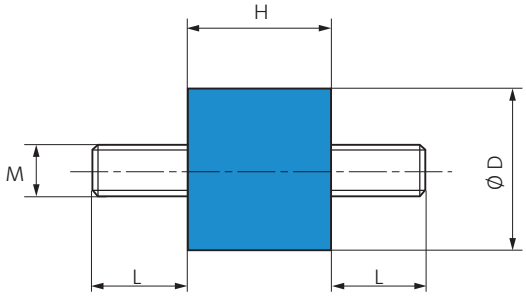
Reference	Ø d (mm)	Ø D1 (mm)	Ø D2 (mm)	H (mm)	h1 (mm)	h2 (mm)
E3RP0712	3,5	10	7,5	4,7	3,2	1,5
E3RP2292	3,5	13	6	7	3,3	3,7
E3RP3290	4	9	6	5,4	3,4	2
E3RP0647	4,2	8	5,8	3,3	1,7	1,6
E3RP0997	5	18	10	24	14	10
E3RP2192	6	12	8,5	7	4	3
E3RP2410	6	18	10	10	6	4
E3RP3533	6,5	15	11	8	4,5	3,5
E3RP0755	7	30	17	14	6	8
E3RP2374	8	18	12	6	3	3
E3RP2379	8	18	13	3,5	2	1,5
E3RP0563	8	19,8	13,8	7	2	5
E3RP2173	8	21	13	6	4	2
E3RP0778	8	24	14	8	4	4
E3RP2042	8,5	26	17	8	4	4
E3RP3491	9,5	24	18	8	4	4
E3RP3490	10	18	14	8	4	4
E3RP0553	11	24	17	9	4	5
E3RP0575	12	50	28	22	12	10
E3RP2315	16	50	28	22	12	10

GROMMETS



Reference	Ø D1 (mm)	Ø D2 (mm)	Ø D3 (mm)	A1 (mm)	A2 (mm)	B (mm)
E3RP2364	4	6	8	2,2	2,2	1,6
E3RP0648	4,2	5,8	8	1,7	1,7	1,6
E3RP0576	5	8	12	2	2	4
E3RP3295	8	12	18	5,5	5,5	3
E3RP3258	8	12	18	5,5	5,5	6

THREADED STUDS



Reference	Ø D (mm)	H (mm)	L (mm)	M
E4432F01	10	8	6	M3
E3RP0956	12	8	6	M3
E3RP2118	16	16	8/9,5	M5
E3RP0757	20	23	12	M5
E3RP0954	33	26	13,2	M6
E3RP0708	33	39	13,2	M6
E3RP0686	33,2	53,5	12	M6

ELASTOMER PLATES E3PEPL

SILICONE RUBBER / SPECIAL ELECTRONICS

DESCRIPTION

VHDS elastomer sheet.

APPLICATIONS

These sheets may be used for making grommets, washers or anti-vibration mountings for equipment.
There is a wide range of VIBRACHOC moulded parts, but in certain cases, such as prototypes, undefined specification, etc, it is often advantageous to determine the suspension using elastomer compo-nents cut from sheet and bonded.

CHARACTERISTICS

- Overall tolerances :
  - on the lengths : ± 5%
  - on the thickness : ± 3%

SHAPE	DIMENSIONS (mm)	THICKNESS (mm)
SQUARE	300 x 300	2, 3, 4, 5, 6, 8, 10

VIBRACHOC plates should be ordered using the following reference :

E3PEPL ❑❑S❑❑C❑❑❑
1 2 3

1 : dimension in cm.
2 : thickness in 1/10 mm.

For example : E3PEPL30S55C060 =
square plate 300 X 300 mm.
6 mm thick VHDS rubber compound.
grade 55.

For other shapes, sizes or materials, ask us for details.

DISC DRIVE SUSPENSION E4330F**

SILICONE RUBBER / SPECIAL ELECTRONICS

Natural frequency : 20 to 30 Hz (1)

DESCRIPTION

A silicone (VHDS) elastomer with a bonded metal insert. The legs have tangs which enable each leg to be pulled through mounting holes in the equipment. The suspended component can then be attached with an M3 screw through the insert. The tangs can be cut off after insertion.

APPLICATIONS

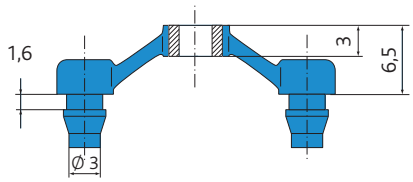
- Suspension of disc drives.
- Protection of electronic components and printed circuit boards with very low mass in mobile or static environments.

CHARACTERISTICS

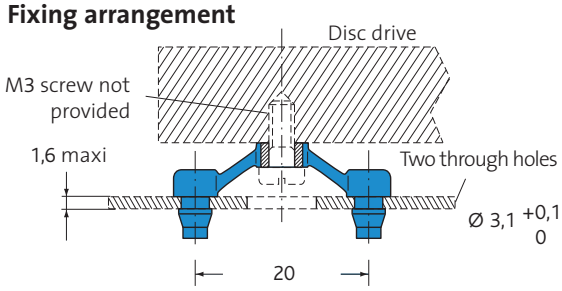
Natural Frequency :
- Axial : 15 to 30 Hz
- Radial : 15 to 30 Hz.

Amplification factor at resonance < 5.
Operating temperature range : -50°C to +150°C.

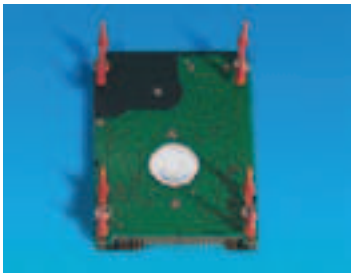
Reference	Nominal load (daN)
E4330F01 E4330F11 E4330F21 E4330F31 E4330F71	0,03 0,035 0,036 0,042 0,1

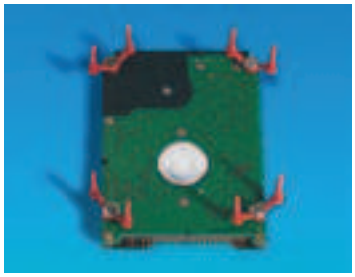


Fixing arrangement

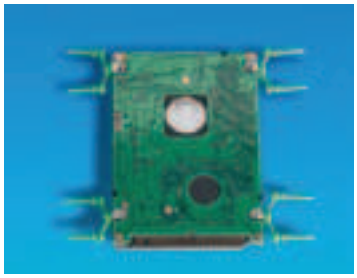


Possible installation configurations :





Mounting in compression



Mounting in shear

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

S.L.F.® MOUNTS

SILICONE RUBBER / SPECIAL ELECTRONICS
SMALL LOADS - HIGH DEFLECTION

Natural frequency : (1)
10 to 25 Hz

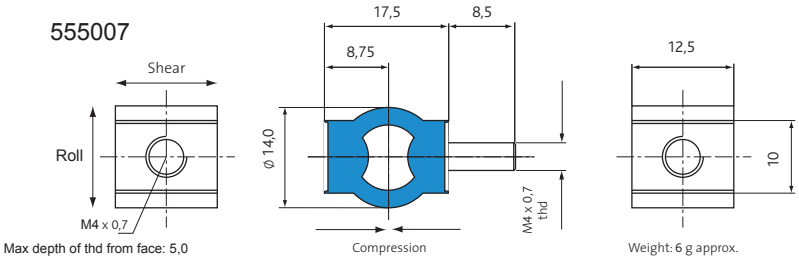
DESCRIPTION

Low frequency high deflection antivibration mount available in a choice of elastomers including high damped silicone. The zinc plated mild steel metalwork is fully bonded for improved fatigue strength.

APPLICATIONS

These mounts have been designed to protect low mass components and instruments from vibration and shock and to isolate small rotating machines e.g. pumps and electric motors.

DIMENSIONS



CHARACTERISTICS

Maximum sinusoidal input at resonance : ± 0.5 mm.
Resonance frequencies at maximum input : 10 to 25 Hz dependent on axis and load.
Axial to radial stiffness : 3 : 1.
Amplification at resonance : silicone : 4 natural rubber : 10.
Maximum displacement during shock : axial : 5 mm.
radial : 7 mm.
Mechanical strength corresponding to a continuous acceleration of 10 g at maximum load.

Reference	Mix	Static load in compression (daN)	Static load in shear (daN)	Static load in roll (daN)	Temperature for continuous operation
55500*42 **55500*72**	Silicone 42 Sh Silicone 70 Sh	0,10 - 0,50 0,60 - 0,80	0,10 - 0,25 0,25 - 0,50	0,10 - 0,15 0,15 - 0,30	- 54 to + 150 °C
55500*01 **55500*02**	NR 50 Sh NR 70 Sh	0,10 - 1,50 1,50 - 3,00	0,10 - 0,50 0,50 - 1,00	0,10 - 0,40 0,40 - 0,80	- 40 to + 70 °C

NB: The * define the type of fixing: combination fixing: 555007 male/male fixing: 555005 female/female fixing: 555006

ASSEMBLY

Improved stability can be achieved if the mounts are inclined at 45° towards the centre of gravity.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

E1E931S
E1E4045

SILICONE RUBBER / SPECIAL ELECTRONICS

Natural frequency : 15 to 25 Hz (1)

DESCRIPTION

- High damped silicon elastomer (VHDS).
- Stainless Steel flange and centre axis.

APPLICATIONS

- Protection of electronic equipment, navigation equipment, control consoles, measuring instruments, onboard aircraft, trains and trucks.

CHARACTERISTICS

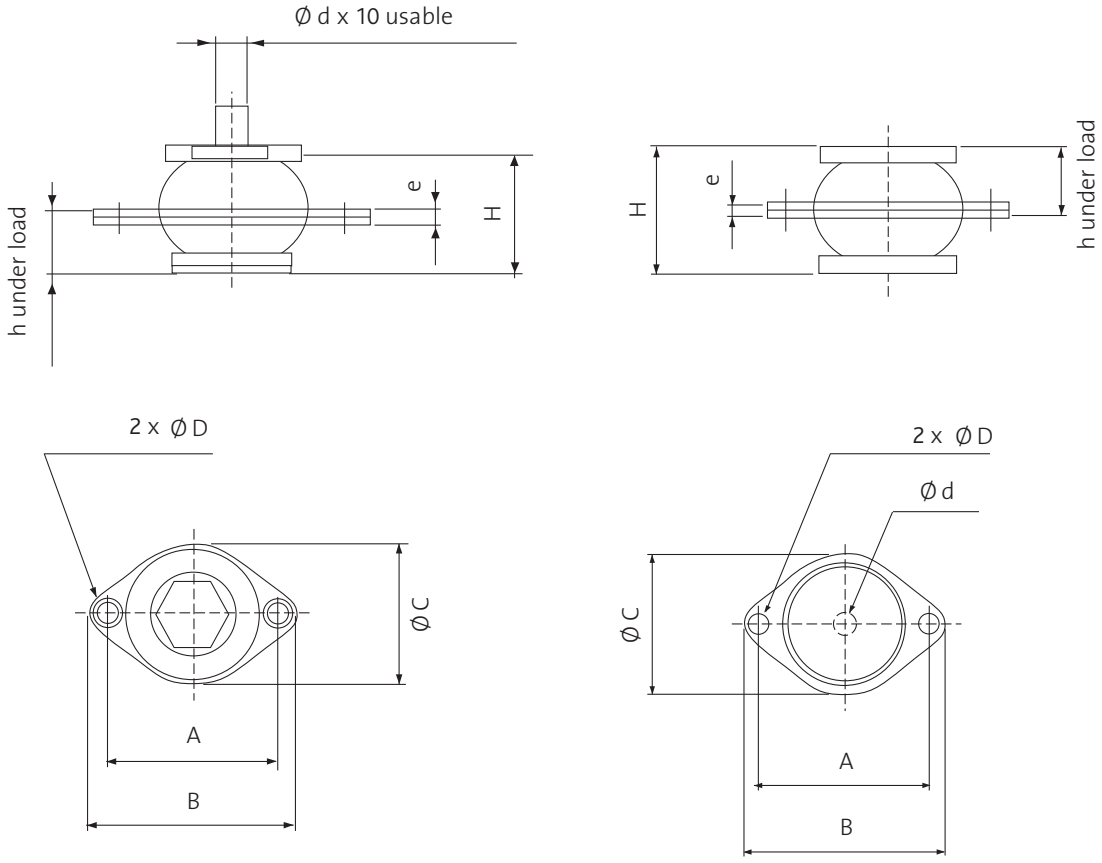
Natural frequency :
- axial :15 to 25 Hz.
- radial : 10 to 20 Hz.

Maximum sinusoidal input amplitude at resonance frequency : ± 0,4 mm.
Amplification factor at resonance < 4.
Operating temperature range : - 54 °C to + 150 °C.
Mechanical strength corresponding to a continuous acceleration of 10 g at maximum load.
Maximum axial displacement during shock : 3 mm
Weight : E1E931S : 31 g.

Part number	Axial static load (daN)
E1E931S38 E1E404538	0,8 - 2
E1E931S55 E1E404555	1- 2,5
E1E931S72 E1E404572	1,5 - 4

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS CHARACTERISTICS



E1E931S

E1E4045

Reference	A (mm)	B (mm)	Ø C (mm)	Ø D (mm)	H (mm)	Ø d (mm)	e (mm)	h (mm)
E1E931S ❑ ❑	34,9	44	30	4,2	24,5	M5	2,5	12,5
E1E4045-❑ ❑	35,9	44	30	4,2	20	5,1	2	11

E1E11S**E*
E1E12S**E*
E1E13S**E*

SILICONE RUBBER / SPECIAL ELECTRONICS

Natural frequency : 20 to 25 Hz (1)

DESCRIPTION

- VHDS elastomer able to carry loads under compression and traction.
- Pedestal, washer and shaft in 18/8 stainless steel.

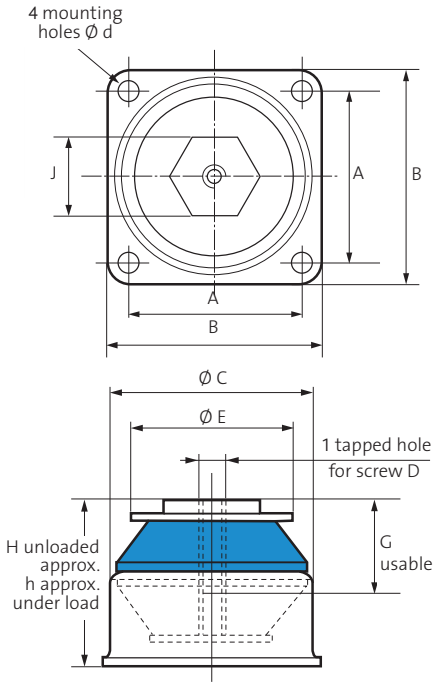
APPLICATIONS

- Protecting electronic equipment, navigation equipment, instrument panels, measuring instruments, control panels on aircraft, road vehicles and railway trains.

CHARACTERISTICS

Natural frequency :
- axial : 20 to 25 Hz
- radial : 20 to 25 Hz.

Maximum permitted excitation at natural frequency of suspension : ± 0.5 mm.
Amplification factor at resonance < 5.
Operating temperature : - 54°C to + 150°C.
Structural strength corresponds to a continuous acceleration of 10 g at maximum load.
Maximum axial travel available for shock :
E1E11 : + 4mm / E1E12 : + 5 mm / E1E13 : + 7 mm.
Weight : E1E1 : 60 g / E1E12 : 120 g / E1E13 : 225 g.
These mounts meet the standard AIR7304 curve ZF



Reference	Axial static loads (daN)
E1E11S38EC	1,60 - 2-80
E1E11S42EC	1,80 - 3,20
E1E11S48EC	2,10 - 3,80
E1E11S55EC	2,50 - 4,50
E1E11S63EC	3,00 - 5,30
E1E11S72EC	3,50 - 6,20
E1E12S38ED	3,70 - 5,70
E1E12S42ED	4,00 - 6,30
E1E12S48ED	4,60 - 7,10
E1E12S55ED	5,20 - 8,10
E1E12S63ED	6,00 - 9,30
E1E12S72ED	6,60 - 10,30
E1E13S38EE	5,50 - 8,50
E1E13S42EE	6,00 - 9,50
E1E13S48EE	6,50 - 10,50
E1E13S55EE	7,50 - 12,00
E1E13S63EE	8,50 - 14,00
E1E13S72EE	10,00 - 16,00

Reference	A (mm)	B (mm)	Ø C (mm)	D	Ø E (mm)	H (mm)	J (mm)	Ø d (mm)	h (mm)	G (mm)
E1E11S ❑❑ EC	25,4	34	28,5	M5	23	29	14	4,3	28	10
E1E12S ❑❑ ED	34,9	44,4	40	M6	34,6	35,6	19	4,3	34,5	12
E1E13S ❑❑ EE	49,2	60,5	57	M8	45	47	23	5,3	45,5	16

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

E1E11S**AL
E1E12S**AL
E1E13S**AL

SILICONE RUBBER / SPECIAL ELECTRONICS

Natural frequency : (1)
20 à 25 Hz

DESCRIPTION

VHDS elastomer able to carry loads under compression and traction.
Flange, washer and shaft in 18/8 stainless steel.

