

APSOvib® – Conical bearings



The new conical bearings are exemplary of the APSOvib® philosophy of Angst+Pfister: excellent price-performance ratio, direct availability of all sizes and degrees of hardness in one of the most comprehensive global market ranges for vibration insulation elements.

The new APSOvib® conical bearings are absolute all-rounders for mechanical engineering and vehicle construction and are all still available directly from stock. The APSOvib® conical mounts are available in six different sizes, each in three degrees of hardness. In addition to this, they are progressive, available in different rigidities and are breakaway-proof thanks to the use of stop washers.

Areas of application

The APSOvib® conical bearings have been developed for use in agricultural and construction machinery, for example, for the suspension of jolts and insulation of engine vibrations from cabins. The direction-dependent stiffness allow good vibration insulation in the vehicle's transverse direction and sufficient stiffness in the direction of running for the suspension of jolts and braking forces.

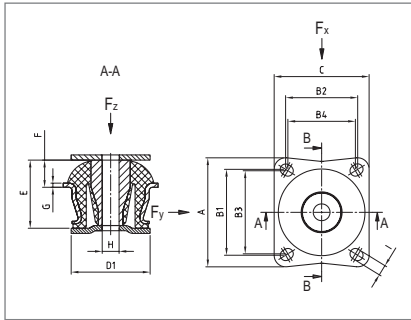
Range of application

- Conical bearings can be used for loads of 26 kg to 3000 kg
- In cases of special requirements regarding the pull out strength, a reinforced version can be used



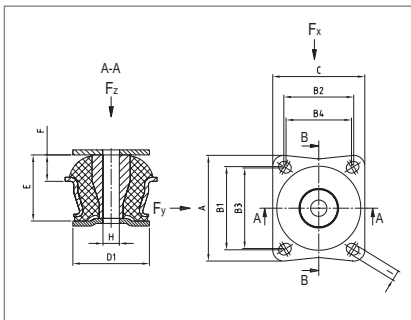
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APISOvib® HD Conical bearings – Type 1

Item no.	Type	Hardness	Static load F_z	Deflection s_z	Load F_x	Deflection s_x	Load F_y	Deflection s_y
			N	mm	N	mm	N	mm
12.2140.0901	1-2000	soft	2000	6.5	2800	4	1360	4
12.2140.0903	1-3000	middle	3000	6.5	4320	4	2080	4
12.2140.0904	1-3600	hard	3600	6.5	5120	4	2480	4



APISOvib® HD Conical bearings – Type 2

Item no.	Type	Hardness	Static load F_z	Deflection s_z	Load F_x	Deflection s_x	Load F_y	Deflection s_y
			N	mm	N	mm	N	mm
12.2140.1001	2-2800	soft	2800	6.5	2800	4	2800	4
12.2140.1003	2-3500	middle	3500	6.5	4320	4	4320	4
12.2140.1004	2-5000	hard	5000	6.5	5120	4	5120	4

Type	A	B1	B2	B3	B4	C	D	E	F	G	H	I
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1-2	105	82.7	69.4	80	65	91.5	Ø 76	75	26.2	4	Ø 16.2	Ø 10.4

Material elastomer

NR, black

Material shell

Steel, zinc plated, chromated

Material stop plate

Steel, zinc plated, chromated

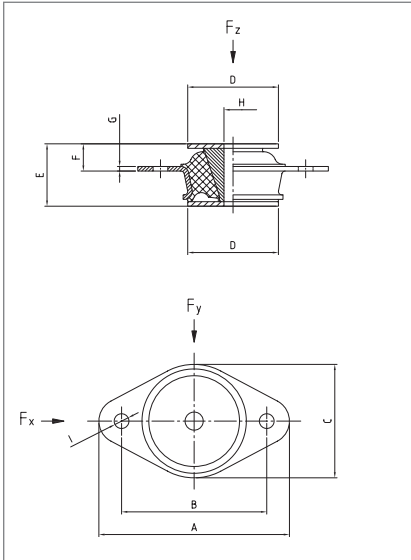
Description

Conical bearings are tear off safety and are designed for compression loads. Deflections are limited by end stop washers.

EU standard

Compliant to 2002/95/EG (RoHS)

Attention: Combined loads will change spring properties.

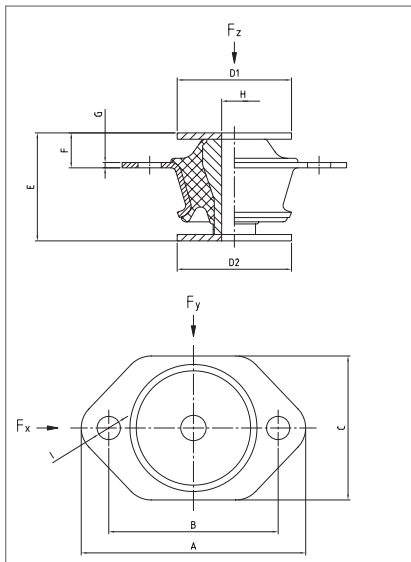


APSoVib® Conical bearings - Type 021/Type 021 S 1

Item no.	Type	Hardness	Static load F_z	Deflection s_z	Load F_x	Deflection s_x	Load F_y	Deflection s_y
			N	mm	N	mm	N	mm
12.2140.2001	021	soft	370	3	695	3	695	3
12.2140.2003	021	middle	670	3	1290	3	1290	3
12.2140.2004	021	hard	1100	3	2000	3	2000	3
12.2140.2201	021 S 1 ^①	soft	260	3	790	4	500	4
12.2140.2203	021 S 1 ^①	middle	450	3	1500	4	1090	4
12.2140.2204	021 S 1 ^①	hard	720	3	2000	3.5	1580	4

