

**Stabilus IndustryLine gas springs are used for all applications that require the controlled moving and braking of weights without having to apply strong forces.**

Gas springs by Stabilus IndustryLine are used in virtually every field today. In commercial vehicles, construction machinery, agricultural and buses as well as in the furniture industry, engineering, for sports, leisure and home appliances, in medical engineering and other areas of industrial and private use. For special applications in medical engineering, the chemicals and food industry and ship-building, we manufacture our products in stainless steel. We produce all types and series in AISI 303/304 and AISI 316L/316Ti. Our gas springs in AISI 316L/316Ti are resistant to chemicals. This catalog will provide you with an overview of our broad product range.

One of the special strengths of Stabilus is the development of customer-specific solutions. A highly-qualified team, state-of-the-art CAD workplaces and high-quality machinery allow us to find solutions for your application challenges and to realize them with short lead times.

The staff of the company Stabilus and your local sales partner will be happy to support you in finding your product.



Order system

Step 1:

- Selection of the product
- G = Gas spring
  - Z = Tension spring
  - ZD = Tension spring with damping

upon request

- F = Elastic locking gas spring
- S = Rigid locking gas spring
- X = Absolutely rigid locking gas spring
- SL = Free-moving locking gas spring
- SX = Double rigid locking gas spring
- D = Non-adjustable oil damper

Step 2:

Select a series on the basis of the required force, the desired stroke and the maximum installation length.

Step 3:

Enter the desired stroke in mm.

G 1 4 2 8 0 2 5 0 1 0 6 5 0 A U 2 7 A B 1 6 1 5 0 0 N 1 5 6 V2

Step 4:

Select the damping (1=with, 0=without damping, 9=special nozzle) or the braking direction (1=extension, 2=compression, 3=in both directions).

Step 5:

Enter the installation length in mm (extended from middle to middle of fitting).

Step 6:

Determine the fitting at the piston rod.

Step 7:

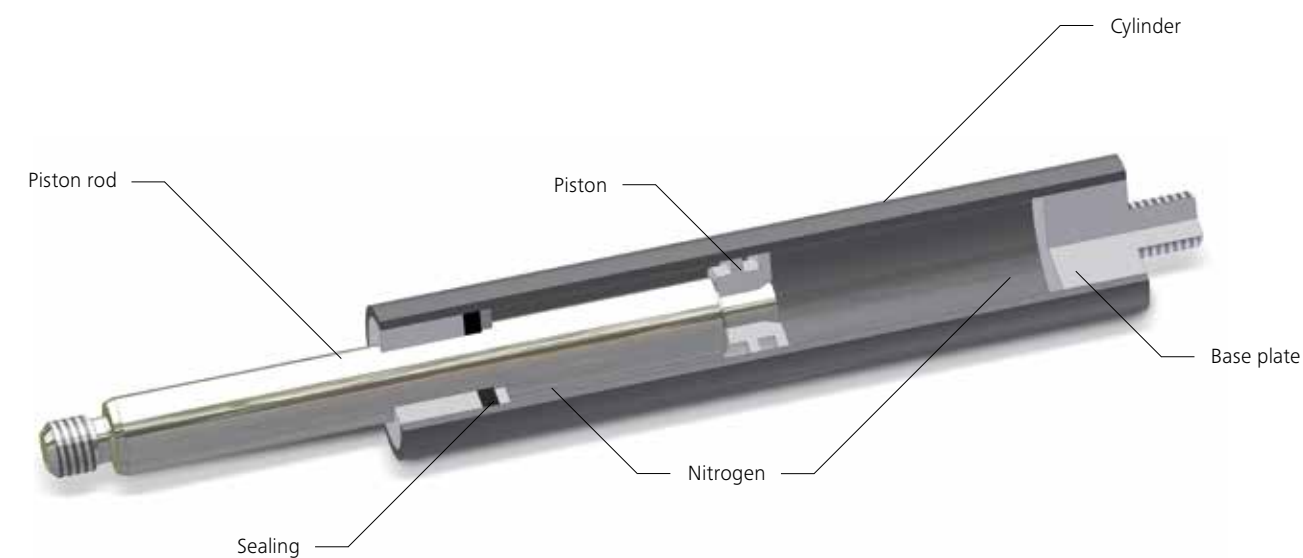
Determine the fitting at the cylinder.

Step 8:

Enter the desired nominal force in N.