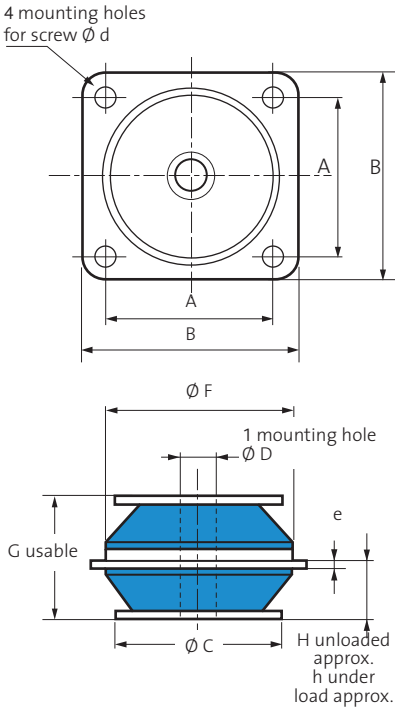
APPLICATIONS

Protecting electronic equipment, navigation equipment, instrument panels, measuring instruments, control panels on aircraft, road vehicles and railway trains.

CHARACTERISTICS

Natural frequency :
- axial : 20 to 25 Hz
- radial : 20 to 25 Hz.

Maximum permitted excitation at natural frequency of suspension : ± 0.5 mm.
Amplification factor at resonance < 5.
Operating temperature : - 54°C to + 150°C.
Structural strength corresponds to a continuous acceleration of 10 g at maximum load.
Maximum axial travel available for shocks :
E1E11 : + 4mm / E1E12 : + 5 mm / E1E13 : + 7 mm.
Weight : E1E11 : 25 g / E1E12 : 75 g / E1E13 : 225 g.
These mounts meet the standard AIR7304 curve ZF.



Reference	Axial static loads (daN)
E1E11S38AL	1,60 - 2-80
E1E11S42AL	1,80 - 3,20
E1E11S48AL	2,10 - 3,80
E1E11S55AL	2,50 - 4,50
E1E11S63AL	3,00 - 5,30
E1E11S72AL	3,50 - 6,20
E1E12S38AL	3,70 - 5,70
E1E12S42AL	4,00 - 6,30
E1E12S48AL	4,60 - 7,10
E1E12S55AL	5,20 - 8,10
E1E12S63AL	6,00 - 9,30
E1E12S72AL	6,60 - 10,30
E1E13S38AL	5,50 - 8,50
E1E13S42AL	6,00 - 9,50
E1E13S48AL	6,50 - 10,50
E1E13S55AL	7,50 - 12,00
E1E13S63AL	8,50 - 14,00
E1E13S72AL	10,00 - 16,00

Reference	A (mm)	B (mm)	Ø C (mm)	Ø F (mm)	G (mm)	Ø d (mm)	e (mm)	H (mm)	h (mm)	Ø D (mm)
E1E11S ❑❑ AL	25,4	32	23	25,6	19	3,6	1,5	10	9	5,2
E1E12S ❑❑ AL	34,9	44,5	34,6	38,7	25,4	4,2	1,8	11,5	10,5	6,7
E1E13S ❑❑ AL	49,2	60,5	45	53	38	5,3	2,5	17,75	18,5	8,5

(1) Natural frequency with max. load, see chapter : CHARACTERISTICS.RISTICS.

E1E21
E1E22
E1E23

SILICONE / SPÉCIAL ÉLECTRONIQUE

Fréquence propre : (1)
20 à 25 Hz

DESCRIPTION

- VHDS elastomer.
- Flange and shaft in 18/8 stainless steel.

Two Ø C fail safe rings must be provided.

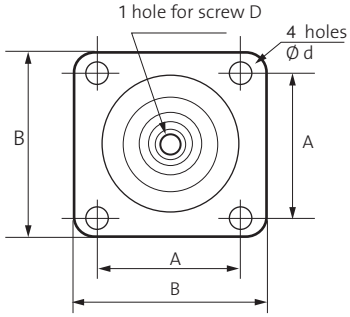
APPLICATIONS

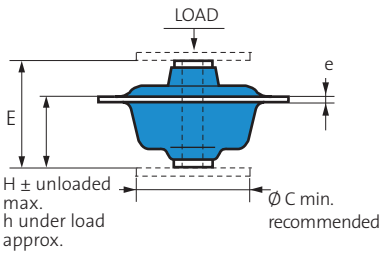
- Protecting electronic equipment, navigation equipment, instrument panels, measuring instruments, control panels on aircraft, road vehicles and railway trains.

CHARACTERISTICS

Natural frequency :
- axial : 15 to 25 Hz
- radial : 20 to 35 Hz.

Maximum permitted excitation at natural frequency of suspension : ± 0.5 mm.
Amplification factor at resonance < 4.
Operating temperature : - 54°C to + 150°C.
Structural strength corresponds to a continuous acceleration of 10 g at maximum load.
Maximum axial travel available for shock :
E1E21 : ± 4 mm for f min / E1E22 : ± 4.5 mm for f min
± 6 mm for f max ± 6 mm for f max.
Weight : E1E21 : 9 g / E1E22 : 25 g / E1E23 : 63 g.
These mounts meet the standard AIR7304 curve ZF





Reference*	A (mm)	B (mm)	Ø C (mm)	D	E (mm)	Ø d (mm)	e (mm)	H (mm)	h (mm)
E1E21S ❑❑ AL	25,4	32	24	M4	19	3	0,8	12,5	11
E1E22S ❑❑ AL	34,9	44,5	28	M5	25,4	4	1,5	16,5	15
E1E23S ❑❑ AL	49,2	60,5	42	M6	36	5	2	22	20

* Exist with a diamond flange (BL)

Reference	Axial static loads (daN)	Frequency (Hz)
E1E21S38AL E1E21S63AL E1E21S77AL	0,10 -0,40 0,20 - 0,90 0,26 - 1,20	15 - 25
E1E22S38AL E1E22S63AL E1E22S77AL	0,20 - 1,00 0,40 - 1,70 0,50 - 2,20	12 - 25
E1E23S42AL E1E23S77AL	0,40 - 1,20 1,00 - 2,90	10 - 15

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

E1E31
E1E32

SILICONE RUBBER / SPECIAL ELECTRONICS

Natural frequency : 15 to 25 Hz (1)

DESCRIPTION

- VHDS elastomer.
- Flange and shaft in 18/8 stainless steel.

Two Ø K fail safe rings must be provided.

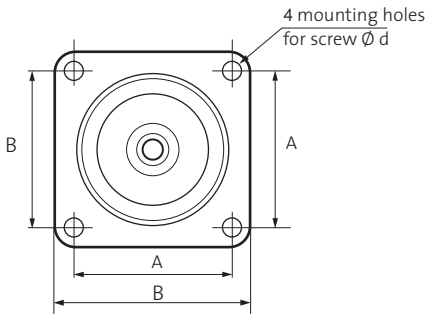
APPLICATIONS

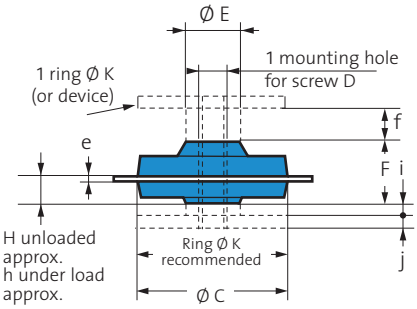
- Protecting electronic equipment, navigation equipment, instrument panels, measuring instruments, control panels on aircraft, road vehicles and railway trains.

CHARACTERISTICS

Natural frequency :
- axial : 15 to 25 Hz
- radial : 20 to 35 Hz.

Maximum permitted excitation at natural frequency of suspension : ± 0.5 mm.
Amplification factor at resonance < 4.
Operating temperature : - 54°C to + 150°C.
Structural strength corresponds to a continuous acceleration of 10 g with maximum load.
Maximum axial travel available for shocks :
E1E 31: ± 4 mm for f min
± 6 mm for f max.
E1E 32 : ± 4.5 mm for f min
± 6 mm for f max.
Weight : E1E31 : 9 g / E1E32 : 25 g.
These mounts meet the standard AIR7304 curve ZF





Reference	Axial static loads (daN)	Frequency (Hz)
E1E31S38AL E1E31S55AL E1E31S77AL	0,40 - 0,70 0,50 - 1,00 0,50 - 1,70	15 - 25
E1E32S38AL E1E32S55AL E1E32S77AL	0,30 - 1,10 0,60 - 1,80 1,60 - 2,60	

Reference	A (mm)	B (mm)	Ø C (mm)	D	Ø E (mm)	F (mm)	J (mm)	Ø K (mm)	Ø d (mm)	e (mm)	f (mm)		H (mm)	j (mm)		h (mm)
											Min.	Max.		Min.	Max.	
E1E31S ❑❑ AL	25,4	32	25	M4	8,5	10,5	2	25	3,6	1	3,2	5	4,5	0	1,75	3,5
E1E32S ❑❑ AL	34,9	44,5	35	M5	13	14,5	3	35	4,3	1,5	4,5	7	6,2	0	2,5	5

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

E1E41
E1E42
E1E43

SILICONE RUBBER / SPECIAL ELECTRONICS

Natural frequency : 10 to 25 Hz (1)

DESCRIPTION

- VHDS elastomer able to carry loads under compression.
- Base and centre axis in 18/8 stainless steel.

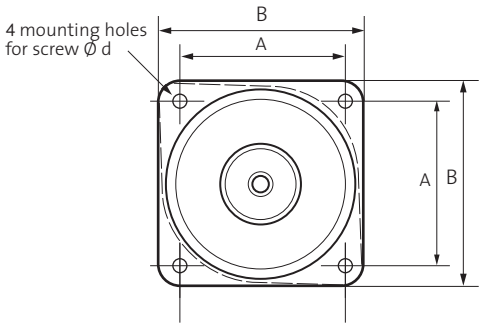
APPLICATIONS

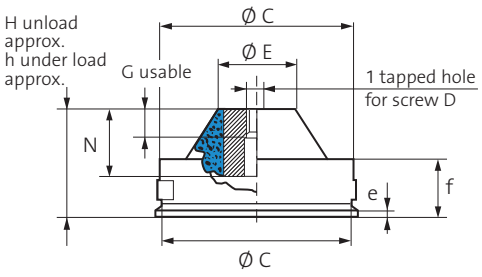
- Protecting electronic equipment, navigation equipment, instrument panels, measuring instruments, control panels on aircraft, road vehicles and railway trains.

CHARACTERISTICS

Natural frequency :
- axial and radial : 10 to 25 Hz.

Maximum permitted excitation at natural frequency of suspension : ± 0.5 mm.
Amplification factor at resonance < 4.
Operating temperature : - 54°C to + 150°C.
Structural strength corresponds to a continuous acceleration of 10 g at maximum load.
Maximum axial travel available for shocks :
E1E41: 8.8 mm / E1E42, E1E43 : 12 mm.
Weight : E1E41 : 22 g / E1E42 : 60 g / E1E43 : 96 g.
These mounts meet the standard AIR7304 curve ZF





Reference	Axial static loads (daN)
E1E41S38EB	1,20 - 2,10
❶ E1E41S63EB	2,20 - 3,80
E1E41S77EB	3,00 - 5,20
E1E42S38EC	1,75 - 3,30
E1E42S63EC	3,20 - 5,90
E1E42S77EC	4,40 - 8,30
E1E43S38ED	3,10 - 5,50
E1E43S63ED	6,00 - 10,80
E1E43S77ED	7,50 - 13,60

❶ These isolators exist with an oval flange (FB).

Reference	A (mm)	B (mm)	Ø C (mm)	D	Ø E (mm)	G (mm)	H (mm)	N (mm)	Ø d (mm)	e (mm)	f (mm)	h (mm)
E1E41S ❑❑ EB	25,4	34	30,5	M4	10	6	23	14,2	4,3	0,8	14	21
E1E42S ❑❑ EC	34,9	43	41,5	M5	12	8	33	20	4,3	1,5	18	31
E1E43S ❑❑ ED	49,2	60,5	57	M6	21,5	8	33	20	5,3	2	16	31

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

E1E941S

Natural frequency : 15 to 30 Hz (1)

DESCRIPTION

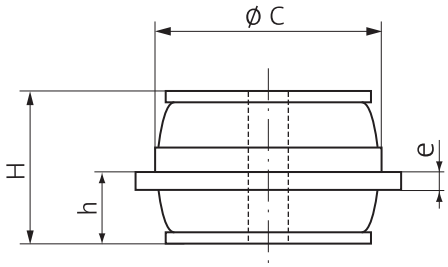
- High damped silicon elastomer (VHDS).
- Stainless Steel flange and centre axis.

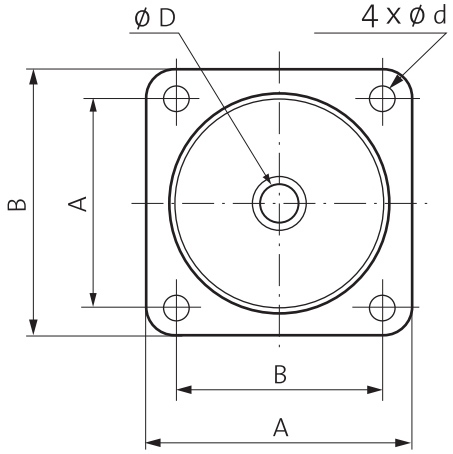
APPLICATIONS

- Protection of electronic equipment, navigation equipment, control consoles, mesuring instruments, onboard aircraft, trains and trucks.

CHARACTERISTICS

Natural frequency :
• axial and radial : 12 to 30 Hz.
Maximum sinusoidal input amplitude at resonance frequency : ± 0,5 mm.
Amplification factor at resonance < 5.
Operating temperature range : - 54 °C to + 150 °C.
Mechanical strength corresponding to a continuous acceleration of 10 g at maximum load.
Maximum axial displacement during shock:
E1E941S : 4 mm.
Weight : E1E941S : 80 g.
These mounts meet the standard AIR7304 curve ZF





Reference	Axial static loads (daN)
❶ E1E941S38	5 - 14
E1E941S55	7- 20
E1E941S72	12 - 30

❶Oval centre flange available.

Reference	A (mm)	B (mm)	Ø C (mm)	Ø D (mm)	H (mm)	Ø d (mm)	e (mm)	h (mm)
E1E941S ❑❑ EB	34,9	44,5	38	6,7	26,2	4,3	3	12

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

ARDAMP®

Natural frequency : (1)
10 to 25 Hz

DESCRIPTION

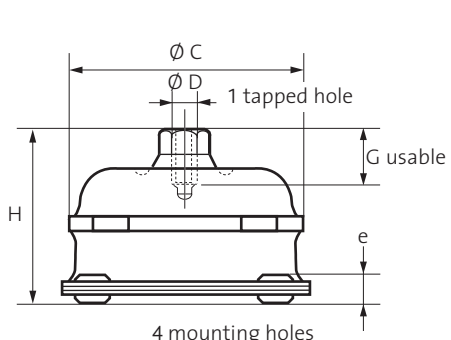
The ARDAMP® series dampers have a spring and piston embedded in high viscosity silicone rubber gel which itself is embedded in an elastomer membrane bonded to the case.

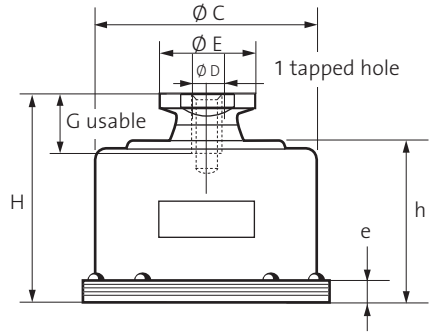
APPLICATIONS

Due to their high performances and high shock damping capacity ARDAMP® dampers are designed to protect fragile electronic equipment, control panels and measuring instruments on ground vehicles, aircrafts, helicopters, civil and military submersible crafts.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS

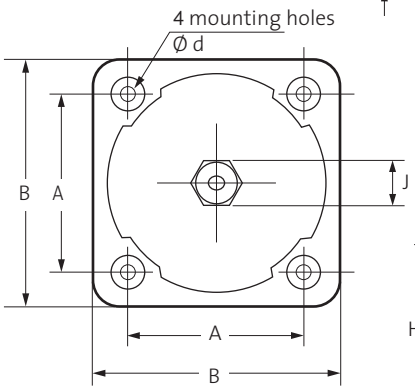


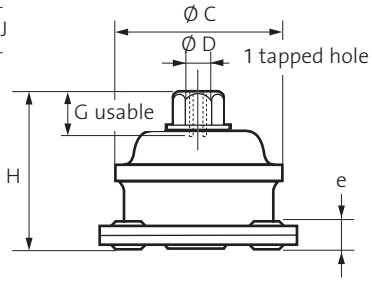


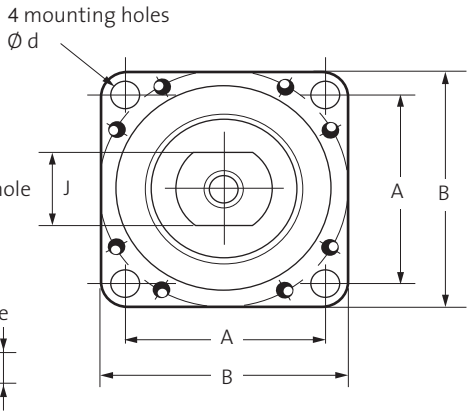
S01

E1FH781

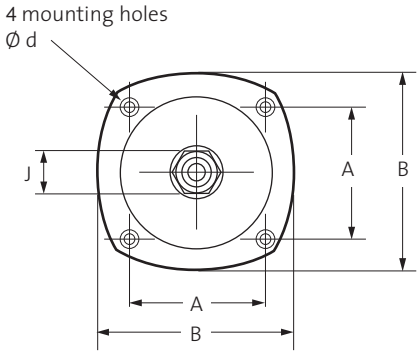
C01







E1FH866C01
E1FH2507-01



E1FH76
E1FH77
E1FH78

Reference	H Unload. (mm)	H approx. under load (mm)	A (mm)	B (mm)	Ø C (mm)	D	Ø E (mm)	G max. (mm)	J (mm)	Ø d (mm)	e (mm)	h (mm)	Weight approx.
E1FH781S01 **E1FH781C01**	42 43	39 41	35	54	43	M5		10	12	4,5	5,5		120 g
E1FH866C01 **E1FH2507-01**	47	46	49,2	65,3	61,5	M6		15	12	5,2	5		230 g 215 g
E1FH76-01 **E1FH76-02**	70 67	66 65	63,5	77	70	M10	30	19	24	8,4	7,2	49	390 g
E1FH77-01	86	82	88	110,5	96	M12	40	24	34	8,4	8,5	62	930 g
E1FH78-01 **E1FH78-02**	102 98	99 95	107,9	132	117	M16	54	25	44	11	9,5	77,5	1,5 kg

OPERATING CHARACTERISTICS

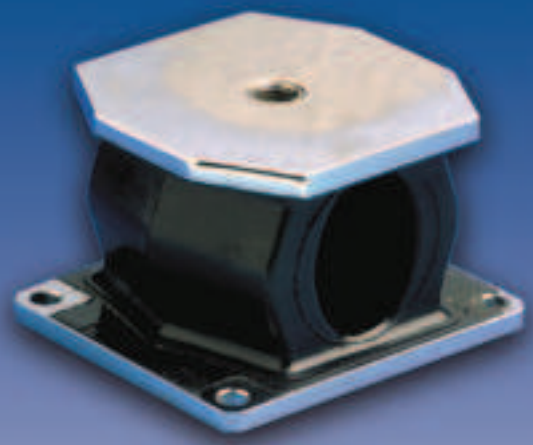
Natural frequency :
- axial : 10 to 25 Hz
- radial : 10 to 20 Hz.

