

Adjustable Force Gas Springs



When Gas Springs are used, it is often found that theoretical forces may be inaccurate because factors such as hinge friction and perceived speed of action and perceived handling will have a bearing on calculations.

Therefore, AMCL supply an adjustable force Gas Spring, called Vari-Lift (See Below). Not only can it be adjusted to meet individual preferences, but it can also be adjusted whilst in position, saving you both time and effort.

Benefits

- **No Need to calculate force**
- **Adjustable down to any force within the range**
- **Force can be adjusted after installation**
- **Simple adjustment using standard tool supplied**
- **Ideal for Prototyping and short production runs**
- **Ideal where application weights vary**
- **Available as an option to most types of AMCL Gas Springs on request**

These Gas Springs are charged to their maximum force during manufacture. By using the standard tool provided, Gas can be gradually released via the Vari-Lift valve to provide the force suited to your application. Once this has been established, AMCL, are then able to measure this force and provide fixed force Gas Springs to your precise requirement.

Vari-Lift Gas Springs can also be used if panel weights vary. These will then allow you to provide the perfect solution to your customer needs every time. Spring weight ranges from 5kg (11lbs) to 250kg (550lbs), force ranges from 50N to 2500N, with standard strokes from 40mm (1.57") to 500mm (19.69").

Vari-Lift versions of the following gas spring ranges are available:

Standard Lift Gas Spring.

Locking Safety Shroud gas springs that lock automatically on full extension.

Additional Friction gas springs that lift and hold in any desired position.

316L Stainless Steel range, the ideal gas springs for high corrosion and clean environments.

Sizes, dimensions and materials are as listed in the following data pages for these ranges. Remember that Vari-Lift versions are supplied fully charged to the maximum force for the particular size gas spring.

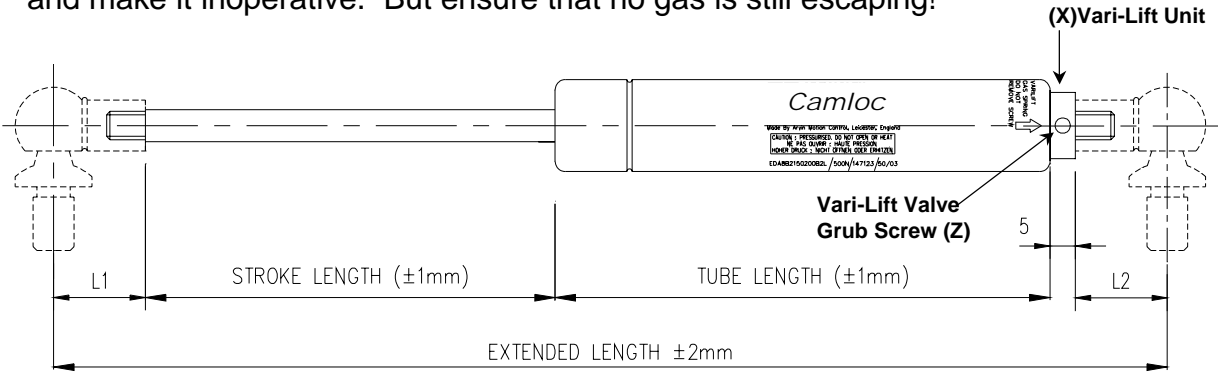


Valve Adjustment Instructions:

Fit the gas spring with the cylinder / tube in the uppermost position. The Vari-lift valve can be seen at the top of the cylinder / tube (X).

Adjustment of the Grub Screw

Ensure the 2mm allen key (provided) is located in the grub screw (Z) to its maximum depth. Undo the screw carefully by rotating anti-clockwise until the gas is heard escaping. When re-tightening care should be taken to ensure that excessive force is not applied, as this will damage the hexagon in the grub screw and make it inoperative. But ensure that no gas is still escaping!



Repeat the process releasing a small amount of gas at a time until the required lifting action is achieved.

WARNING: The force can be adjusted downwards only. It is advisable to add approximately 10% to the weight being supported when adjusting the gas spring. This will reduce the chance of releasing too much gas.

UNDER NO CIRCUMSTANCES SHOULD THE GRUB SCREW BE REMOVED

Note: A slight mist of oil may sometimes be seen escaping when venting gas. This is normal.

