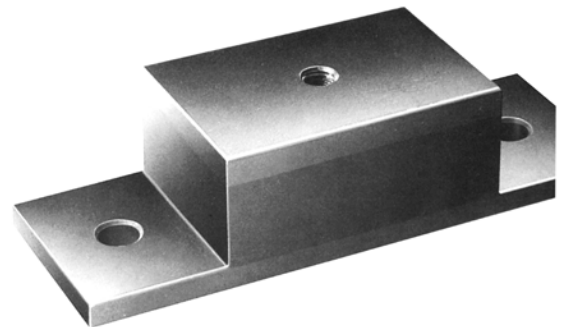


## Elasto® Rubber-Metal Blocks

for Vibration Isolation and Structure Borne Noise Reduction



- Load capacity up to 160 kN
- Vertical natural frequency 7.1 Hz (minimum)

### ■ Mode of Function

The transmission of intermittent or periodic impact force is considerably reduced by the vibration isolation bedding of machines and plants on G+H bearing elements.

### ■ Advantages

- Elasto®-Rubber-Metal Blocks are made of natural rubber with vulcanised metal plates. Natural rubber has better elastic properties compared to synthetic materials.
- Elasto®-Rubber-Metal Blocks have a relatively high material damping. This serves to reduce the vibration amplitude of the elastically-supported system when passing through the resonant frequency and also to shorten the decay time of the oscillation, in case of sudden impacts.
- The various types allow good mounting possibilities for nearly every application.

### ■ Temperature Range

-20° C to +70° C

### ■ Installation conditions

Elasto®-Rubber-Metal Blocks are constructed exclusively for compressive or shear loads. Tensile loads are not allowed.

During installation care must be taken to allow for lateral expansion of the mounts, as the rubber volume is constant.

ELASTO®-elements must be protected against oil, grease, and fuel. An occasional and slight moistening with oil however has no adverse affect on their function or lifetime.

### ■ Dimensions, Weights

Type	B [mm]	Height unloaded H <sub>A</sub> [mm]	s [mm]	d [mm]	g	Weight (Model 0) [kg/m]
<b>502</b>	50	40	10	14	M 12	9,0
<b>703</b>	70	50	10	14	M 12	13,4
<b>705</b>	70	70	10	14	M 12	15,0
<b>103</b>	100	60	15	18	M 16	27,0
<b>155</b>	150	80	15	18	M 16	43,9

### ■ Construction and types

Elasto®-Rubber-Metal Blocks are made of natural rubber and have vulcanised metal parts, corrosion protected with black lacquer.

ELASTO®-elements are supplied in two shore-hardness, according to DIN 53505:

rubber-hardness a: 43 ± 5 Shore A

rubber-hardness f: 57 ± 5 Shore A

These tolerances of the rubber-hardness can result in a possible ± 20 % deviation of the spring rate

### ■ Special types

Elasto®-Rubber-Metal Blocks can also be supplied in other rubber-hardness, dimensions, or synthetic rubbers. When requested, ELASTO®-elements can be protected against oil with a special lacquer.

### ■ Accessories

- **Adhesive sheet at bottom – Gu,**  
**Adhesive sheet on top – Go:**  
For mounting, fixing and levelling uneven surfaces on erection site. Due to their good adhesive features, the adhesive and the structure-borne noise damping sheets are in most cases suitable for the mounting (not using any screws). Thickness: 2 mm
- **Protective coating of paint – A:** For protection against oil and for outer using with protection against UV-radiation and ozone
- **Gemak®-Glue:** To glue Elasto®-Rubber-Metal Blocks with adhesive or structure-borne damping sheet with surfaces

	Dynamic factor k <sub>d</sub>	Damping Ratio D
rubber-hardness a (43 Shore(A))	1,2	0,02 - 0,03
rubber-hardness f (57 Shore(A))	1,6	0,03 - 0,06