Damping : 20% c/cc (E1FH781, 866, 2507-01).
17% c/cc (E1FH76, 77, 78).

Amplification factor at resonance : 2.5 to 3 max.

These dampers comply with SEFT 001A, AIR 7304, MIL STD 810 C.

Reference	SEFT 001 A			AIR 7304			MIL STD 810 C		Non standard applications		Shocks and bumps OZ axis	
	Load by damper (daN)	Axial Fn (Hz)	Radial Fn (Hz)	Load by damper (daN)	Axial Fn (Hz)	Radial Fn (Hz)	Load by damper (daN)	Axial Fn (Hz)	Load by damper (daN)	Radial Fn (Hz)	6 ms 1/2 sinus shocks max. input (g)	11 ms 1/2 sinus shocks max. input (g)
E1FH781S01 **E1FH781C01**	-	-	-	0,2 - 2 2-5	20 - 25	15 - 20	4	16	1,5 - 3,5 3,5 - 8	10 - 20	70 g	38 g
E1FH866C01	8 - 15	10 - 20	12 - 20	6 - 8	20 - 25	15 - 20	8	20	8 - 15	10 - 20	50 g	27 g
E1FH2507-01	-	-	-	-	-	-	-	-	5 - 8	6 - 10	-	-
E1FH76-01 **E1FH76-02**	14 - 20 18 - 30	10 - 20	12 - 20 11 - 16	7 - 12 9 - 20	20 - 25	15 - 20	14 18	18 17	14 - 20 18 - 30	10 - 20	40 g 55 g	22 g 30 g
E1FH77-01	20 - 50	10 - 20	10 - 17	-	-	-	30	15	20 - 50	10 - 20	50 g	25 g
E1FH78-01 **E1FH78-02**	50 - 100 90 - 130	10 - 20	10 - 16 10 - 15	-	-	-	75 100	10 11	50 - 100 90 - 130	10 - 20	40 g	22 g



E1C2321
E1T2105

SPECIAL PACKAGING

Natural frequency : 10 to 25 Hz (1)

DESCRIPTION

The special packing dampers have a flexible elastomer element designed for various applications, bonded to two steel mounting plates.

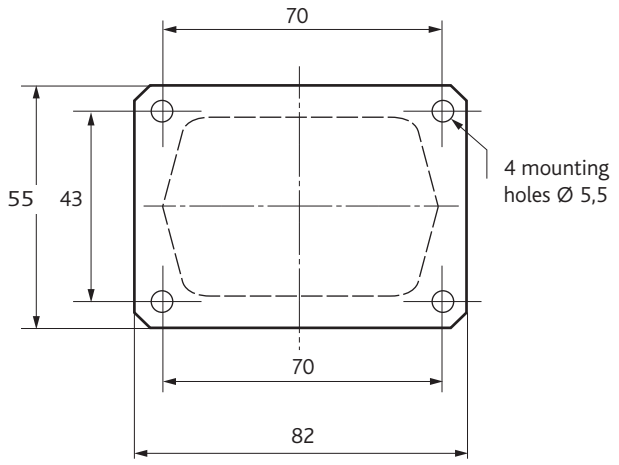
APPLICATIONS

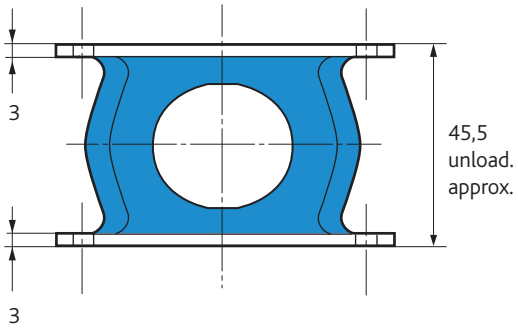
These multi-directional dampers allow considerable deflection to protect equipment transported in containers against drops and transport shocks (missiles, aeronautical equipment).
These dampers are also suitable for suspending equipment to be protected against shocks and vibrations caused by explosions or earthquakes.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

E1C2321

DIMENSIONS





OPERATING CHARACTERISTICS

Natural frequency :
- axial : 10 to 25 Hz,
- radial : 10 to 25 Hz.

Maximum permitted excitation at natural frequency of suspension : ± 1.6 mm.
Maximum travel available for shocks : - axial : 15 mm.
- radial : 40 mm.

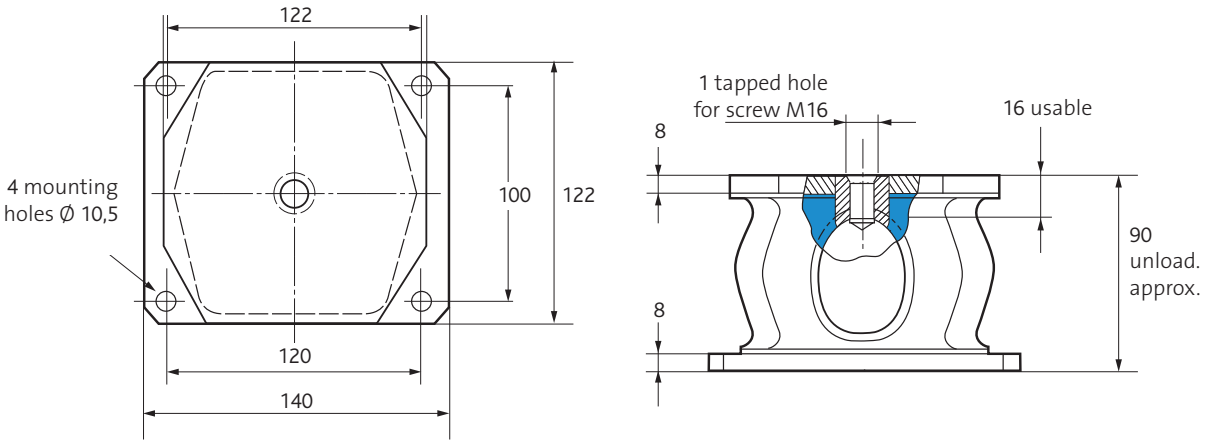
Operating temperature : see table.
Weight : 0.3 kg.

Reference	Axial static load (daN)	Damping	Resistance to oils and hydrocarbons	Resistance to fatigue	Operating temperature	Material (1)
E1C2321S01	1-10	***	*	*	- 54 to + 150 °C	SIL 33 Sh
E1C2321S02	2-20					SIL 55 Sh
E1C2321-01	2-20	*	**	***	- 30 to + 100 °C	CR 60 Sh
E1C2321-02	5-50					CR 70 Sh
E1C2321-03	10-100					CR 75 Sh
E1C2321-21	2-20	***	*	***	- 40 to + 90 °C	BR 60 Sh
E1C2321-22	5-50					BR 70 Sh
E1C2321-23	10-100					BR 80 Sh

(1) SIL: Silicone; CR: Chloroprene-Rubber; BR: Butadiene-Rubber.

E1C2105

DIMENSIONS



OPERATING CHARACTERISTICS

Natural frequency :
- axial : 10 to 25 Hz
- radial : 10 to 25 Hz.

Maximum permitted excitation at natural frequency of suspension : ± 1.6 mm.
Maximum travel available for shocks : - axial 40 mm.
- radial 75 mm.

Operating temperature : see table.
Weight : 2.6 kg.

Reference	Axial static load (daN)	Damping	Resistance to oils and hydrocarbons	Resistance to fatigue	Operating temperature
E1T2105S01 **E1T2105S02**	2-20 4-40	***	*	*	- 54 to + 150 °C
E1T2105-41 **E1T2105-42** **E1T2105-43**	10-100 20-200 50-400	*	***	**	- 25 to + 90 °C
E1T2105-21 **E1T2105-22** **E1T2105-23**	10-100 20-200 50-400	***	*	***	- 40 to + 90 °C

BECA

Natural frequency : (1)
8 to 14 Hz

DESCRIPTION

The BECA mount comprises one piece elastomer bonded to a top and bottom plate.
- Top plate : smooth or threaded (welded nut) hole.
- Bottom plate : fixing lugs or direct bearing on the ground.
- Bonded rubber.
- Domed rubber ring.
- Anti-slip bead or grooved anti-slip sole.
- Removable protective top cover : protects the rubber and distributes the load.

OPERATION

The design of the BECA mount gives the following basic characteristics :
- Transverse elasticity approximately the same as the axial elasticity (equifrequency).
- Rubber works in compression.
- Progressive buffer against shocks or accidental overload.
- Anti-slip (may be placed directly on the ground).

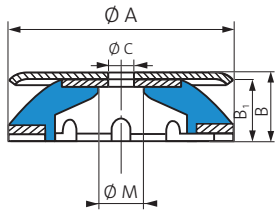
Advantages :
- The machine may be placed (with its mounts) directly on the ground.
- Very slim.
- Speed of fixing.
- Simple removal of the assembly.
- Extensive range : 3 hardnesses of rubber for 6 existing sizes, allowing the mounting to be optimised as a function of the load and stimulation frequency.
- A choice of 3 fixing styles.

Recommendations :
- In order not to affect the suspension of the machine, all external connections must be flexible.
- BECA mount can be used for fixed, well-balanced rotating machinery, otherwise a ballasting slab should be used.

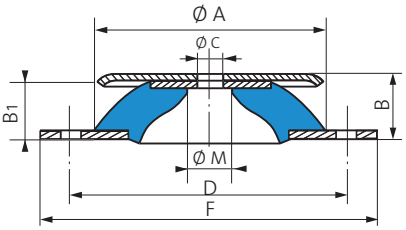
(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS

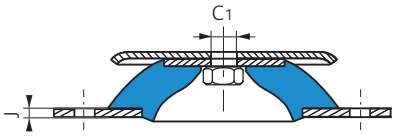
Section XX'

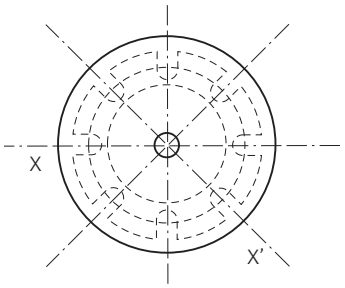


Section XX'

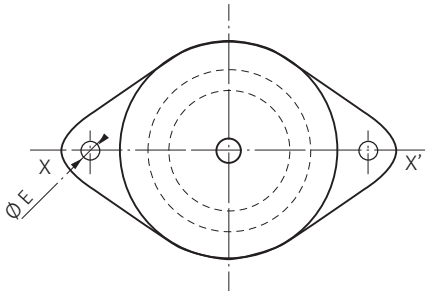


Section XX'

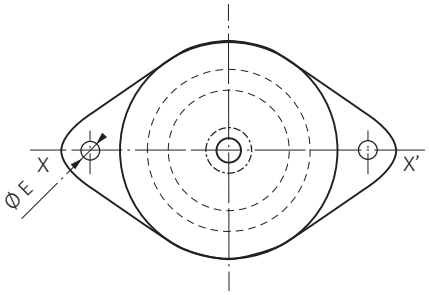




Shape a
BECA with anti-slip base



Shape b
BECA with lugs, smooth hole



Shape c
BECA with lugs, threated hole

Type	Hardness	Reference			Ø A (mm)	B (mm)	B_1 (mm)	Ø C (mm)	C_1	D (mm)	Ø E (mm)	F (mm)	J (mm)	Ø M (mm)	Weight (g)
		Anti-slip base	Diamond base												
		Smooth hole shape a	Smooth hole shape b	Threaded hole shape c											
Ø 40	45.60	-	-	**533641***	40	20	18	-	M6	52	6,2	64	2	19	50
Ø 60	45.60.75	-	-	**533661**	60	24	22,5	-	M6	76	6,2	90	2	18	140
Ø 80	45.60.75	-	**533581**	**533681**	80	27	25	8,1	M8	100	8,2	120	2	22	250
Ø 100	45.60.75	**533108**	-	-	100	30	28	10,2	-	-	-	-	-	22	420
Ø 100	45.60.75	-	**533109**	**533609**	100	27,5	25,5	10,2	M10	124	10,2	148	2,5	22	460
Ø 150	45.60.75	**533151**	-	-	150	41	38	14,2	-	-	-	-	-	34	1220
Ø 150	45.60.75	-	**533152**	**533652**	150	39	36	14,2	M14	182	12,2	214	4	34	1340
Ø 200	45.60.75	**533202**	-	-	200	46	42	18	-	-	-	-	-	44	2750
Ø 200	45.60.75	-	**533203**	**533623**	200	44	40	18	M18	240	14,5	280	5	44	3030

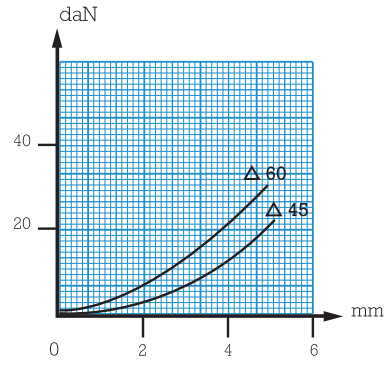
* Ø 40, M6 - RAPID nut - max. torque 3 N.m.
See current price list for availability of items.