Step 9:

- Selection of the extras
- 1 = Wiper ring
  - 2 = Radial valve
  - 4 = Grease chamber
  - 5 = Valve
  - 6 = Protection tube
  - 7 = Floating piston (add 70 % of the stroke length to the determined installation length)
  - 8 = Locking device (add 30 mm to the determined installation length)
  - B3 = Sealing system
  - NT = Low-temperature design
  - HT = High-temperature design
  - RK = Friction element
  - V2 = Design completely in stainless steel AISI 303/304
  - V4 = Design completely in stainless steel AISI 316L/316Ti



Stabilus gas springs are hydro pneumatic, closed and maintenance-free adjustable elements. The spring force  $F_1$  results from the internal pressure 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 is always 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. Stabilus IndustryLine gas springs contain an oil filling for lubrication and end damping.

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

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



Product range of the STABILUS IndustryLine gas springs

The stock program of the STABILUS IndustryLine allows you to quickly access many gas pressure and gas tension springs in steel and stainless steel, as well as the appropriate connections and fittings.

Our sales team will be pleased to assist you in selecting the right spring for you. You can also configure your own spring. Please follow these instructions:

- 1. Select the appropriate product, series, material and stroke from the lists. Determine the required force and respect the force range permitted for the spring.

Example

Type	Stroke (H)	Length (L)	Thread	Force
G 1023	150 mm	345 mm	M8	100–1200 N

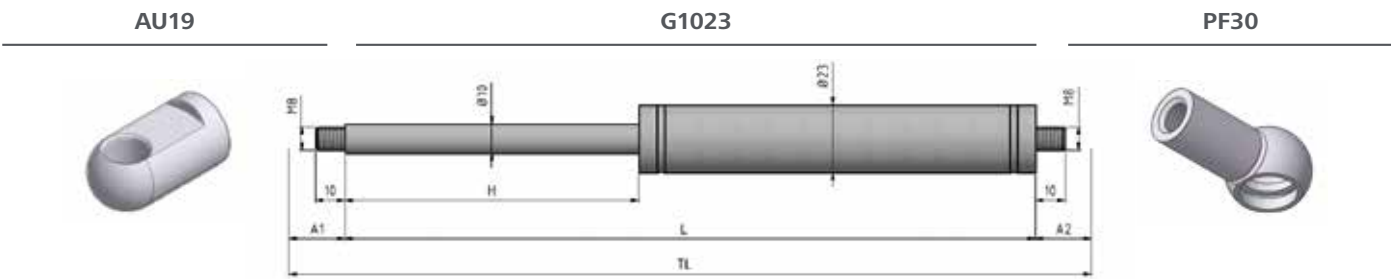
- 2. Select the desired connections, matching the thread of the gas spring, out of the stock program. In addition a variety of fittings (page 22–25), which can also be used to adjust the total length (TL). Add the installation length of the connections (A) to the length (L) of the gas spring.

Example

Type	Thread	Installation length (A)	Thickness (B)	Width (C)	Cross hole Ø (D)	Steel	AISI 303
AU 19	M8	19 mm	10 mm	14 mm	8.1 mm	1	1
PF30	M8	30 mm	13 mm	–	–	1	1

L (length gas spring) + A1(connection Rod) + A2(connection cylinder) = TL (total length).Example: 345 mm (G10-23-150 stroke) + 19 mm (AU19) + 30 mm (PF30) = 394 mm

Example of item 1 and 2

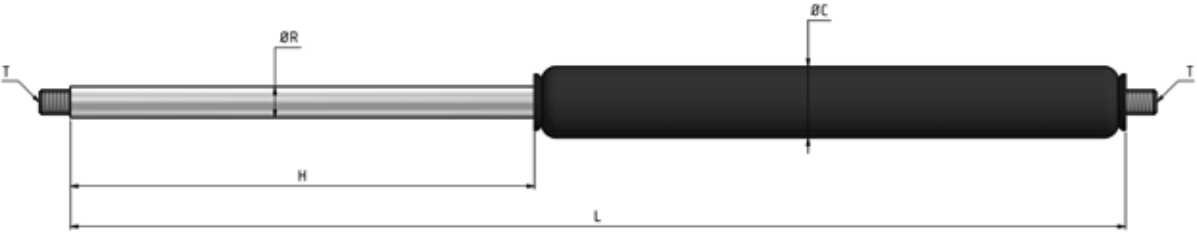


- 3. Congratulations: You have configured your desired gas spring. Please do not forget to order the appropriate brackets (page 27–29). Example: BC01 (for eyelet), BA20/K13 (for socket)



- 4. Please ask your STABILUS IndustryLine dealer for price and delivery time.

STABILUS IndustryLine stands for high quality, innovative products, as well as flexibility and speed in the implementation of your wishes.