■ Technical Data

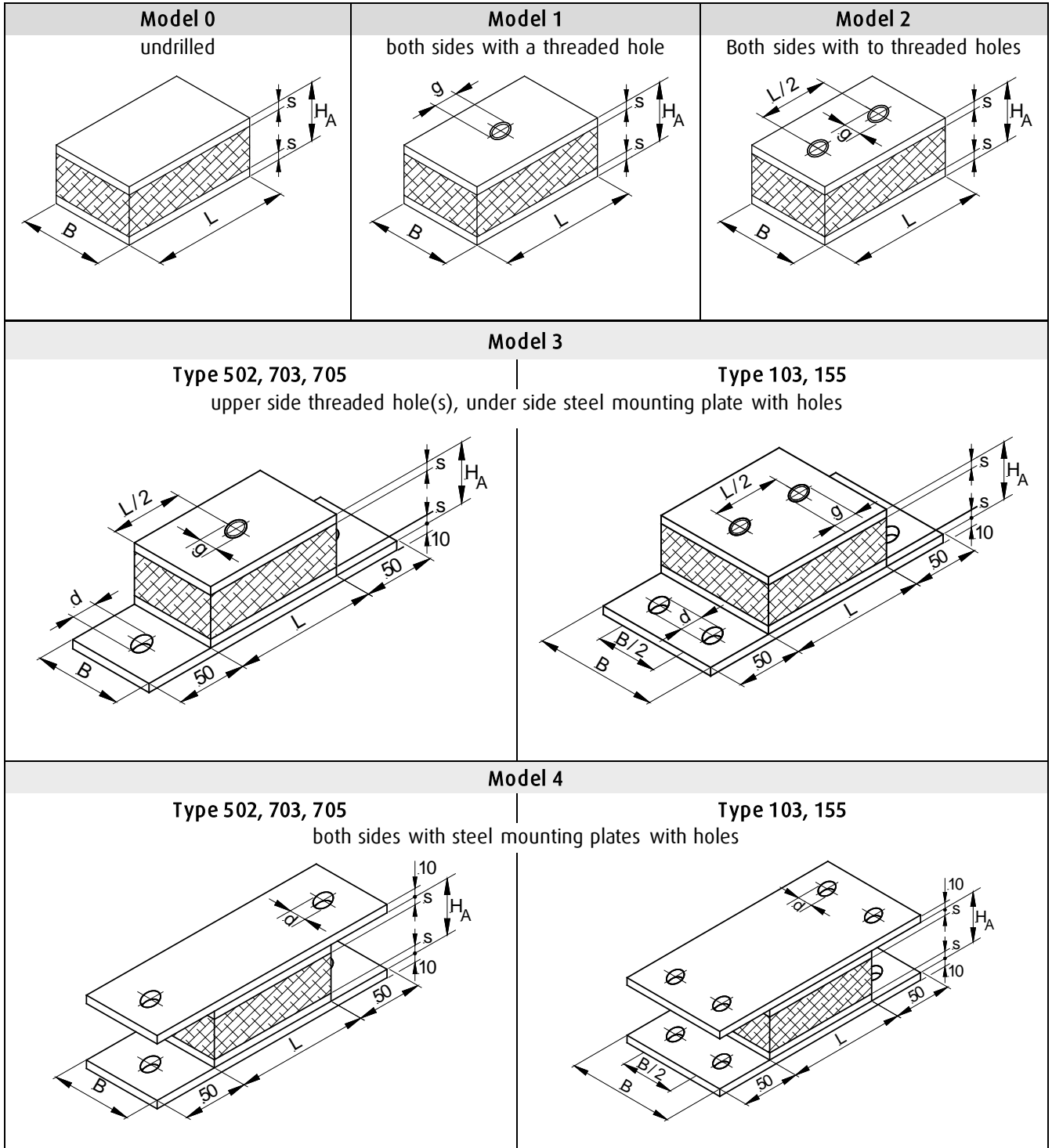
Rubber-hardness a (43 Shore A)						
Type	Load Capacity		Spring Constant		Natural Frequency vertical <sup>1</sup>	
	vertical	horizontal	vertical	horizontal	n <sub>0</sub>	f <sub>0</sub>
GSS	F <sub>vzul</sub> [kN]	F <sub>hzul</sub> [kN]	C <sub>v</sub> [N/mm]	C <sub>h</sub> [N/mm]	[1/min]	[Hz]
502a-10	2,5	0,6	1090	140	684	11,4
502a-15	4,3	0,9	1810	210	672	11,2
502a-20	6,1	1,2	2570	290	673	11,2
502a-30	9,9	1,8	4140	430	670	11,2
502a-40	13,7	2,5	5730	570	670	11,2
502a-50	17,6	3,1	7340	710	669	11,2
502a-60	21,4	3,7	8960	860	670	11,2
502a-70	25,3	4,3	10580	1000	670	11,2
502a-80	29,2	5,0	12200	1140	670	11,2
502a-90	33,1	5,6	13820	1280	669	11,2
502a-100	37,0	6,2	15450	1430	670	11,2
703a-10	3,1	0,8	870	130	549	9,1
703a-15	5,2	1,3	1460	200	549	9,1
703a-20	7,5	1,7	2090	270	547	9,1
703a-30	12,2	2,6	3410	400	548	9,1
703a-40	17,1	3,5	4770	530	547	9,1
703a-50	22,0	4,3	6140	670	547	9,1
703a-60	27,0	5,2	7520	800	547	9,1
703a-70	32,0	6,1	8910	930	547	9,1
703a-80	37,0	7,0	10310	1070	547	9,1
703a-90	42,1	7,9	11710	1200	546	9,1
703a-100	47,1	8,7	13110	1330	547	9,1