OPERATING CHARACTERISTICS

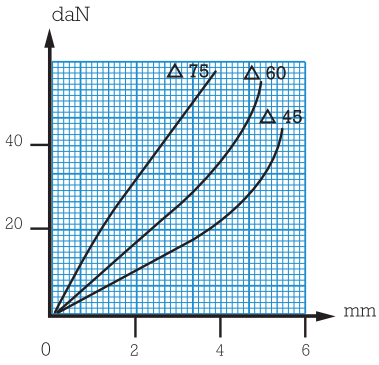
Nominal static load (daN)	Deflection (mm)	Type	Hardness
1-4	2	Ø 40	45
2-10	2,5	Ø 40	60
3-15	3	Ø 60	45
6-25	3	Ø 60	60
11-45	3	Ø 60	75
11-45	4,5	Ø 80	45
20-80	4,5	Ø 80	60
22-90	4	Ø 100	45
30-120	4	Ø 80	75

Nominal static load (daN)	Deflection (mm)	Type	Hardness
30-130	7	Ø 150	45
40-160	4	Ø 100	60
50-220	4	Ø 100	75
60-250	7	Ø 150	60
85-350	6	Ø 150	75
125-500	7	Ø 200	45
200-825	7	Ø 200	60
310-1250	6	Ø 200	75

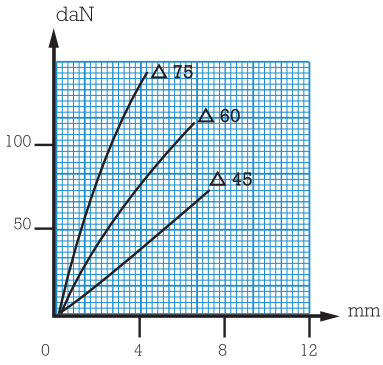
LOAD/DEFLECTION CURVES IN AXIAL COMPRESSION



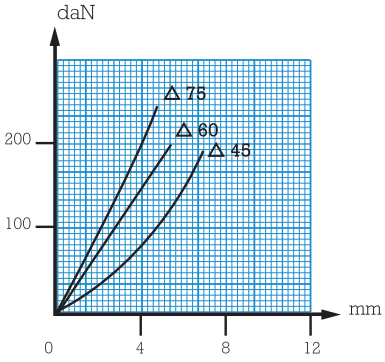
BECA Ø 40



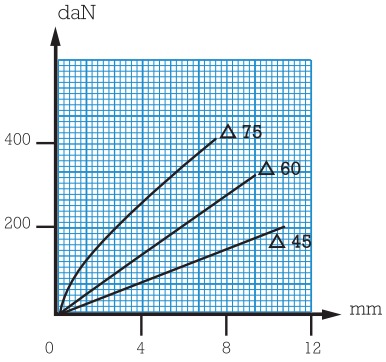
BECA Ø 60



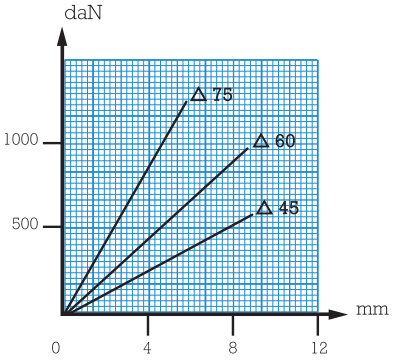
BECA Ø 80



BECA Ø 100

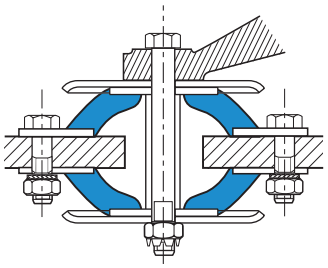


BECA Ø 150

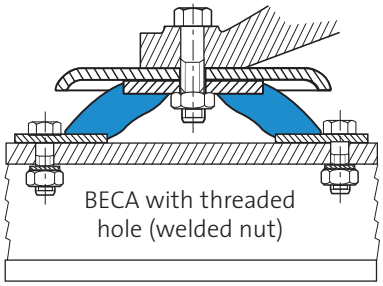


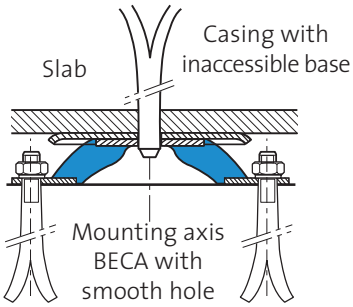
BECA Ø 200

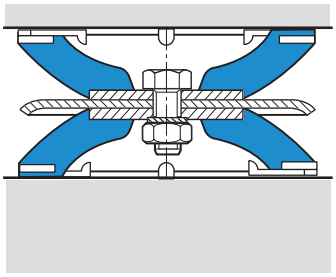
ASSEMBLY

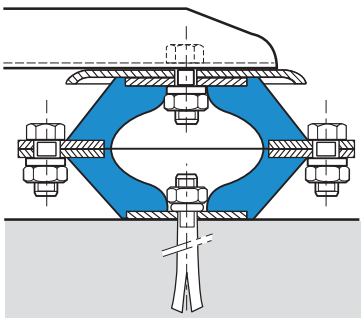


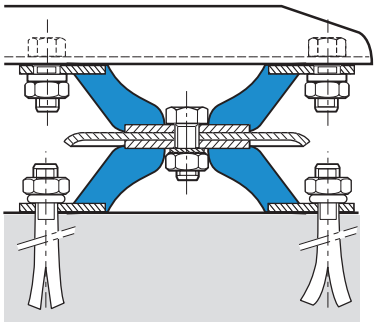
Anti-rebound (prestressed)









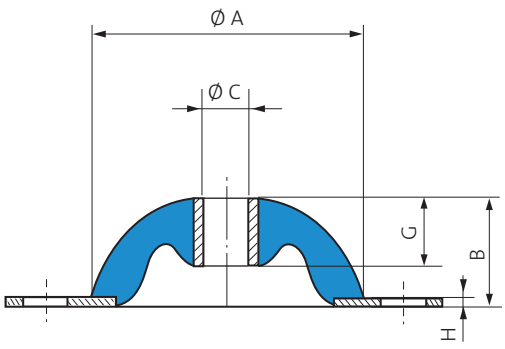


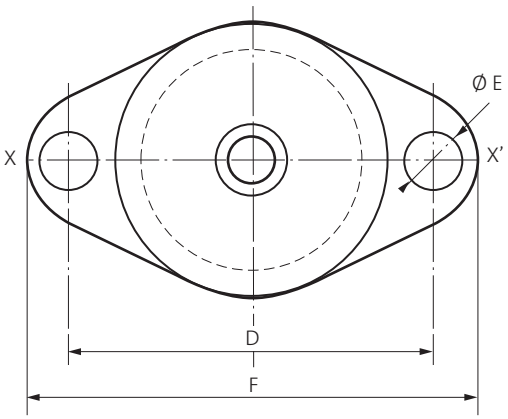
BECA mounts in tandem (to double the deflection)
All of our mounts are identified by conventional markings, either a paint spot or figures indicating the hardness: grey = hardness 45, green = hardness 60, blue = hardness 75.

POLYFLEX

Natural frequency : (1)
9 to 20 Hz

Section XX'





DIMENSIONS

Reference	Ø A (mm)	B (mm)	Ø C (mm)	D (mm)	Ø E (mm)	F (mm)	G (mm)	H (mm)
532300	30	16	6	40	6,1	50	8	1,5
532500	50	20	8	66	8,2	82	13	2
532563	55	23	10,1	90	8,2	106	15	3
532561	60	25	12,2	76	8,5	95	20	4
532750	75	30	12,2	95	11,0	118	25	6

See current price list for availability of items.

OPERATING CHARACTERISTICS

Nominal static load (daN)	Deflection (mm)	Reference	Hardness Shore A
1-5	3	**532300**	45
1-7	2	**532300**	60
2-8	1	**532300**	75
2-10	4	**532500**	45
3-15	3	**532500**	60
4-18	5	**532563**	45
5-20	2,5	**532500**	75
7-30	3	**532561**	45

Nominal static load (daN)	Deflection (mm)	Reference	Hardness Shore A
7-30	5	**532563**	60
10-40	2	**532561**	60
10-50	1,5	**532561**	75
10-50	4	**532750**	45
15-60	5,5	**532563**	75
15-65	3	**532750**	60
20-80	1,5	**532750**	75

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

ISOFLEX ®

Natural frequency : (1)
11 to 15 Hz

DESCRIPTION

The ISOFLEX® mount comprises two concentric metallic parts joined by a bonded, perforated rubber ring.

Operation

The design of the ISOFLEX® mount gives the following basic characteristics :

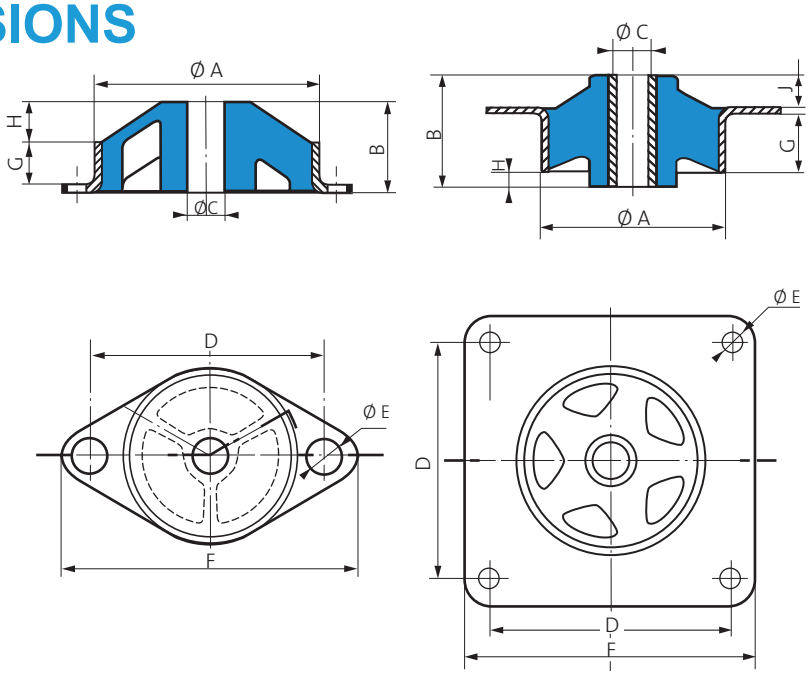
- Elasticity approximately the same in all directions (equi-frequent mounting).

APPLICATIONS

ISOFLEX® mounts may be used for suspending any small measuring or recording equipment, mobile equipment, machine tool controls.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS



Shape a

Shape b

Type	Shape	Reference	Hardness	Ø A (mm)	B (mm)	Ø C (mm)	D (mm)	Ø E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	Weight (g)
R	a	**552428**	50	28	8	4,2	36	3,2	44	4	3	-	9
I.20	b	**552231**	45-60	25,4	10,3	4,2	25,4	3,6	31,8	4,2	1	4,3	10
I.30	b	**552241**	45-60	38,1	15,9	6,2	34,9	4,2	44,5	7,3	-	7,3	30

See current price list for availability of items.

OPERATING CHARACTERISTICS

Nominal static load (daN)	Deflection (mm)	Type	Reference	Hardness
0,25-1	3	R	**552428**	50
0,50-2	3	I.20	**552231**	45
0,75-3	2,5	I.20	**552231**	60

Nominal static load (daN)	Deflection (mm)	Type	Reference	Hardness
1-4	3	I.30	**552241**	45
1,5-6	2	I.30	**552241**	60

All of our mounts are identified by conventional markings, either a paint spot or figures indicating the hardness : grey = hardness 45, green = hardness 60, blue = hardness 75.

ASSEMBLY

Fixing method

To avoid toppling or canting, the suspension should be designed so that the centre of gravity of the suspended equipment is close to the geometrical centre of the suspension.

ISODYNE ®

DESCRIPTION

The ISODYNE® mount comprises two half mountings joined together.

FONCTIONNEMENT

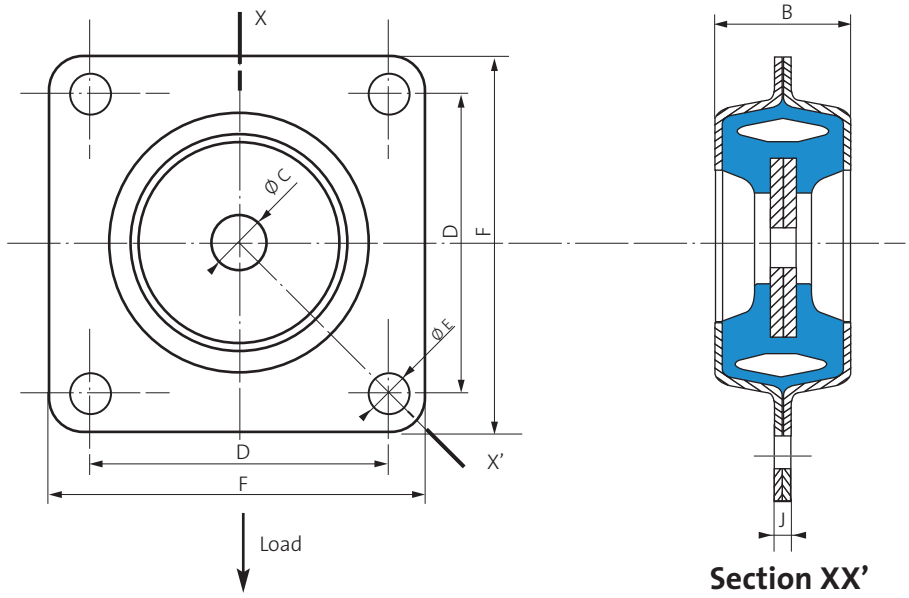
The design of the ISODYNE® mount gives the following basic characteristics :

- A very high axial to radial stiffness ratio.
- Vertical fixing avoiding excessive inclination of the equipment.
- Fixing at any angle.
- Safe (551571), anti-rebound.

APPLICATIONS

ISODYNE® can be used to suspend lightweight equipment in a vertical plane.

DIMENSIONS



Reference	Hardness	B (mm)	Ø C (mm)	D (mm)	Ø E (mm)	F (mm)	J (mm)	Weight (g)
551321 **551441** **551571**	50 45 45.60	16 18 20	4,2 6,5 8,2	25,4 35 45,5	3,5 4,2 6,2	32 44,5 57,5	1,6 2 2	10 24 50

See current price list for availability of items.

OPERATING CHARACTERISTICS

Nominal static load (daN)	Deflect. (mm)	Reference	Hardness
2,5	1	**551321**	50
10	3	**551441**	45

Nominal static load (daN)	Deflect. (mm)	Reference	Hardness
25	2,5	**551571**	45
35	2,5	**551571**	60

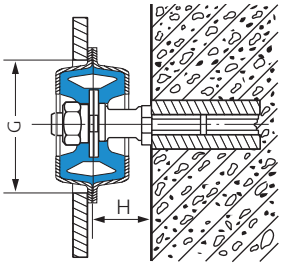
ASSEMBLY

Fixing clearances (approximate).

Reference	G (mm)	H (mm)
551321 **551441** **551571**	28 40 47	18 20 22

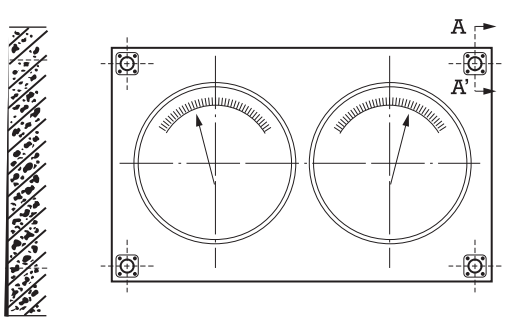
Fixing to wall

Suspended equipment



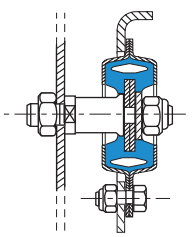
Vertical wall

Fixing a control panel against a wall or vertical frame.



Fixing to frame

Suspended equipment



frame

mount

SUSPENSION OF EQUIPMENT IN MOBILE APPLICATIONS

Natural frequency : 16 to 22 Hz (1)

DESCRIPTION

This mount has rubber moulded around a metal centre axis.
The elastomer is shaped so that the mount can be pressed into the mounting structure.

FONCTIONNEMENT

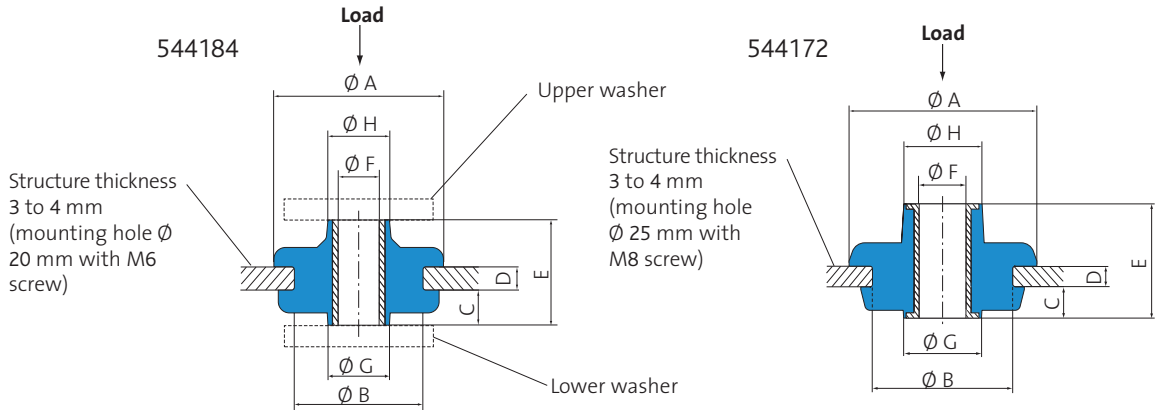
The mount combines the advantages of low natural frequency and easy installation.
The simple design means the part can be assembled usring a single bott or screw fixing.

APPLICATIONS

- Anti-vibration mounts suitable for mobile equipment mounted in light and heavy vehicles, construction equipment (hydraulic pumps, acoustic panels, control boxes, air conditioning sets, compressors)…
- Isolation of light weight equipment in static environments.

CHARACTERISTICS

Natural frequency :
Axial and radial : 16 to 22 Hz
Operating temperature range : - 30°C to + 80°C.
Fail safe assembly possible with washers fitted above and below the mount.
(dim Ø 6,2 x Ø 30 thickness 1,5)



Reference	Ø A (mm)	Ø B (mm)	C (mm)	D (mm)	E (mm)	Ø F (mm)	Ø G (mm)	Ø H (mm)
544184	29	22	6	4	18	6,2	10,5	10,5
544172	36	27	6	4	22	9	15	15

See current price list for availability of items.