Type	A	B	C	D	E	F	G	H	I
	mm	mm	mm	mm	mm	mm	mm	mm	mm
021	84	64	50	∅ 40	27.5	12	2	∅ 8H11	∅ 6.5
021 S 1	84	64	50	∅ 40	30.5	12	2	∅ 8H11	∅ 6.5

① with recesses within elastomer

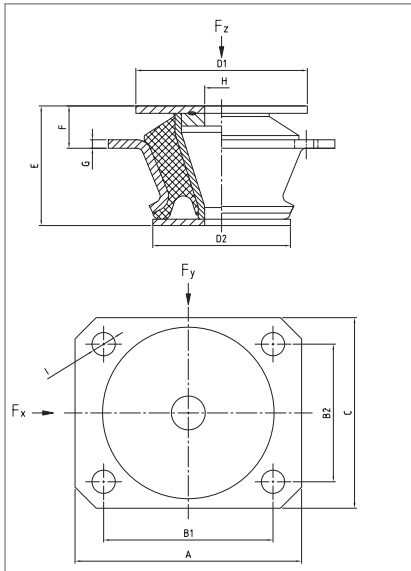


APSoVib® Conical bearings - Type 025/Type 025 S 1

Item no.	Type	Hardness	Static load F_z	Deflection s_z	Load F_x	Deflection s_x	Load F_y	Deflection s_y
			N	mm	N	mm	N	mm
12.2140.2301	025	soft	800	3.5	2335	4	2335	4
12.2140.2303	025	middle	1500	3.5	4000	3.3	4000	3.3
12.2140.2304	025	hard	2400	3.5	4000	2	4000	2
12.2140.2401	025 S 1 ^①	soft	600	3.5	2395	4	1450	4
12.2140.2403	025 S 1 ^①	middle	1150	3.5	4435	4	2915	4
12.2140.2404	025 S 1 ^①	hard	1850	3.5	6000	3.9	4980	4

Type	A	B	C	D1	D2	E	F	G	H	I
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
025	106	80	68	∅ 54	∅ 54	51	16.5	2.5	∅ 12H11	∅ 11
025 S 1 ^①	106	80	68	∅ 54	∅ 54	51	16.5	2.5	∅ 12H11	∅ 11

① with recesses within elastomer

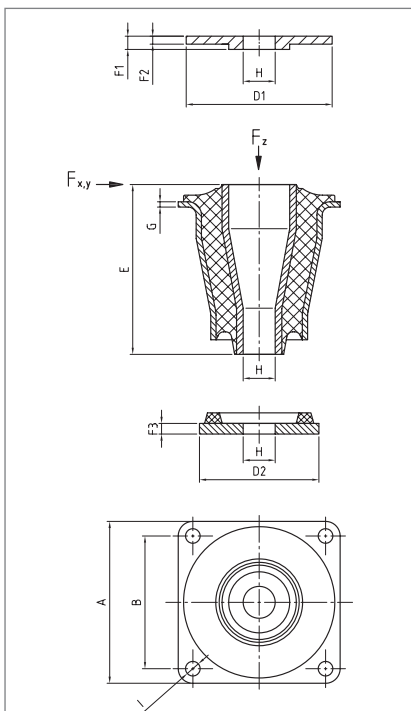


APSoVib® Conical bearings – Type 026 S 1/Type 026 S 3/Type 027 S 5/Type 030

Item no.	Type	Hardness	Static load F_z N	Deflection s_z mm	Load F_x N	Deflection s_x mm	Load F_y N	Deflection s_y mm
12.2140.2501	026 S 1	soft	1360	3.5	4870	4	4870	4
12.2140.2503	026 S 1	middle	2550	3.5	6870	4	6870	4
12.2140.2504	026 S 1 ^①	hard	4100	3.5	10000	3.4	10000	3.4
12.2140.2601	026 S 3 ^①	soft	950	3.5	3200	4	1835	4
12.2140.2603	026 S 3 ^①	middle	1700	3.5	6600	4	3200	4
12.2140.2604	026 S 3	hard	2800	3.5	8940	4	4665	4
12.2140.2701	027 S 5	soft	3600	3.5	7465	4	7465	4
12.2140.2703	027 S 5	middle	6500	3.5	11445	4	11445	4
12.2140.2704	027 S 5	hard	9600	3.5	14000	3.6	14000	3.6
12.2140.2801	030	soft	4500	4	8645	2.5	8645	2.5
12.2140.2803	030	middle	9950	4	13900	2.5	13900	2.5
12.2140.2804	030	hard	14050	4	19660	2.5	19660	2.5

Type	A	B1	B2	C	D1	D2	E	F	G	H	I
	mm	mm		mm	mm	mm	mm	mm	mm	mm	mm
026 S 1	107	80	65	90	∅ 81	∅ 65	56.5	20	4	∅ 16H11	∅ 11
026 S 3 ^①	107	80	65	90	∅ 81	∅ 65	56.5	20	4	∅ 16H11	∅ 11
027 S 5	120	90	74	100	∅ 88	∅ 70	81.5	20.5	4.3	∅ 16H11	∅ 11
030	140	112	92	120	∅ 110	∅ 82	95	23	4.5	∅ 20H11	∅ 11

① with recesses within elastomer



APSoVib® Conical bearings – Type 05719

Item no.	Type	Hardness	Static load F_z N	Deflection s_z mm	Load $F_{x,y}$ N	Deflection $s_{x,y}$ mm
12.2140.3001	05719	soft	10000	7	9600	1.5
12.2140.3003	05719	middle	20000	7	19200	2.5
12.2140.3004	05719	hard	30000	7	30000	3.5

Type	A	B	D1	D2	E	F1	F2	F3	G	H	I
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
05719	122	100	∅ 110	∅ 90	128	10	6	8	4	∅ 24.1	∅ 11