705a-10	2,2	0,8	380	80	431	7,2
705a-15	3,6	1,3	620	120	430	7,2
705a-20	5,1	1,7	860	160	425	7,1
705a-30	8,1	2,6	1360	240	425	7,1
705a-40	11,2	3,5	1880	320	424	7,1
705a-50	14,3	4,3	2390	400	424	7,1
705a-60	17,4	5,2	2910	480	424	7,1
705a-70	20,5	6,1	3430	560	424	7,1
705a-80	23,6	7,0	3950	640	424	7,1
705a-90	26,8	7,9	4470	720	423	7,1
705a-100	29,9	8,7	5000	800	424	7,1
103a-10	5,1	1,2	1450	190	552	9,2
103a-15	9,2	1,8	2570	290	548	9,1
103a-20	13,7	2,5	3820	380	547	9,1
103a-30	23,0	3,7	6530	570	552	9,2
103a-40	32,0	5,0	9390	760	561	9,4
103a-50	40,5	6,2	12330	950	572	9,5
103a-60	49,0	7,5	15310	1140	579	9,7
103a-70	58,0	8,7	18330	1330	582	9,7
103a-80	66,5	10,0	21360	1520	587	9,8
103a-90	75,5	11,3	24410	1710	589	9,8
103a-100	84,0	12,5	27470	1900	592	9,9
155a-10	6,0	1,8	1010	170	425	7,1
155a-15	10,6	2,8	1790	260	426	7,1
155a-20	15,9	3,7	2670	340	425	7,1
155a-30	27,7	5,6	4630	510	424	7,1
155a-40	40,4	7,5	6750	680	424	7,1
155a-50	53,7	9,4	8960	860	423	7,1
155a-60	67,3	11,3	11230	1030	423	7,1
155a-70	81,1	13,1	13530	1200	423	7,1
155a-80	94,0	15,0	15860	1370	426	7,1
155a-90	105,0	16,9	18220	1540	432	7,2
155a-100	118,0	18,8	20580	1710	433	7,2