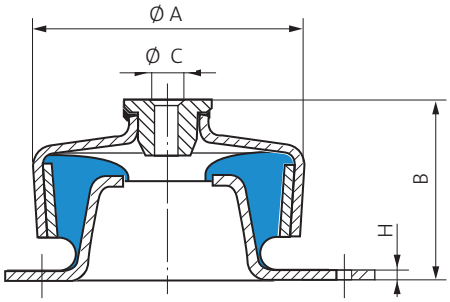
Reference	Load range (daN)	Temperature range
544184 -11	2 - 3	-30 to +80 °C
544184 -16	2,5 - 3,5	-30 to +60 °C
544172 -11	2 - 3	-30 to +60 °C

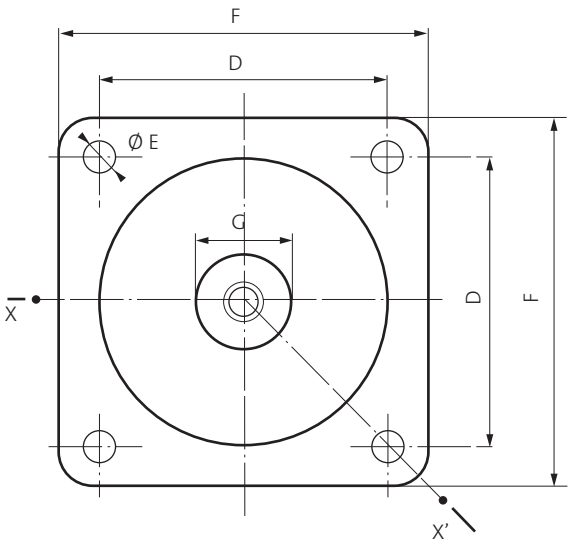
(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

S.C.P. MOUNTING

Natural frequency : (1)
9 to 15 Hz

Section XX'





DIMENSIONS

Reference	Ø A (mm)	B (mm)	Ø C (mm)	D (mm)	Ø E (mm)	F (mm)	G (mm)	H (mm)
530120	74	53	10	72	9	90	32	3
530220	92	63	12	90	11	114	36	3
530420	124	94	16	114	13	144	60	4

OPERATING CHARACTERISTICS

Reference	HARDNESS 45		HARDNESS 60		HARDNESS 75		Weight (g)
	Load (daN)	Deflect. (mm)	Load (daN)	Deflect. (mm)	Load (daN)	Deflect. (mm)	
530120 **530220** **530420**	70 140 300	3 4 5	120 200 500	2,5 3 5	175 300 800	2 2,5 4	580 1 000 2 550

See current price list for availability of items.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

BATRA® RING

Natural frequency : (1)
7 to 22 Hz

DESCRIPTION

The BATRA® ring comprises a rubber ring bonded to two metallic washers one with a circular groove, the other with a mating circular ridge which allows BATRA® rings to be mounted one on top of another.

OPERATION

The design of the BATRA® ring gives the following basic characteristics :

- Behaviour identical to that of a metallic spring plus damper.
- Robustness :
  - well behaved under shock.
  - removal of the risks of suspension collapse.
- Flexibility easily tailored by stacking BATRA® rings.
- Transverse creep limited by the two bonded armatures..

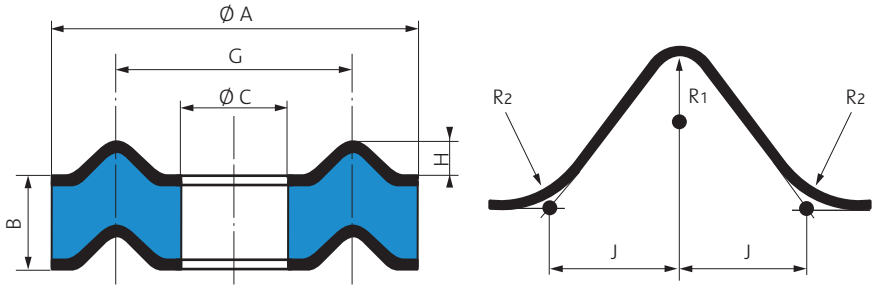
APPLICATIONS

BATRA® rings may be used :

- For making suspensions that are very flexible vertically and also damped by the natural properties of the rubber (road and rail vehicles).
- For making very effective anti-shock buffers (wagons, cars, gantries).
  For special applications, where the quantities would justify custom manufacture, it is possible to supply Special BATRA® rings either with only one bonded lower armature or “all rubber”.
  For special cases of shock, there are Special BATRA® rings with overlapping, non-bonded, armatures.

(1) Natural frequencies with max/min loads, see : OPERATING CHARACTERISTICS.

DIMENSIONS



Reference	Ø A (mm)	B (mm)	Ø C (mm)	G (mm)	H (mm)	J (mm)	R1 (mm)	R2 (mm)	Weight (g)
541050	50	11	14	32	4	5	2,5	1,5	45
541083	80	27	41,5	61	4	6	3	3	220
541082	86	27,5	32	65	5	7	4	2	300
541100	100	28,5	32	65	5	7	4	2	415
541112	115	30	50	85	10	10	5	3	540
541145	140	35	55	100,5	10	10	5	3	890
541146	146	20	55	100,5	10	10	5	3	750
541144	146	35	55	100,5	10	10	5	3	980
541175	170	35	60	115	10	10	5	3	1360
541174	170	50	60	115	10	10	5	3	1680
541185	185	40	95	140	10	10	5	3	1510
541249	250	50	70	160	10	10	5	3	2600
541250	250	59	70	160	10	10	5	3	4400

See current price list for availability of items.

OPERATING CHARACTERISTICS

Static compression		Dynamic compression			Reference
Nominal load (daN)	Deflection (mm)	Load (daN)	Deflect. (mm) (1)	Ø A max.	
50-200	0,8	600	3,5	57	**541050**
90-360	3	1100	7	90	**541083**
125-500	3	1500	7	100	**541082**
175-700	3	2100	7	115	**541100**
210-850	3	2500	7	130	**541112**
325-1300	3,5	4000	9,5	150	**541145**
375-1500	3	4500	7	158	**541144**

Static compression		Dynamic compression			Reference
Nominal load (daN)	Deflection (mm)	Load (daN)	Deflect. (mm) (1)	Ø A max.	
475-1900	1,1	5700	2,5	158	**541146**
500-2000	3	6000	9,5	190	**541175**
500-2000	5,3	6000	14	190	**541174**
500-2000	4,5	6000	12	205	**541185**
1125-4500	4,5	13500	12	282	**541249**
1125-4500	5,5	13500	13	282	**541250**

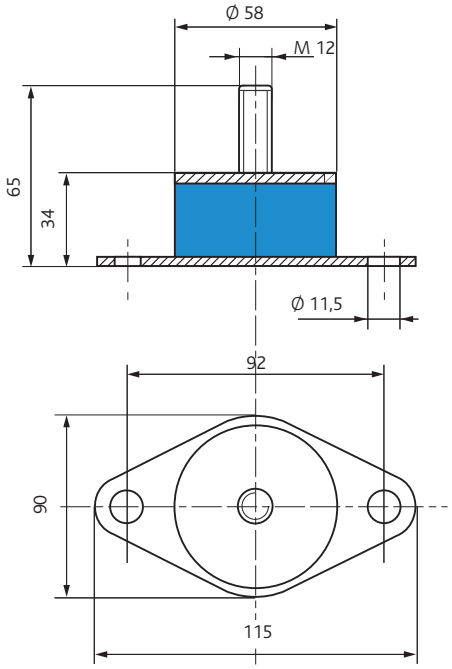
(1) The instantaneous deflection indicated in this table is approximate as it depends on the impact speed.

It is possible to use a metallic cushion for this application.

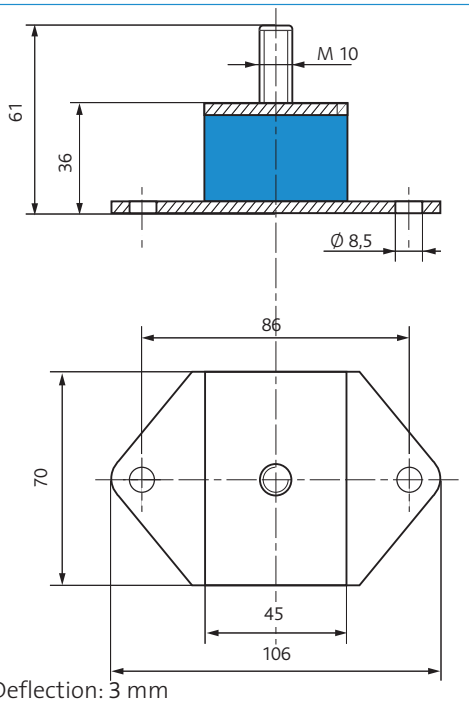
ASSEMBLY

The rings are centred using the grooves and ridges. To avoid play under no-load conditions, the stack should be pre-compressed by 3 to 10% of its height. It is also necessary to leave sufficient room around the stack for the sideways expansion under load.

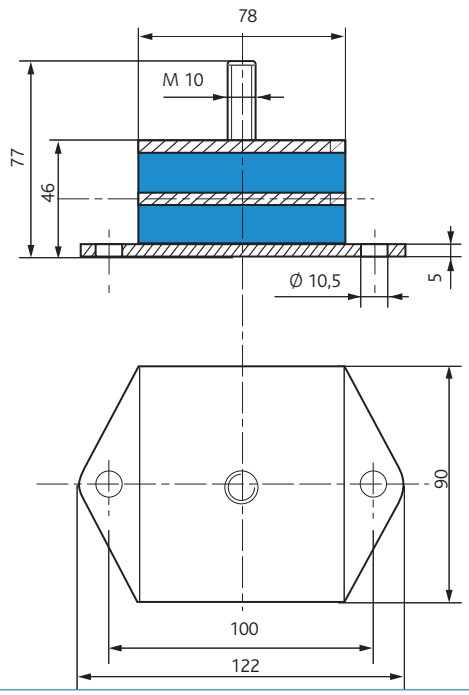
OTHER MOUNTING SYSTEMS



Deflection: 5 mm
Maximum load: 250 daN
Reference **539243 -55**



Deflection: 3 mm
Maximum load: 150 daN
Reference **534135**



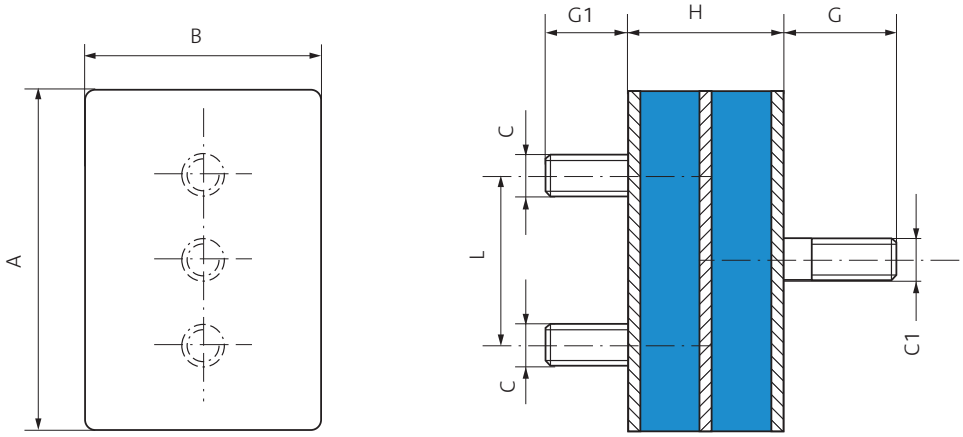
Compression:

Deflection: 4.5 mm
Maximum load: 800 daN

Shear:

Deflection: 6.5 mm
Maximum load: 80 daN

Reference **534079**



DIMENSIONS

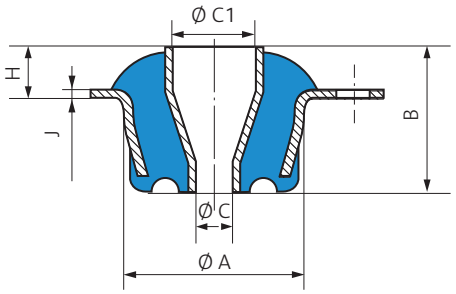
Reference	A (mm)	B (mm)	H (mm)	C	C1	G (mm)	G1 (mm)	L (mm)	Number intermed. plates
538076	100	70	46	M10	M12	34	23	50	-
539214	100	70	46	M10	M12	31	23	50	2
539377*	100	70	46	M10	M12	33	23	50	1

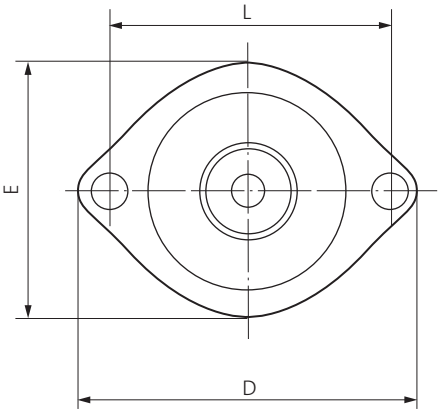
* This reference has 4 screws.

OPERATING CHARACTERISTICS

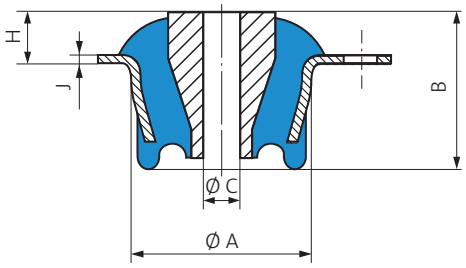
Reference	Hardness	Static load (daN)	Deflection (mm)
538076	45	300	5
539214	40	300	1
539377*	60	300	0,7

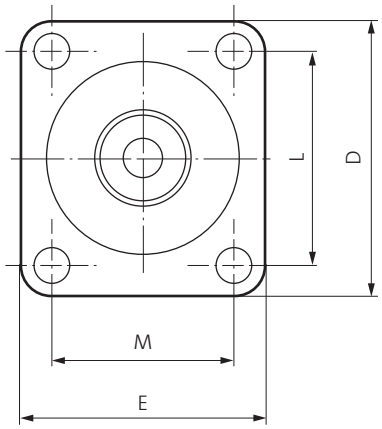
* This reference has 4 screws.





Reference 539004





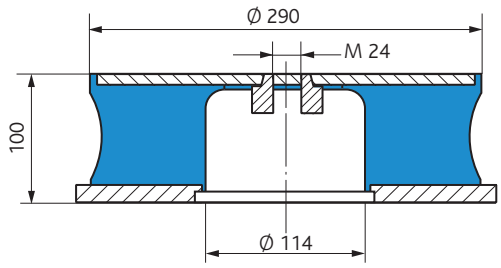
Reference 539743

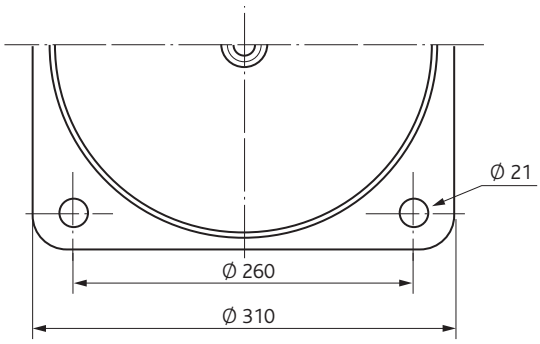
DIMENSIONS

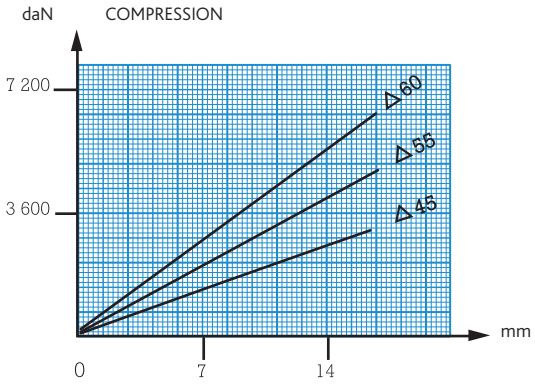
Reference	Ø A (mm)	B (mm)	Ø C (mm)	Ø C1 (mm)	D (mm)	E (mm)	H (mm)	J (mm)	L (mm)	M (mm)
539004	54	52	15,8	25,4	102	76	13,5	3	82,5	-
539743	74,6	71	16,25	-	105	92	33,5	3	82,5	69,5

OPERATING CHARACTERISTICS

Reference	Hardness	Axial stiffness	
		Load (daN)	Deflection (mm)
539004	50	150	2
	60	230	2
539743	45	200	4,5







Reference 539972
Also exists with anti-rebound stop - Reference 539971

STRUCTURAL DAMPING SYSTEMS

DESCRIPTION

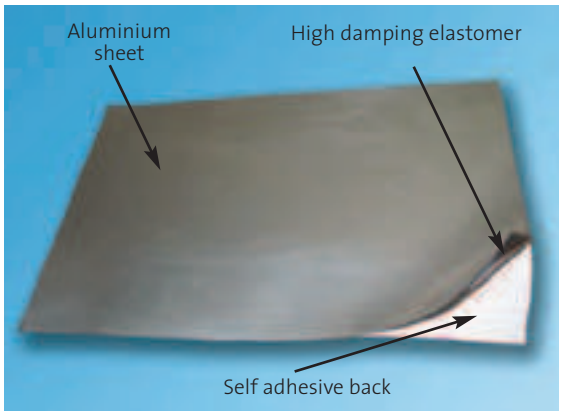
This damper is made of an high damping material bonded on an aluminium plate.
A self adhesive layer on the elastomer to ease the installation.
This product will reduce vibrations and noise. The damping is due to the shearing of the high damping layer.

APPLICATIONS

This damper is designed to face structure borne noise (engine compartments, cabs, bodyshells,….).
Its limited thickness ease it's installation in confined areas.

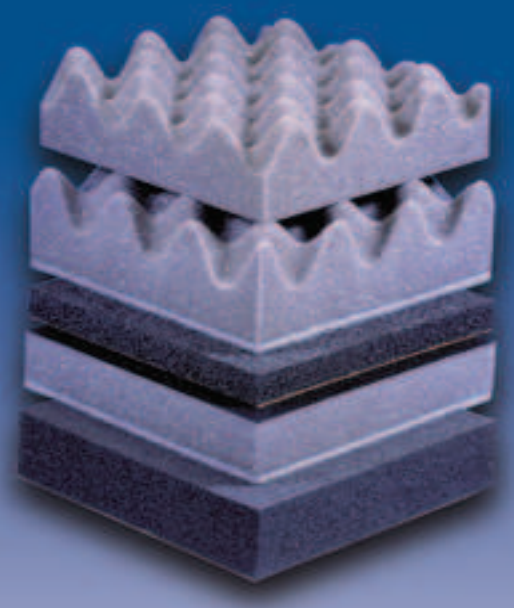
CHARACTERISTICS

- Part numbers : 820189 (500 x 500 mm), **820248 (300 x 200 mm).**
- Total thickness : 1.5 mm.
- Weight : 0.7 kg (820189) and 0.2 kg (820248) by sheet.
- Temperature range : - 30°C to + 80°C with maximal damping at ambient.



