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

Camloc Motion Control Ltd has designed an adjustable force gas spring called ‘Vari-Lift™’. 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.

The 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 at the end of the tube to provide the force suited to your application. Once this has been established, Camloc Motion Control Ltd is then able to measure this force and provide production fixed force gas springs to your precise requirement.

Vari-Lift™ gas springs can also be used if panel weights vary. These will allow you to provide the perfect solution to your customer’s needs every time. Spring force ranges from 50 Newton (5kg or 11lbs) to 2500 Newton (250kg or 550lbs) with standard strokes from 40mm (1.57”) to 500mm (19.69”).

Vari-Lift™ gas springs are also available in stainless steel, either manufactured to order or from stock via Camloc Motion Control Ltd’s network of distributors.

**Benefits**

- No need to calculate force
- Adjustable to any force within range
- Force can be adjusted after installation
- Simple adjustment using standard tool supplied
- Ideal for prototyping and short production runs
- Available as an option on most types of Camloc gas springs
- Ideal where application weights vary
- Available in stainless steel
- BS EN ISO 9001 Registered Company
An extensive range of sizes and forces

Gas springs are commonly referred to by their size. Typically, the four common sizes for gas springs are 6-15, 8-18, 10-23 and 14-28, although other sizes are available. The sizes directly relate to the diameter of the rod and the tube, for example an 8-18 will have a rod diameter of 8mm and a tube diameter of 18mm.

**Vari-Lift™ versions of the following gas springs are available:**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Swift &amp; Sure</strong></td>
<td>A self-contained standard gas spring solution for lifting, supporting, counterbalancing and tensioning</td>
</tr>
<tr>
<td><strong>Stop &amp; Stay</strong></td>
<td>A gas spring that lifts and stays in any position</td>
</tr>
<tr>
<td><strong>Econoloc</strong></td>
<td>A gas spring that locks automatically on full extension for safety</td>
</tr>
<tr>
<td><strong>Stainless Steel Swift &amp; Sure</strong></td>
<td>The ideal gas spring for high corrosion and clean environments</td>
</tr>
</tbody>
</table>

Sizes, dimensions and materials are listed in the individual datasheets for these ranges except that Vari-Lift™ versions are supplied fully charged to the maximum force. Please select the gas spring type that interests you and ask for a separate datasheet on that range.

**Size & force for Vari-Lift™ versions**

For Vari-Lift™ versions add 5mm for the valve when calculating the extended length. The force is set to the maximum as standard but can be pre-set lower as required.

See our End Fittings leaflet for the comprehensive range available.

If you have any questions about specifying gas springs or end fittings, please call +44 (0)116 274 3600.