Length [mm]
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1000

Rubber-hardness f (57 Shore A)						
Type	Load Capacity		Spring Constant		Natural Frequency vertical <sup>1</sup>	
	vertical	horizontal	vertical	horizontal	n <sub>0</sub>	f <sub>0</sub>
GSS	F <sub>vzul</sub> [kN]	F <sub>hzul</sub> [kN]	C <sub>v</sub> [N/mm]	C <sub>h</sub> [N/mm]	[1/min]	[Hz]
502f-10	4,2	1,1	2190	260	864	14,4
502f-15	6,7	1,7	3660	400	884	14,7
502f-20	9,3	2,3	5200	530	895	14,9
502f-30	14,4	3,4	8370	790	912	15,2
502f-40	19,5	4,6	11590	1060	922	15,4
502f-50	24,7	5,8	14840	1320	927	15,5
502f-60	30,0	6,9	18110	1590	930	15,5
502f-70	35,0	8,1	21390	1850	935	15,6
502f-80	40,5	9,3	24670	2110	934	15,6
502f-90	45,5	10,4	27950	2380	938	15,6
502f-100	50,5	11,6	31240	2640	941	15,7
703f-10	5,4	1,6	1750	250	681	11,4
703f-15	8,7	2,4	2950	370	697	11,6
703f-20	12,0	3,2	4220	490	709	11,8
703f-30	19,0	4,8	6890	740	720	12,0
703f-40	25,7	6,5	9630	990	732	12,2
703f-50	33,0	8,1	12410	1230	734	12,2
703f-60	40,0	9,7	15210	1480	738	12,3
703f-70	46,5	11,3	18020	1730	745	12,4
703f-80	54,0	13,0	20850	1970	743	12,4
703f-90	60,5	14,6	23670	2220	748	12,5
703f-100	68,0	16,2	26500	2470	747	12,4
705f-10	4,5	1,6	770	150	495	8,2
705f-15	7,1	2,4	1250	220	502	8,4
705f-20	9,8	3,2	1740	300	504	8,4
705f-30	15,2	4,8	2750	440	509	8,5
705f-40	20,8	6,5	3790	590	511	8,5
705f-50	26,2	8,1	4830	740	514	8,6
705f-60	31,7	9,7	5880	890	515	8,6
705f-70	37,3	11,3	6930	1040	516	8,6
705f-80	42,5	13,0	7990	1180	519	8,6
705f-90	47,8	14,6	9040	1330	520	8,7
705f-100	53,0	16,2	10100	1480	522	8,7
103f-10	8,5	2,3	2920	350	701	11,7
103f-15	14,0	3,4	5200	530	729	12,2
103f-20	19,5	4,6	7730	700	753	12,6
103f-30	31,3	6,9	13210	1060	777	13,0
103f-40	43,0	9,3	18990	1410	795	13,3
103f-50	55,5	11,6	24930	1760	802	13,4
103f-60	67,0	13,9	30960	2110	813	13,6
103f-70	79,5	16,2	37060	2470	817	13,6
103f-80	92,0	18,6	43190	2820	820	13,7
103f-90	104,0	20,9	49360	3170	824	13,7
103f-100	116,0	23,2	55540	3520	828	13,8
155f-10	11,1	3,4	2040	320	513	8,5
155f-15	18,2	5,2	3610	480	533	8,9
155f-20	25,8	6,9	5390	630	547	9,1
155f-30	42,0	10,4	9360	950	565	9,4
155f-40	58,0	13,9	13640	1270	580	9,7
155f-50	75,0	17,4	18110	1590	588	9,8
155f-60	92,0	20,9	22700	1900	594	9,9
155f-70	108,0	24,4	27360	2220	602	10,0
155f-80	126,0	27,9	32080	2540	604	10,1
155f-90	143,0	31,3	36840	2850	607	10,1
155f-100	160,0	34,8	41620	3170	610	10,2

<sup>1</sup> at maximum load capacity

■ Model and Dimensions



Position, quantity, bores and screw threads according to customers demand.

The data given in this product information are based on our present state of knowledge, reflect the state-of-the-art technology and are subject to change. Warranty is granted only on the basis of individual contracts and execution by G+H Schallschutz.