INSTALLATION

The surfaces must be clean and dry. An acetone type solvant or equivalent can be used for cleaning.
Cut the sheet to the appropriate size. Remove the adhesive protection and lay the sheet on the surface avoiding any air bubble.
In case of an installation on a curved surface, or with an edge, we recommend you to give the right shape to the sheet with the adhesive protection in place.
The constrained layer damping system will be fully operationnal 72 hours after installation.



STRASONIC ®
ACOUSTIC FOAM

DESCRIPTION

STRASONIC® is a range of complex materials designed to provide the best acoustic isolation. Their structure is based on polyurethane foams or cellular rubber.

Their main function is to reduce airborne noise (Isolation, Absorption and Damping) in partial or complete enclosures of machinery.

APPLICATIONS

The STRASONIC® material can be used in a range of applications such as : air conditioning, pumps, presses, compressors, electric motors, diesel engines, generator sets, gearboxes, turbines, agricultural or construction equipment and other machinery.

Due to their design, they are light, easy to handle and a self adhesive side simplifies the installation (depending on the type of foam).

Note : To glue the foams **841001** and **841002**, please contact your usual supplier of glues, or our distribution network.

POLYURETHANE FOAM

CORRUGATED, WITH SELF ADHESIVE LAYER

DESCRIPTION

50 mm of corrugated PU Ether absorption foam. **Self adhesive layer on one side**.
Temperature range : from - 25°C to + 110°C.
Fire resistance : M4.

APPLICATIONS

- Air conditioning,
- Fans,
- Ventilation shaft,
- Pumps,
- Presses,
- Air compressors, ...

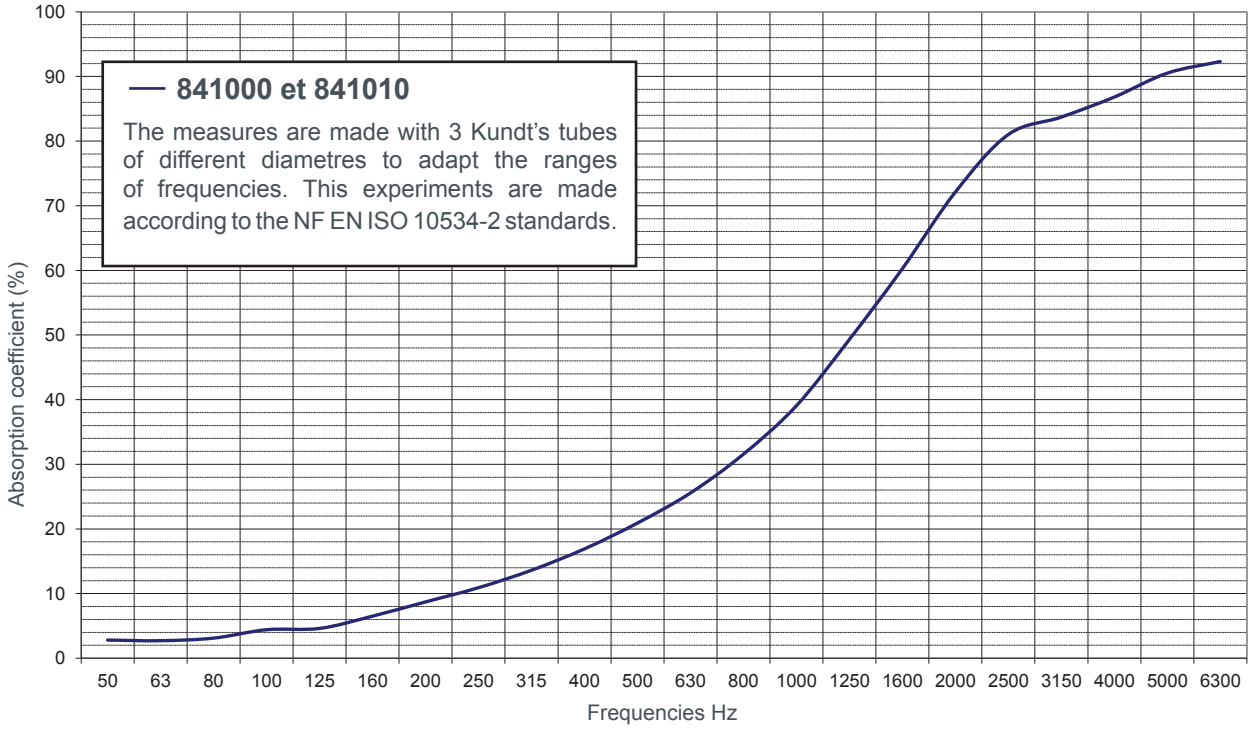
DIMENSIONS

Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight (kg)
841000	700	500	50	0,43
841010	2000	1400	50	3,44

Tolerance : ± 6 mm

ACOUSTIC PERFORMANCES

Average absorption factor K 65%.
Approximate gain on a 2 mm steel sheet : - 10 dB (A).
The corrugations increase the absor ption surface by 40%.



POLYURETHANE FOAM

CORRUGATED AND HEAVY WEIGHT

DESCRIPTION

50 mm of heavy weight 5 kg/m2, corrugated PU Ether absorption foam bonded to **3 mm** of spring foam.
Temperature range : from - 25°C to + 110°C.
Fire resistance : M4.

APPLICATIONS

- Air compressors,
- Compressors,
- Gearboxes,
- Electric motors, ...
- Presses,

DIMENSIONS

Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight (kg)
841001	700	500	50	2,13
841001-50*	700	500	50	2,05

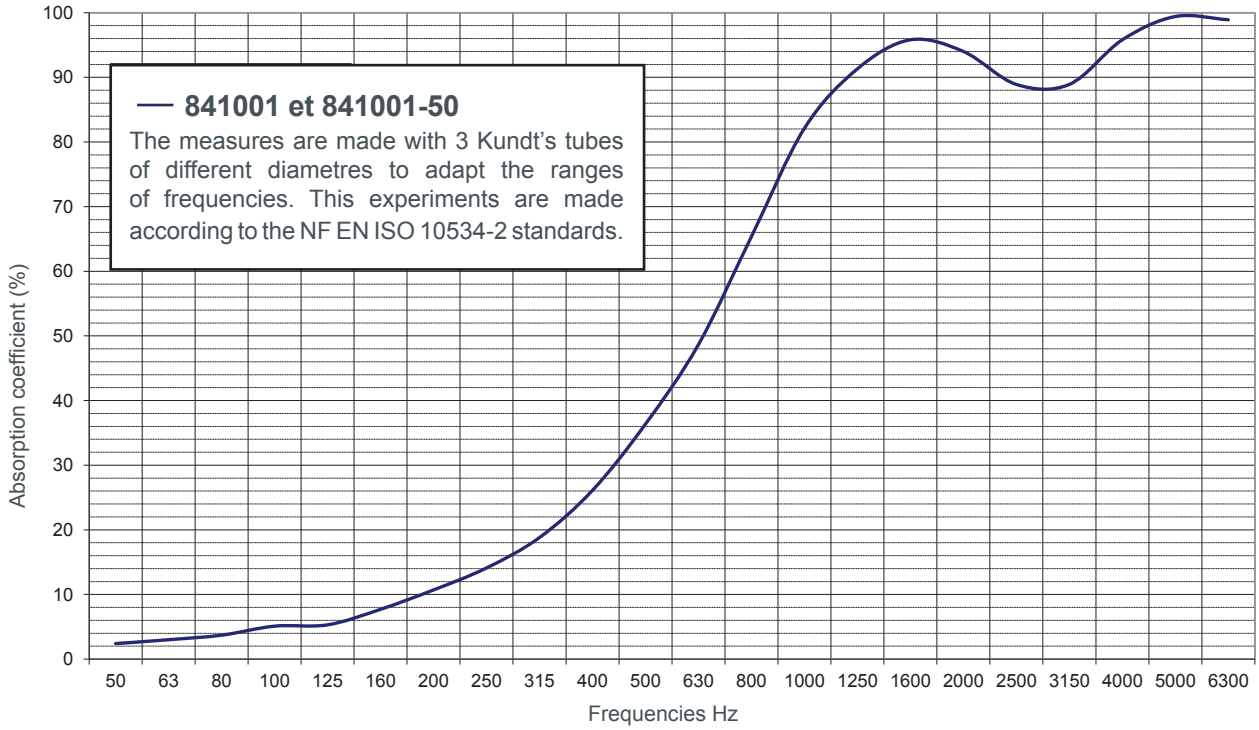
*Self adhesive layer on one side.

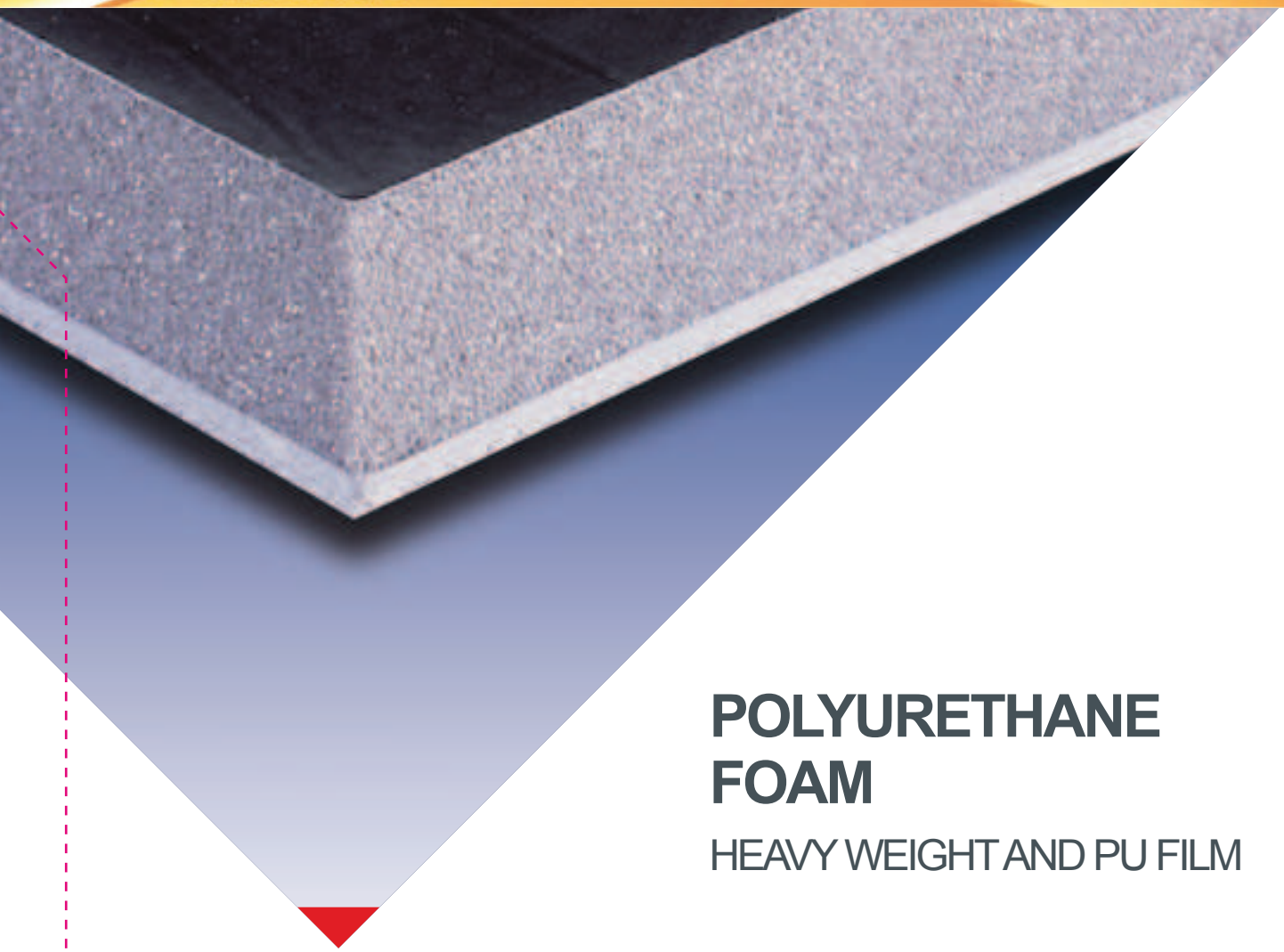
Tolerance : ± 6 mm

Note : In order to glue **841001**, we advise you to use a neoprene based adhesive.

ACOUSTIC PERFORMANCES

Average absorption factor K 68%.
Approximate gain on a 2 mm steel sheet : - 25 dB (A).
Very good performance from 500 Hz to 5000 Hz.





POLYURETHANE FOAM

HEAVY WEIGHT AND PU FILM

DESCRIPTION

100% waterproof black PU film bonded to 25 mm of heavy weight 5 kg/m2 corrugated PU Ether absorption foam bonded to **3 mm** of spring foam.
Temperature range : from - 25°C to + 110°C.
Fire resistance : M4.

APPLICATIONS

- Generator sets,
- Agricultural and Construction, equipment machines,
- Electric and Diesel engines,
- Compressors, Pumps,
- Turbines,
- Test benches, ...

DIMENSIONS

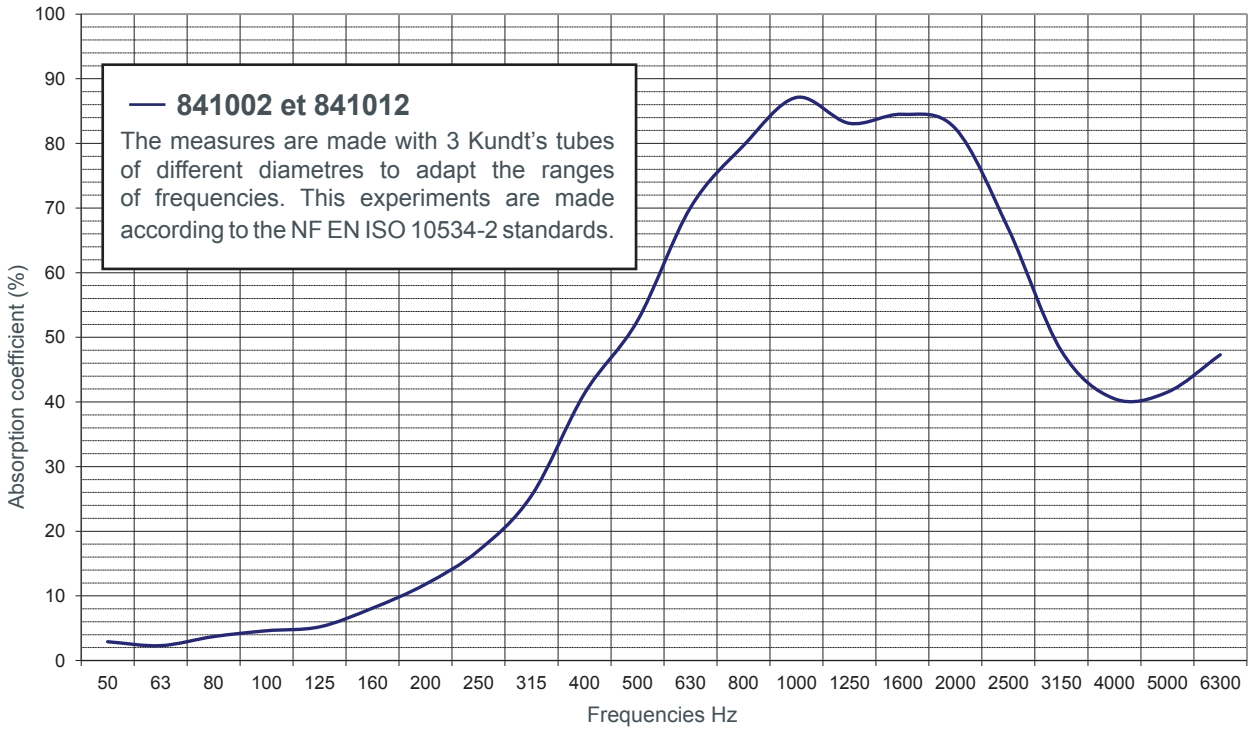
Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight(kg)
841002	700	500	25	1,99
841012	2000	1400	25	3,4

