

Elasto[®]-Circular Rubber-Metal Elements

for Vibration Isolation and Structure-Borne Noise Reduction

Load capacity up to 15 kN
 Vertical natural frequency 6.2 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[®]-Circular Rubber-Metal Elements are made of natural rubber with vulcanised metal plates. Natural rubber has better elastic properties compared to synthetic materials.
- Elasto[®]-Circular Rubber-Metal Elements 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.

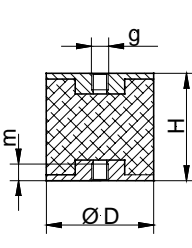
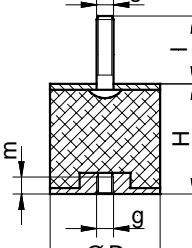
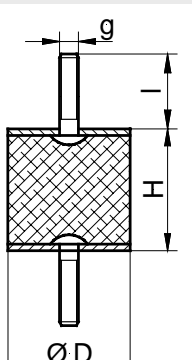
Installation conditions

Elasto[®]-Circular Rubber-Metal elements 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, Weight

Model GFII		Model GFIS																																																																																												
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Temperature range

- 20 °C to + 70 °C

Construction and types

Elasto[®]-Circular Rubber-Metal Elements are made of natural rubber and have vulcanised metal parts, corrosion protected (galvanised and yellow chromate, lacquered for diameter D > 100 mm).

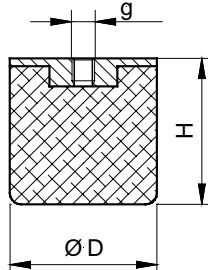
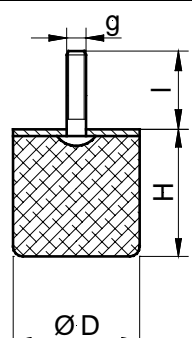
ELASTO[®]-elements are supplied in two shore-hardness, according to DIN 53 505:

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.

Accessories

- Protective coating of paint –A:**
 For protection against oil and for outer using with protection against UV-radiation and ozone.

Model GPI						Model GPS							
	Type	Ø D	H	m	g	Weight		Type	Ø D	H	l	g	Weight
	3017	30	17	8	M 8	0.02		3017	30	17	20	M 8	0.03
	5021	50	21	10	M 10	0.10		5021	50	21	28	M 10	0.09
	7525	75	25	12	M 12	0.22		7525	75	25	37	M 12	0.23

Technical Data

Model	Rubber-hardness a (43 Shore A)							Rubber-hardness f (57 Shore A)						
	Type	Load Capacity vertical F _{vzul} [N]	Load Capacity horizontal F _{hzul} [N]	Spring-Constant		Natural Frequency		Type	Load Capacity vertical F _{vzul} [N]	Load Capacity horizontal F _{hzul} [N]	Spring-Constant		Natural Frequency	
				verti- kal C _v	hori- zontal C _h	n _{ov} [1/min]	f _{ov} [Hz]				verti- kal C _v	hori- zontal C _h	n _{ov} [1/min]	f _{ov} [Hz]
GFII	3030a	260	90	75	17	556	9.3	3030f	450	160	145	30	679	11.3
	4040a	450	160	90	20	463	7.7	4040f	780	260	185	40	583	9.7
	5030a	1250	250	620	55	730	12.2	5030f	2000	450	1200	105	927	15.4
	7550a	2400	560	330	60	384	6.4	7550f	3700	1000	630	110	494	8.2
	1060a	3900	1000	550	90	389	6.5	1060f	7000	1850	1050	165	463	7.7
	1575a	7600	2300	970	150	370	6.2	1575f	15000	4250	1900	270	426	7.1
GFIS	2020a	140	40	65	11	706	11.8	2020f	250	70	120	20	829	13.8
	3030a	280	90	80	15	554	9.2	3030f	520	150	150	28	643	10.7
	4040a	450	160	100	20	488	8.1	4040f	750	260	180	35	586	9.8
	5050a	700	250	120	25	429	7.1	5050f	1300	410	230	47	503	8.4
	7550a	2100	560	320	60	404	6.7	7550f	3500	1000	580	105	487	8.1
	1060a	3600	1000	520	85	394	6.6	1060f	6700	1850	980	160	458	7.6
GFSS	2020a	110	40	50	9	699	11.6	2020f	180	70	100	19	892	14.9
	3030a	250	90	65	13	528	8.8	3030f	400	150	135	25	695	11.6
	4040a	430	160	80	16	447	7.4	4040f	720	260	170	30	581	9.7
	5030a	750	250	240	44	586	9.8	5030f	1300	470	515	80	753	12.6
	7550a	1650	560	270	54	419	7.0	7550f	2800	1000	570	100	540	9.0
	1060a	3000	1000	440	80	397	6.6	1060f	5000	1850	910	150	510	8.5
GPI	3017a	360	85	210	35	791	13.2	3017f	530	160	380	65	1013	16.9
	5021a	1300	240	610	80	710	11.8	5021f	1700	450	1120	145	971	16.2
	7525a	3200	550	1400	150	685	11.4	7525f	4200	1000	2580	270	938	15.6
GPS	3017a	310	85	150	30	721	12.0	3017f	490	160	270	55	888	14.8
	5021a	1000	240	410	65	663	11.1	5021f	1500	450	760	120	852	14.2
	7525a	2900	550	890	120	574	9.6	7525f	3700	1020	1650	215	799	13.3

¹ at maximum lod capacity

	Dynamic factor k _d	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

The data given in this product information correspond to the state-of-the-art and our know-how and is subject to alterations. Guarantees are only valid on individual contracts when executed by G+H Schallschutz