Gas spring – Steel (piston rod: chromium-plated, cylinder: black spray coated)

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 04 12	4 mm	12 mm	30 mm	92 mm	M3,5 x 5 mm	10–180N
G 04 12	4 mm	12 mm	50 mm	132 mm	M3,5 x 5 mm	10–180N
G 04 12	4 mm	12 mm	60 mm	152 mm	M3,5 x 5 mm	10–180N
G 04 12	4 mm	12 mm	80 mm	192 mm	M3,5 x 5 mm	10–180N
G 04 12	4 mm	12 mm	100 mm	232 mm	M3,5 x 5 mm	10–180N
G 04 12	4 mm	12 mm	120 mm	272 mm	M3,5 x 5 mm	10–180N
G 04 12	4 mm	12 mm	150 mm	332 mm	M3,5 x 5 mm	10–180N

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 06 15	6 mm	15 mm	50 mm	132 mm	M5 x 5 mm	40–400N
G 06 15	6 mm	15 mm	60 mm	152 mm	M5 x 5 mm	40–400N
G 06 15	6 mm	15 mm	80 mm	192 mm	M5 x 5 mm	40–400N
G 06 15	6 mm	15 mm	100 mm	232 mm	M5 x 5 mm	40–400N
G 06 15	6 mm	15 mm	120 mm	272 mm	M5 x 5 mm	40–400N
G 06 15	6 mm	15 mm	150 mm	332 mm	M5 x 5 mm	40–400N
G 06 15	6 mm	15 mm	200 mm	432 mm	M5 x 5 mm	40–400N

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 08 19	8 mm	19 mm	50 mm	145 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	60 mm	165 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	80 mm	205 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	100 mm	245 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	120 mm	285 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	150 mm	345 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	160 mm	365 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	200 mm	445 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	250 mm	545 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	300 mm	645 mm	M8 x 10 mm	50–700N

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 10 23	10 mm	23 mm	100 mm	245 mm	M8x10 mm	100–1200N
G 10 23	10 mm	23 mm	150 mm	345 mm	M8x10 mm	100–1200N
G 10 23	10 mm	23 mm	200 mm	445 mm	M8x10 mm	100–1200N
G 10 23	10 mm	23 mm	250 mm	545 mm	M8x10 mm	100–1200N
G 10 23	10 mm	23 mm	300 mm	645 mm	M8x10 mm	100–1200N
G 10 23	10 mm	23 mm	350 mm	745 mm	M8x10 mm	100–1200N
G 10 23	10 mm	23 mm	400 mm	845 mm	M8x10 mm	100–1200N

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 14 28	14 mm	28 mm	100 mm	248 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	150 mm	348 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	200 mm	448 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	250 mm	546 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	300 mm	648 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	350 mm	748 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	400 mm	848 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	450 mm	948 mm	M10 x 12 mm	150–2500N
G 14 28	14 mm	28 mm	500 mm	1048 mm	M10 x 12 mm	150–2500N

Gas spring – Stainless Steel 303 (piston rod: AISI 303, cylinder: AISI 304)

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 06 15	6 mm	15 mm	80 mm	192 mm	M5 x 7 mm	40–400N
G 06 15	6 mm	15 mm	100 mm	232 mm	M5 x 7 mm	40–400N
G 06 15	6 mm	15 mm	150 mm	332 mm	M5 x 7 mm	40–400N

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 08 19	8 mm	19 mm	80 mm	205 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	100 mm	245 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	120 mm	285 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	150 mm	345 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	200 mm	445 mm	M8 x 10 mm	50–700N
G 08 19	8 mm	19 mm	250 mm	545 mm	M8 x 10 mm	50–700N

Type	Ø Rod (R)	Ø Cylinder (C)	Stroke (H)	Length (L)	Thread (T) on both sides	Force
G 10 23	10 mm	23 mm	100 mm	245 mm	M8 x 10 mm	100–1200N
G 10 23	10 mm	23 mm	150 mm	345 mm	M8 x 10 mm	100–1200N
G 10 23	10 mm	23 mm	200 mm	445 mm	M8 x 10 mm	100–1200N
G 10 23	10 mm	23 mm	250 mm	545 mm	M8 x 10 mm	100–1200N
G 10 23	10 mm	23 mm	300 mm	645 mm	M8 x 10 mm	100–1200N
G 10 23	10 mm	23 mm	350 mm	745 mm	M8 x 10 mm	100–1200N
G 10 23	10 mm	23 mm	400 mm	845 mm	M8 x 10 mm	100–1200N

You could not realize your desired gas spring with our stock program?  
No problem. Our warehouse program is only a small part of our product portfolio. Send us your ideas, data about the product, or your application. We support you in the design of the appropriate gas spring, and manufacture the right product for you quickly and cost-effectively.