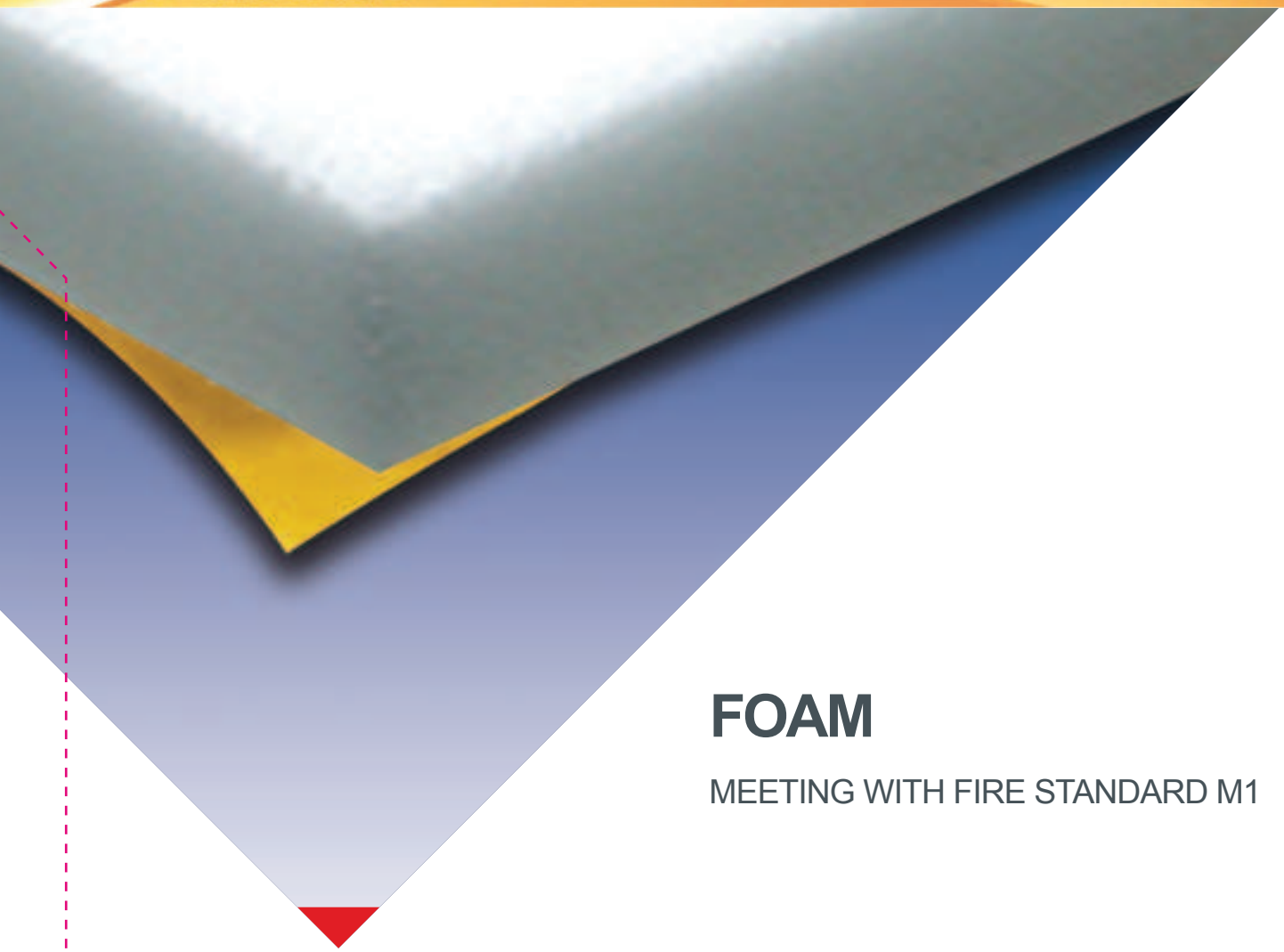
Tolérance : ± 6 mm

Note : Pour coller les mousses **841002** et **841012**, nous vous conseillons d'utiliser une colle à base néoprène.

ACOUSTIC PERFORMANCES

Approximate gain on a 2 mm steel sheet : - 20 dB (A).
Very good performance from 125 Hz to 4000 Hz.





FOAM

MEETING WITH FIRE STANDARD M1

DESCRIPTION

Melamine Resin based soundproofiing foam, thickness 30 mm, self adhesive layer on one side.
Temperature range : up to +150°C.
Fire resistance : M1/UL94 - B1/DIN 4102.
Classiefied 0/BS476 6/7.

APPLICATIONS

- Acoustic and thermal isolation,

Building applications :
- Air conditioning,
- Fans,
- Ventilation shaft,
- Recording studios, ...

Industrial applications :
- Air compressors, Air exhausts,
- Vacuum pump,
- Injection presses,
- Gearboxes,...

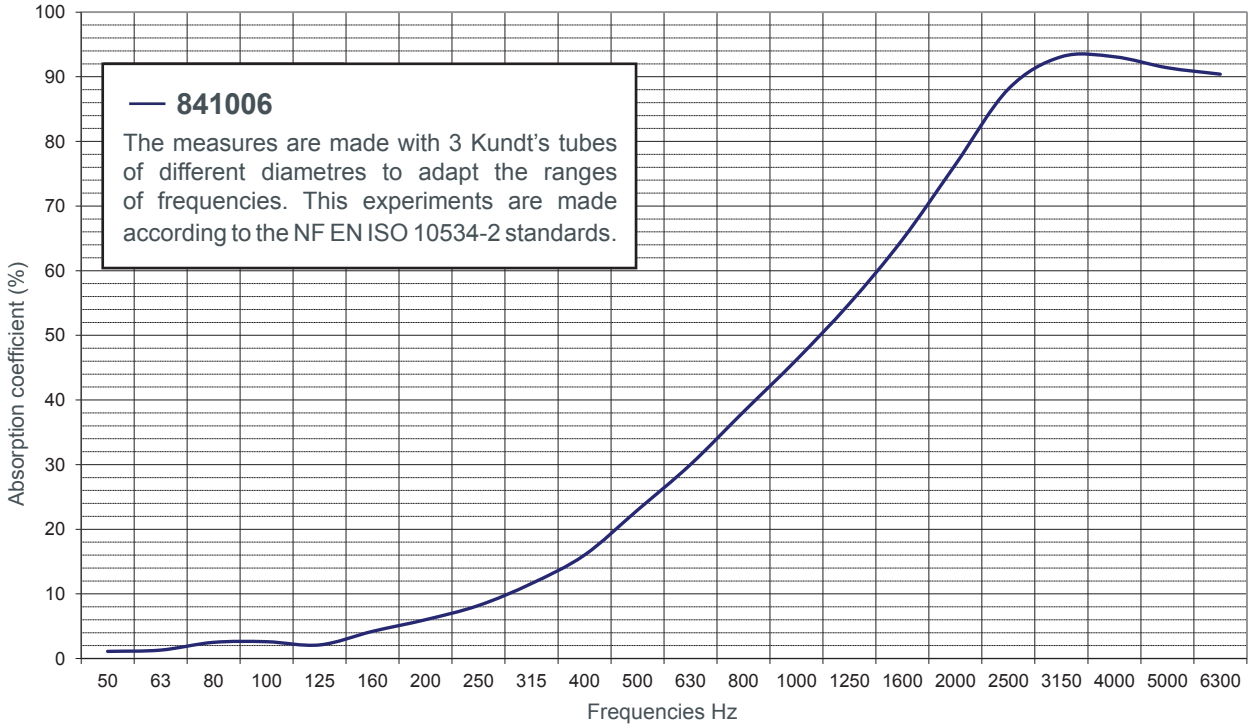
DIMENSIONS

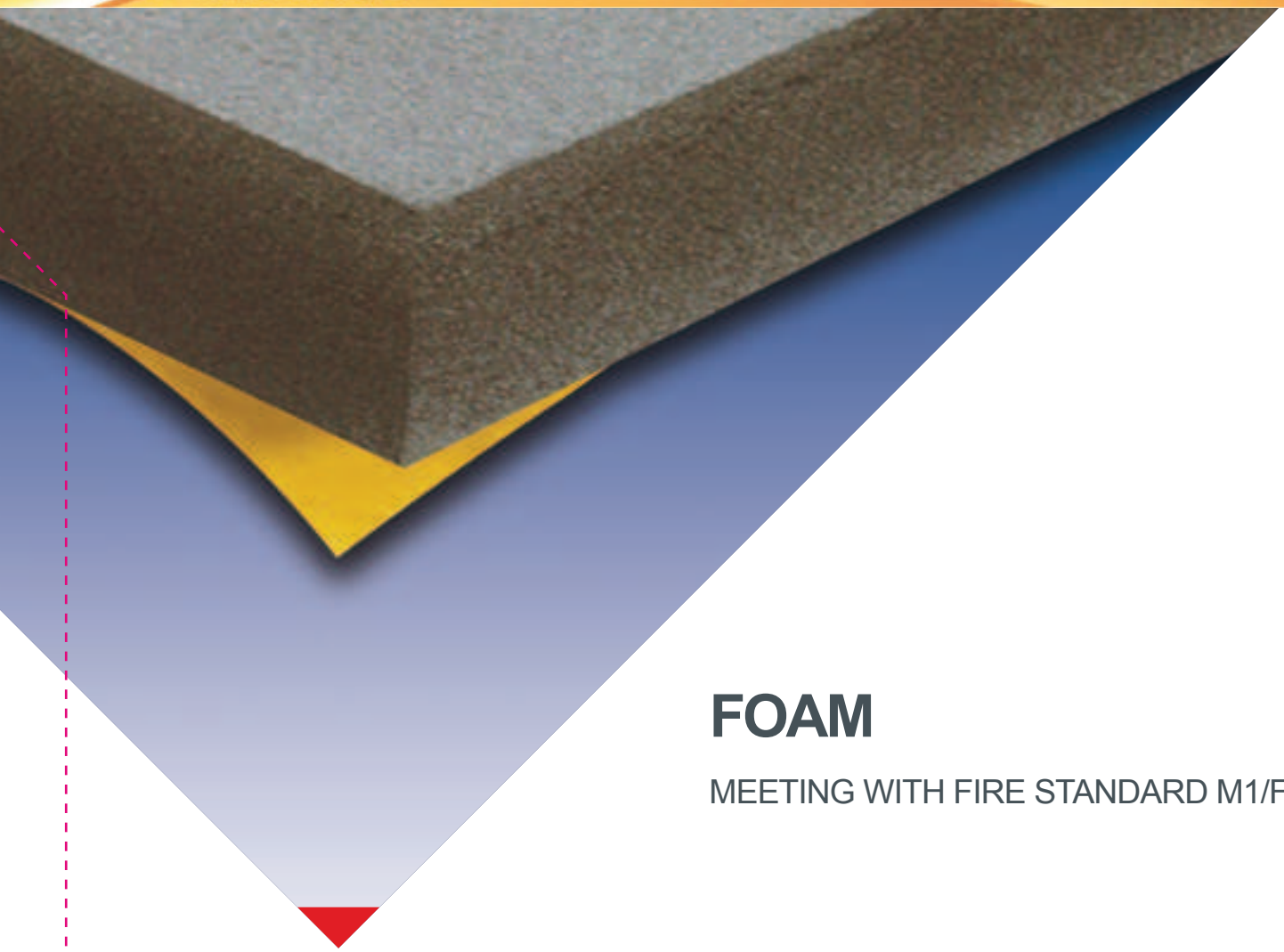
Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight (kg)
841006	500	500	30	0,14

Tolerance : + 5 to -20 mm

ACOUSTIC PERFORMANCES

Average absorption factor K : 85% at 2000 Hz.
Very good acoustic performance in high frequencies above 1250 Hz.





FOAM

MEETING WITH FIRE STANDARD M1/F3

DESCRIPTION

NBR-PVC **based waterproof cellular rubber thickness 30 mm (± 3 mm) self adhesive layer on one side.**
Temperature range : - 40 °Cup to + 90 °C continuous.
Very good resistance to oil. Good fire properties with very few smock released.
Self extinguishible
Rated : **M1/F3** (NFP 92507).

APPLICATIONS

- Acoustic and thermal isolation,

Building applications :
- Air conditioning,
- Fans,
- Ventilation shaft,
- Recording studios, ...

Industrial applications :
- Air compressors, Air exhausts,
- Vacuum pump,
- Injection presses,
- Gearboxes,...

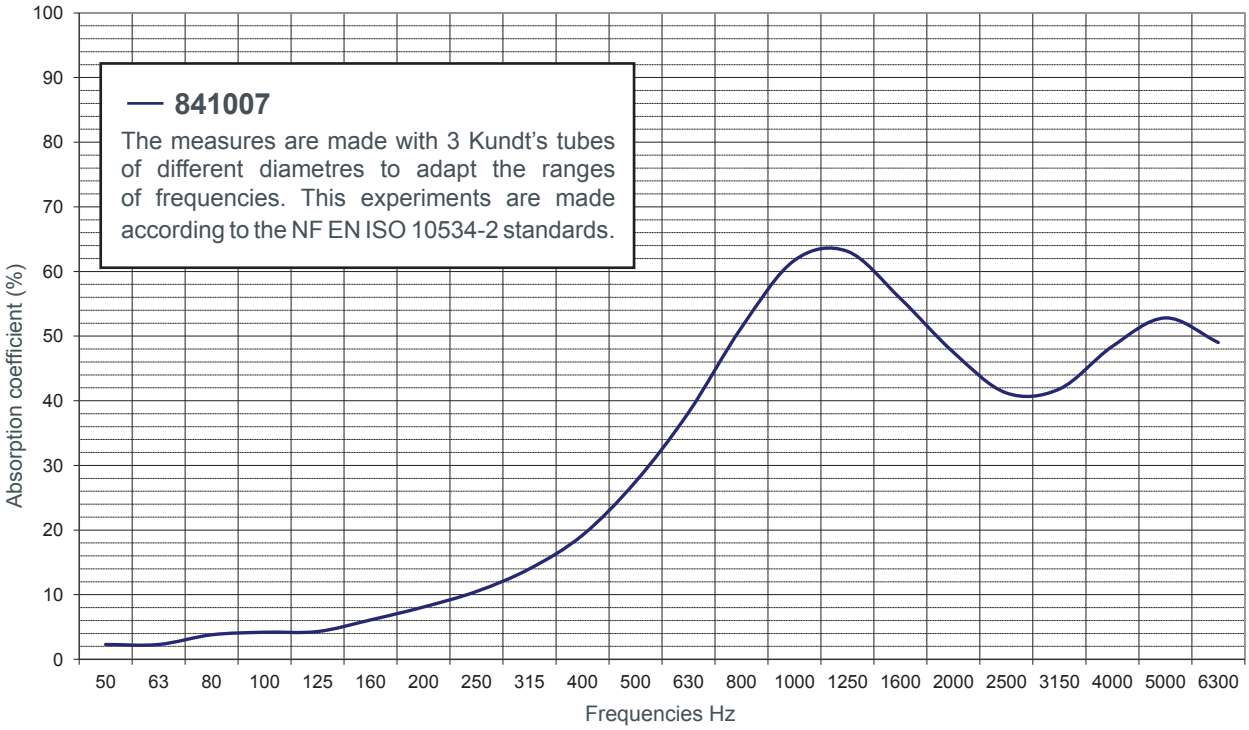
DIMENSIONS

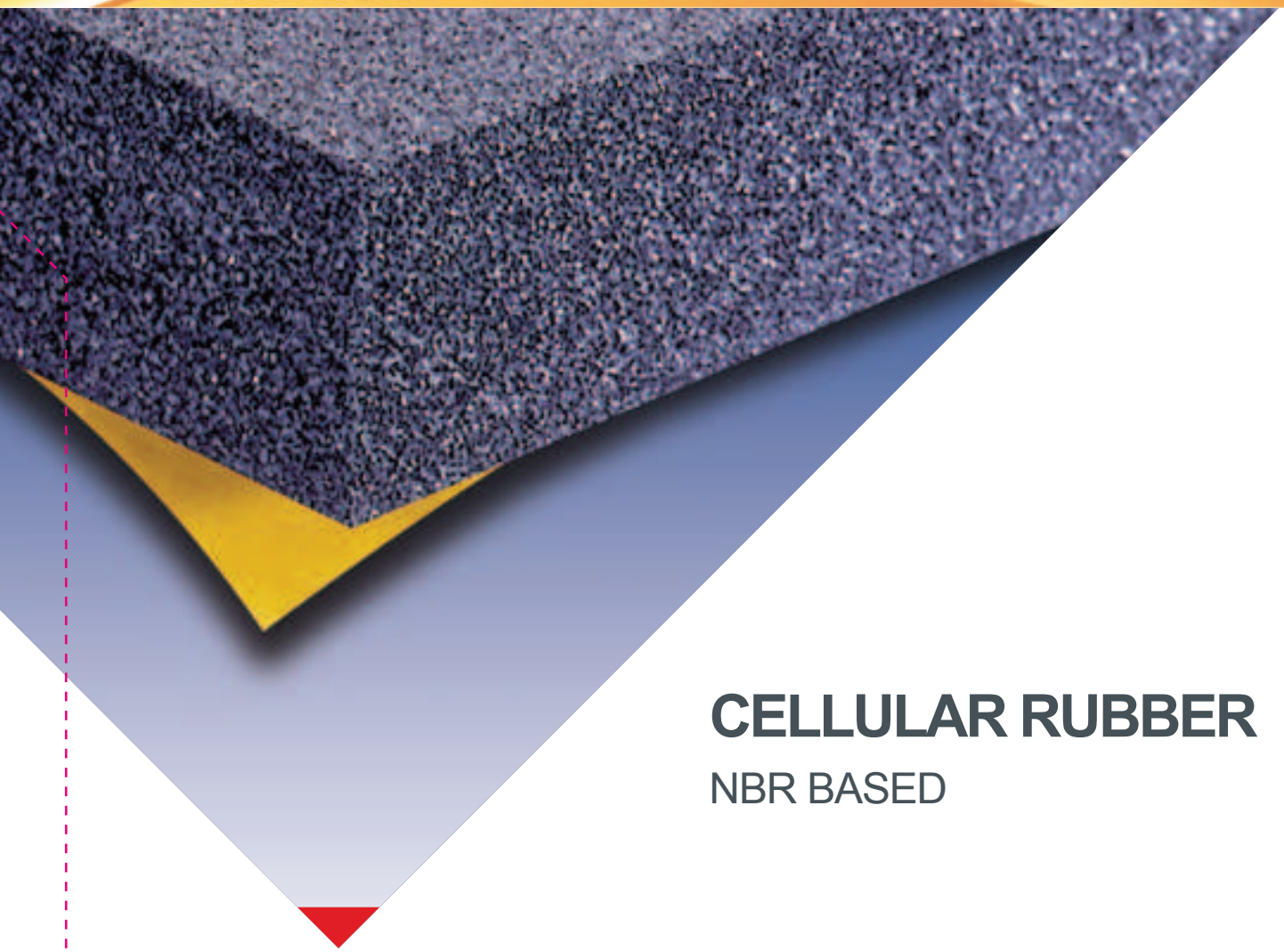
Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight (kg)
841007	500	500	30	0,46

Tolerance : + 5 to -20 mm

ACOUSTIC PERFOMANCES

Average absorption factor K : ≥ 20 % from 600 Hz (increase with frequency).
Very good acoustic performance in high frequencies above 2000 Hz.
Approx. gain on a 2 mm steel sheet : - 10 dB (A) at 2500 Hz / - 20 dB (A) at 5000 Hz.





