

Design and function of HAHN gas springs



- ▶ HAHN gas springs are hydropneumatic, closed and maintenance-free adjustable elements. The spring force F_1 results from the internal pressure (160 bars without load at the most) in the cylinder, which is generated by the filling medium nitrogen. On the gas spring, this pressure is applied to the cross-section of the piston rod. When no load is applied, the piston rod always is extended.

By pushing in the piston rod, the volume in the cylinder is reduced, and the gas is compressed. Thus the gas spring force increases (progression) depending on the diameter of the piston rod and the volume of the cylinder. HAHN gas springs contain an oil filling for lubrication and end damping.

HAHN gas springs are available in steel, in AISI 303/304 and AISI 316L/316Ti.

Gas springs

State-of-the-art production sites with CNC-controlled machines are the basis for ultimate safety, quality and durability.



Standard product range

Type	Ø Rod	Ø Cylinder	Stroke	Standard length	Extension force	Progression
G 02-06	2 mm	6 mm	5 - 50 mm	2 x stroke + 20	5 - 40 N	20 %
G 03-08	3 mm	8 mm	10 - 80 mm	2 x stroke + 32	5 - 100 N	30 %
G 03-10	3 mm	10 mm	10 - 80 mm	2 x stroke + 32	5 - 100 N	20 %
G 04-12	4 mm	12 mm	30 - 180 mm	2 x stroke + 32	10 - 180 N	25 %
G 06-15	6 mm	15.6 mm	20 - 300 mm	2 x stroke + 55	40 - 400 N	22 %
G 06-19	6 mm	19 mm	20 - 300 mm	2 x stroke + 55	40 - 400 N	17 %
G 08-19	8 mm	19 mm	40 - 500 mm	2 x stroke + 70	50 - 700 N	30 %
G 08-23	8 mm	23 mm	40 - 500 mm	2 x stroke + 70	50 - 700 N	18 %
G 10-23	10 mm	23 mm	40 - 500 mm	2 x stroke + 70	100 - 1200 N	30 %
G 10-28	10 mm	28 mm	40 - 500 mm	2 x stroke + 70	100 - 1200 N	20 %
G 10-40	10 mm	40 mm	30 - 500 mm	2 x stroke + 100	150 - 1200 N	8 %
G 14-28	14 mm	28 mm	50 - 600 mm	2 x stroke + 107	150 - 2500 N	40 %
G 14-40	14 mm	40 mm	50 - 600 mm	2 x stroke + 100	150 - 2500 N	16 %
G 20-40	20 mm	40 mm	50 - 600 mm	2 x stroke + 138	300 - 5000 N	40 %
G 22-40	22 mm	40 mm	50 - 1000 mm	2 x stroke + 138	500 - 6000 N	43 %
G 25-55	25 mm	55 mm	100 - 1000 mm	2 x stroke + 140	500 - 7500 N	40 %
G 30-65	30 mm	65 mm	100 - 1000 mm	2 x stroke + 160	750 - 10000 N	35 %

For additional product details, see Internet: www.hahn-gasfedern.de



Thread rod	Thread cylinder	Extras	Steel	AISI 303/304	AISI 316L/316Ti
M 2	M 2	5	•	-	•
M 3.5	M 3.5	5, 6	•	-	•
M 3.5	M 3.5	5, 6	•	-	•
M 3.5	M 3.5	5, 6, 7	•	-	•
M 5	M 5	4, 5, 6, 7, NT, RK, HT	•	•	•
M 5	M 8	2, 4, 5, 6, 7, NT	•	•	o. r.
M 8	M 8	1, 2, 4, 5, 6, 7, 8, NT, HT	•	•	•
M 8	M 8	2, 4, 5, 6, 7	•	o. r.	o. r.
M 8	M 8	1, 2, 4, 5, 6, 7, 8, B3, NT, HT, RK	•	•	•
M 8	M 8	2, 4, 5, 6, 7, 8, B3, NT, HT	•	•	•
M 8	M 14 x 1.5	2, 4, 5, 6, 7	•	•	•
M 10	M 10	1, 2, 4, 5, 6, 7, 8, NT, HT	•	•	•
M 10	M 10	1, 2, 4, 5, 6, 7, 8, B3	•	•	o. r.
M 14 x 1.5	M 14 x 1.5	1, 2, 4, 6, 7, B3, NT, HT	•	•	•
M 14 x 1.5	M 14 x 1.5	1, 2, 4, 6, 7	•	•	-
M 20 x 1.5	M 20 x 1.5	2, 6	•	-	-
M 24 x 2	M 24 x 2	2, 6	•	-	-