



AGS
AMERICAN GAS SPRINGS
americangassprings.com



TITAN 
Lift

Moving heaven and earth
and everything in between

American Gas Springs (AGS) is a true American manufacturer of exceptional quality gas springs, with facilities in the beautiful State of Oregon. With over 25 years of experience in design and manufacturing in this industry, AGS has become the leader in high-quality gas spring technology. Our team of engineers delivers highly-advanced gas spring solutions to almost every industry, both nationwide and internationally. AGS is a custom manufacturer focused on attention to detail, short lead times and 100% customer satisfaction. AGS is a modern and well-equipped company with the latest CNC technology, testing equipment and automated production lines.

TITAN Lift Standard

TITAN LIFT Standard gas springs, also called compression gas springs, are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

Function: Standard compression gas springs are extended, self-contained force-generating devices that consist of a rod attached to a piston with an orifice that moves within a sealed cylinder. The cylinder contains high pressure nitrogen gas that produces force in extension. Compression gas springs are the most common gas springs in the marketplace as they provide a compact, high force solution to a wide variety of lifting and counterbalancing applications.



Series:

Rod Ø/Cyl. Ø - max stroke-max Force.F1

- 4/12 - 10 -150mm - 10 - 200N
- 6/15 - 10 -150mm - 10 - 400N
- 8/18 - 10 -300mm - 30- 700N
- 8/19 - 10 -300mm - 30- 700N
- 10/21 - 20 - 800mm - 50- 1300N
- 10/22 - 20 - 800mm - 50- 1300N
- 14/27 - 20 -1000mm - 150-2600N
- 14/28 - 20-1000mm - 150-2600N
- 20/40 - 20-1000mm - 200-5000N

Total Length:

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

Attachments:

Many varieties are possible. See our website for the choices and latest developments.

Speed and Damping:

You specify, we make it.

Specialties:

- Rod scrapers
- Cover tubes
- Lockable cover tubes
- Refill valves
- High temperature seals
- Stainless Steel 316
- Friction pistons
- Floating pistons

ALL
gas springs
are available in
Stainless Steel
316

Proudly made in the U.S.A.



TITAN Lift Locking

TITAN LIFT Lockable gas springs, also called blocking or adjustable gas springs, are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

Function: A locking gas spring incorporates a mechanism to enable the rod to be locked at any point in its travel. A plunger that protrudes from the rod actuates this mechanism. When this plunger is depressed, the rod is free to operate as normal. When the plunger is released, which may be at any point in the stroke, the rod is locked in that position.

AGS offers three types of locking gas springs, with the following characteristics when locked:

FLEXIBLE: Good resistance to rod being pushed or pulled.

RIGID IN TENSION: No flex when rod is being pulled, slight flex when rod being pushed.

RIGID IN COMPRESSION: Slight flex when rod being pulled, no flex when rod is being pushed.

All three types of lockable gas springs have the same locking mechanism. This locking mechanism operates when the plunger rod is depressed by opening a valve in the piston. When the plunger rod is released, the valve closes and the passage of oil or gas is prevented, locking the piston in that position.



Series:

Rod Ø/Cyl. Ø - max stroke-max Force.F1

- 8/18 - 10 -300mm - 40- 700N
- 8/21 - 10 -300mm - 40- 700N
- 10/21 - 20 - 700mm - 50- 1300N
- 10/27 - 20 - 700mm - 50- 1300N
- 14/27 - 30-700mm - 150-2600N
- 14/40 - 30-800mm - 150-2600N

Total Length:

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

Attachments:

Many varieties are possible. See our website for the choices and latest developments.

Speed and Damping:

You specify, we make it.

Specialties:

- Rod scrapers
- Cover tubes
- Refill valves (some types)
- High temperature seals
- Stainless Steel 316

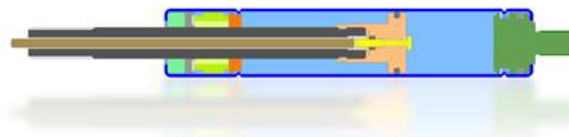
Type of Locking:

- **S-TYPE** spring locking (standard) flex in up and down directions
- **R-type** 100% rigid in pulling and limited rigidity in pushing direction
- **P-type** 100% rigid in pushing and limited rigidity in pulling direction
- **Q-type** 100% rigid in pushing and pulling directions

Release systems:

We offer a variety of release systems listed on our website, with and without cable systems.