CELLULAR RUBBER

NBR BASED

DESCRIPTION

NBR based waterproof cellular rubber, thickness **33 mm**. **Self adhesive layer on one side.**
Temperature range static from - 40°C to +105°C continuous.
Very good resistance to oil, ozone, air and UV.
Fire resistance : M4/FMVSS 302.

APPLICATIONS

- Sand blasting systems, Saws,
- High speed drills,
- Vacuum pumps,
- Injection presses,
- Gearboxes...

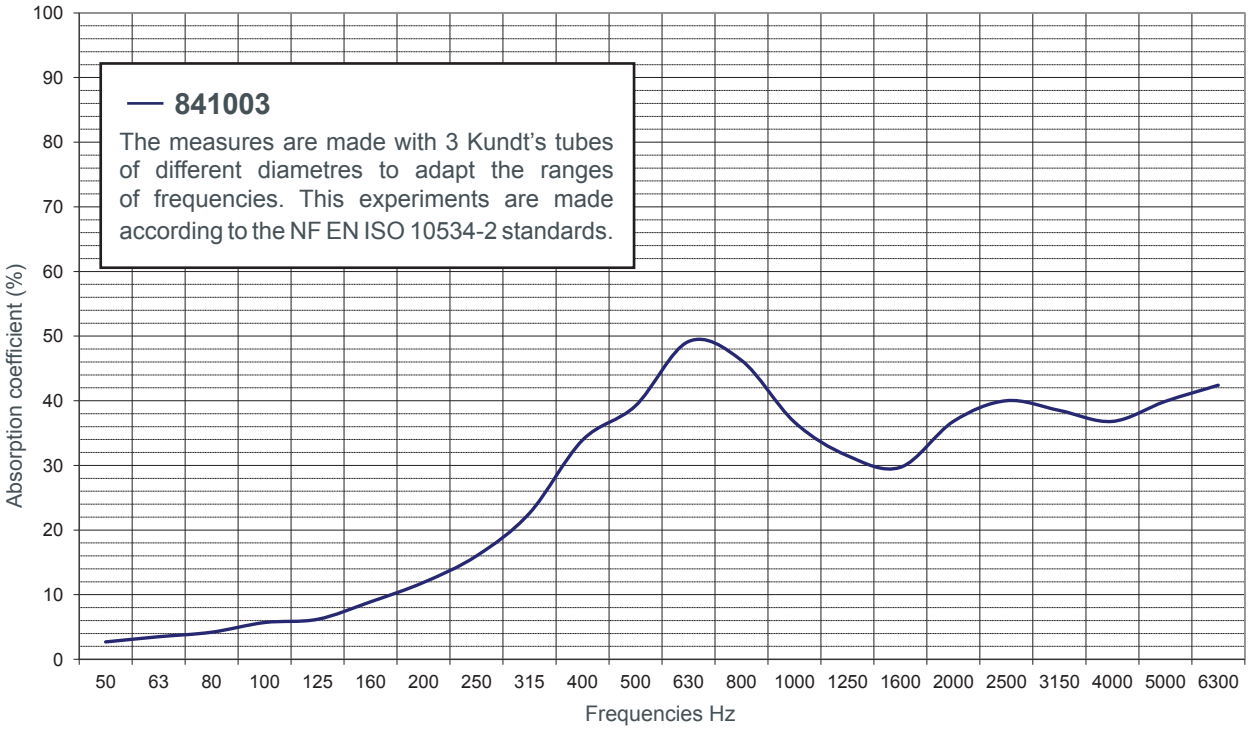
CARACTÉRISTIQUES DIMENSIONNELLES

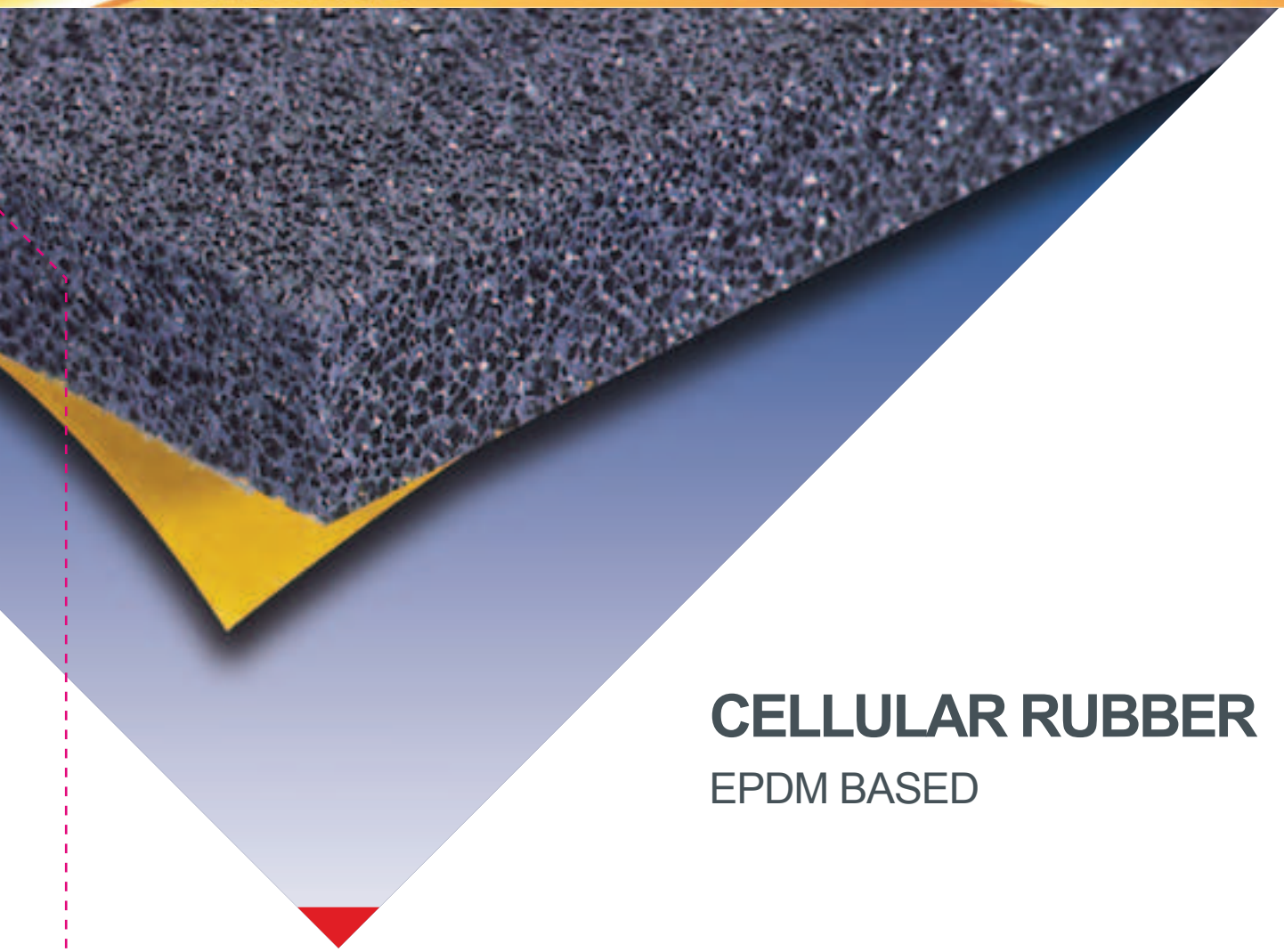
Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight (kg)
841003	500	500	33	0,53

Tolerance : + 0 to -30 mm

ACOUSTIC PERFORMANCES

Average absorption factor K ≥ 30% from 500 Hz.
Very good acoustic performance in high frequencies above 2500 Hz.
Approximate gain on a 2 mm steel sheet : - 10 dB (A) at 2500 Hz / - 20 dB (A) at 5000 Hz.





CELLULAR RUBBER

EPDM BASED

DESCRIPTION

EPDM based cellular rubber with half closed cells.
Thickness **15 mm.**
Self adhesive layer on one side.
Temperature range continuous from - 40°C to + 130°C.
Very good resistance to air, ozone and UV.
Very flexible. Good ageing resistance.
Waterproof if slightly compressed.
Fire resistance : FMVSS 302.

APPLICATIONS

- Air jet positioning,
- Sound blasting systems, Saws,
- High speed drills,
- Vacuum pumps,
- Injection presses,
- Gearboxes...

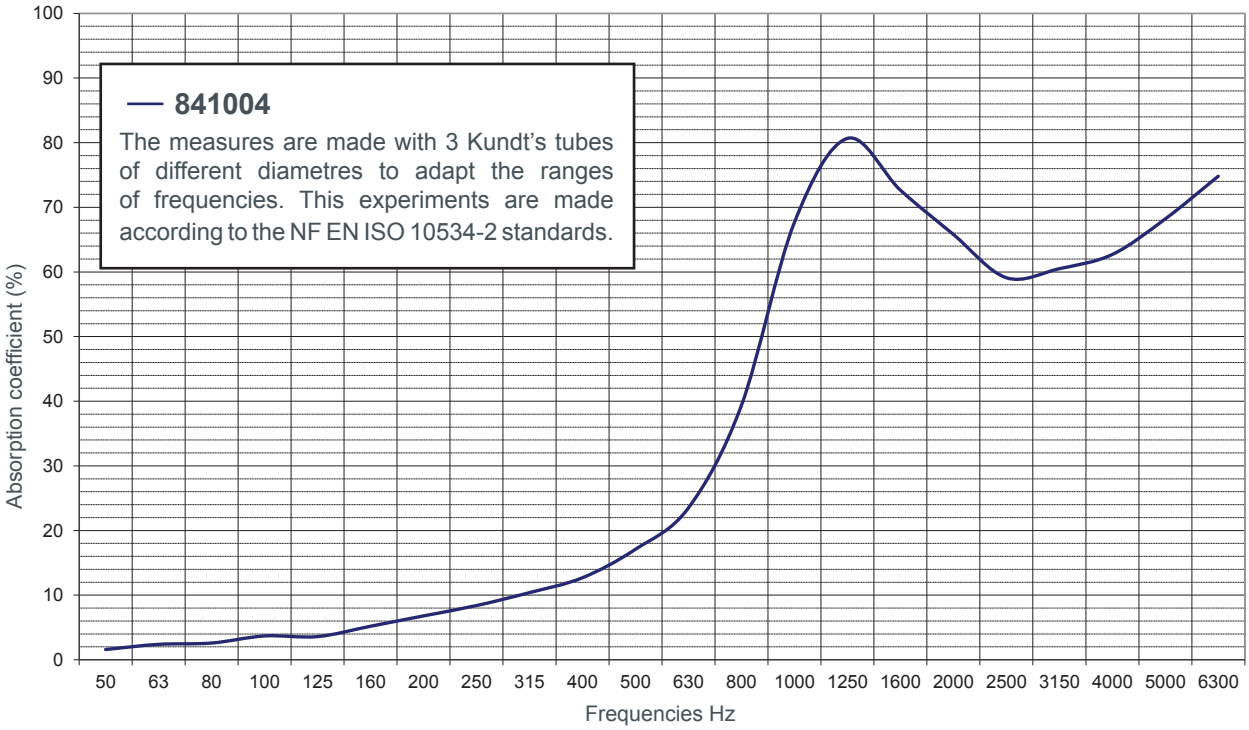
CARACTÉRISTIQUES DIMENSIONNELLES

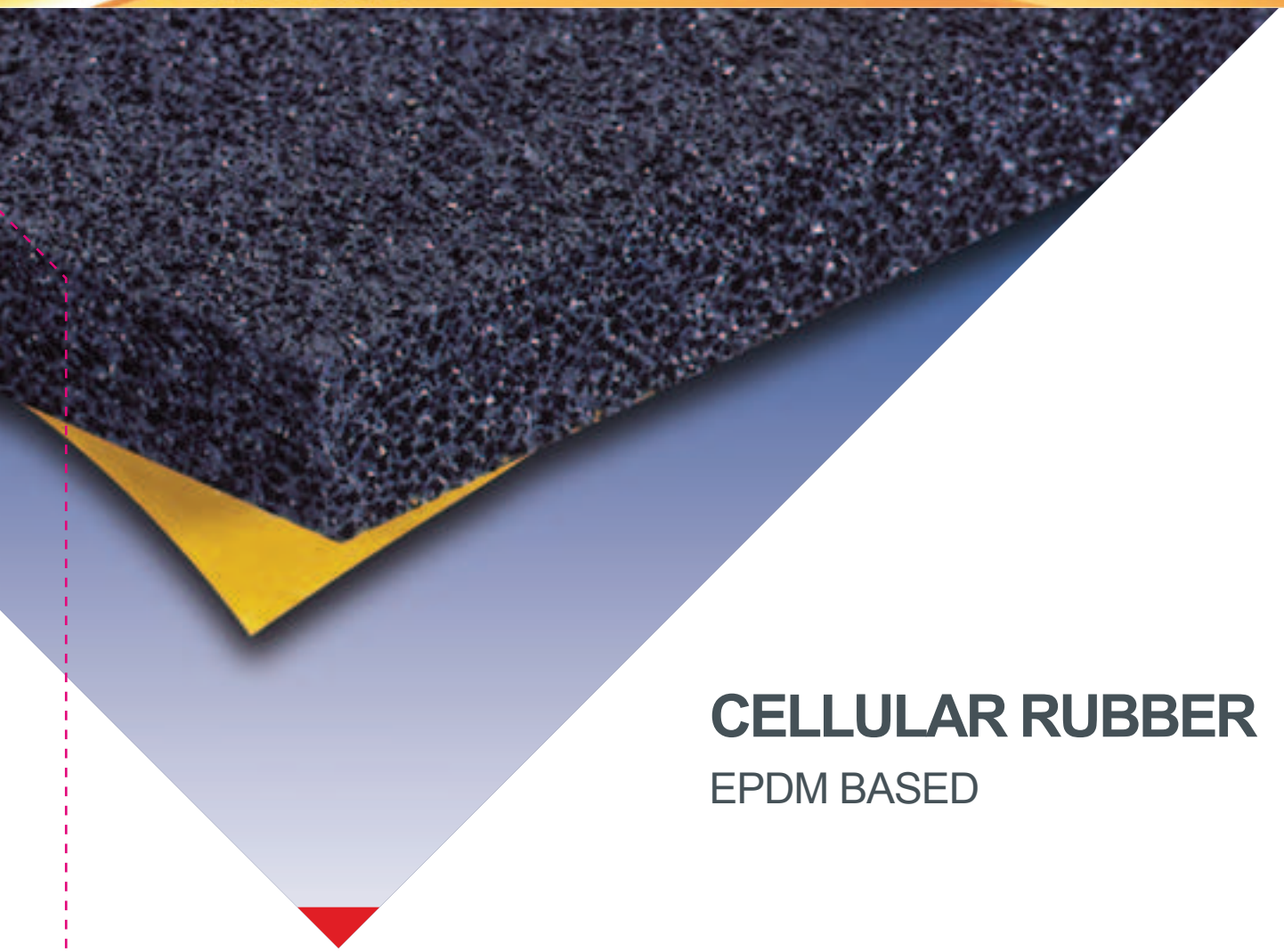
Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight (kg)
841004	500	500	15	0,51

Tolerance : + 0 to -30 mm

ACOUSTIC PERFORMANCES

Average absorption factor K ≥ 30% from 600 Hz.
Very good acoustic performance in high frequencies above 2000 Hz.
Approximate gain on a 2 mm steel sheet: - 8 dB (A) at 2500 Hz / - 20 dB (A) at 5000 Hz.





CELLULAR RUBBER

EPDM BASED

DESCRIPTION

EPDM based cellular rubber half closed cells.
Thickness **22.5 mm. Self adhesive layer on one side.**
Temperature range continuous from - 40°C to + 130°C.
Very good resistance to air, ozone and UV.
Very flexible. Good ageing resis-tance.
Waterproof if slightly compressed.
Fire resistance : FMVSS 302.

APPLICATIONS

- Air jet positioning,
- Sound blasting systems, Saws,
- High speed drills,
- Vacuum pumps,
- Injection presses,
- Gearboxes...

CARACTÉRISTIQUES DIMENSIONNELLES

Reference	Lenght (mm)	Width (mm)	Thickness (mm)	Weight (kg)
841005	500	500	22,5	0,94

Tolerance : + 0 to -30 mm

ACOUSTIC PERFORMANCES

Average absorption factor K ≥ 30% from 500 Hz.
Very good acoustic performance in high frequencies above 2000 Hz.
Approximate gain on a 2 mm steel sheet : - 10 dB (A) at 2500 Hz/ - 27 dB (A) at 5000 Hz.