TITAN Lift Traction



TITAN LIFT Traction gas springs work the exactly the opposite of Standard gas springs. They are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

Function: AGS Gas Springs supplies a complete range of traction gas springs. Also referred to as tension springs, these units operate the opposite of compression gas springs—they retract rather than extend. Mounting constraints often do not allow for the use of compression springs, i.e., doors and access panels hinged horizontally at the bottom and any type of cover or lid that must be pulled open or pulled shut. Traction gas springs also often function as tensioners on mechanical assemblies and belt drives. AGS offers these units in both mild steel and stainless steel construction in a number of sizes.

Series:

Rod Ø/Cyl. Ø - max stroke-max Force.F1

- 8/21 - 10 - 300mm - 50- 400N
- 10/27 - 10 - 600mm - 10- 1500N
- 14/40 - 10 - 600mm - 200-4000N

Total Length:

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

Attachments:

Many varieties are possible. See our website for the choices and latest developments.

Speed and Damping:

You specify, we make it.

Specialties:

- Rod scrapers
- Cover tubes
- Refill valves (some types)
- High temperature seals
- Stainless Steel 316



TITAN Lift Dampers



TITAN Dampers are designed to control motion. Their appearance is very similar to Standard gas springs. Special designs allow adjustment of the motion speed, free-fall, full-stroke control and vibration control. AGS Dampers are the highest quality in the industry. Conscious choices of quality materials guarantee endurance and a long life. For environments like marine or food industries we have the same quality in a Stainless Steel 316 available.

Function: AGS dampers provide speed and motion control using hydraulic oil damping in either extension, compression, or both directions, with or without support of nitrogen gas pressure. Their look and outer design is similar to gas springs, so the intended function and purpose determines when a damper is needed instead of a gas spring.

Four types of dampers:

- **Code DST:** Standard damper with built-in free-fall and controlled fixed damping
- **Code DFL:** Damper with separate oil chamber can also be supplied with an extension force
- **Code DMC:** Motion-adjustable damper
- **Code DMF:** Damper with a fixed constant motion over entire stroke

Series:

Rod Ø/Cyl. Ø - max stroke-max Force.F1

- 4/12 - 10-150mm - xxN
- 6/15 - 10-150mm - xxN
- 8/18 - 10-300mm - xxN
- 8/19 - 10-300mm - xxN
- 10/21 - 20-800mm - xxN
- 10/22 - 20-800mm - xxN
- 14/27 - 20-1000mm - xxN
- 14/28 - 20-1000mm - xxN
- 20/40 - 20-1000mm - xxN

Total Length:

Depending on the above choice, our website provides a gas spring configurator for easy calculation. Or call our engineers at 1-888-220-6093.

Speed and Damping:

You specify, we make it.

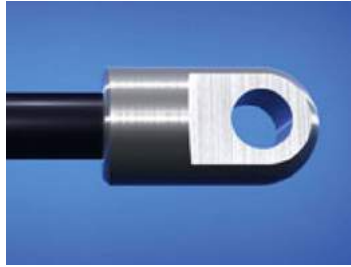
Attachments:

Many varieties are possible. See our website for the choices and latest developments.

Specialties:

- Rod scrapers
- Cover tubes
- Lockable cover tubes
- Refill valves
- High temperature seals
- Stainless Steel 316
- Friction pistons
- Floating pistons

Connectors



HINGE-EYES



BALL-JOINTS



BRACKET BA500



THREADED END



CLEVIS / FORKS



BRACKET BA600



CONNECTOR OPTIONS



ROD-ENDS



BRACKET BA-SIDE MOUNT

Industries We Serve

Medical, computer, food industry, automotive, trucking, aerospace, marine, military, machine industry, mining, oil industry, furniture and kitchen cabinets, food industry, sports and exercise, entertainment and more.

Environment

Steady growth of the company also means growth of our responsibilities. Controlled waste management and responsible choices of materials and production processes make AGS a clean and environmentally-friendly production company.

For the latest information and technology it is important to visit our website:

www.americangassprings.com

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