Gas Springs Specification

Technical Specification

All gas springs packages are supplied with:
✦ 2 Gas springs including a release valve,
✦ 4 Metal eyes,
✦ 4 Metal ball joints with metric stud,
✦ 1 Gas release key (stud),
✦ 1 Instruction leaflet

Operating Temperature range: from -5°C to +70°C
Steel zinc or chrome plated metal end-fittings
Steel chrome plated rod
Steel black painted body
Manufactured in the United Kingdom

DO’S

✦ Do use standard gas springs rod down.
✦ If springs are to be stored prior to use, it should be stored rod down to lubricate the rod seal.
✦ Do try to use ball joints to help avoid side load forces. If eyes are used, ensure a sloppy fit to allow lateral movement.
✦ Do ensure that the end-fittings are in line so that side load forces are not applied as a result of misalignment.
✦ Do try to use shorter springs close to the hinge rather than long stroke springs away from the hinge.
✦ Do provide physical stops to limit the spring's extremes. i.e. ensure that undue force is not applied to over compress or over extend the spring.
✦ Ensure the gas spring's end-fittings are fully screwed home.
✦ Where ball joints are used ensure the ball stud is flush with the surface and tightened.

DON'TS

✦ Do not scratch, dent, chip, bend or paint the rod.
✦ Do not puncture or incinerate. Please contact customer support for disposal instructions.
✦ Do not lubricate the gas spring.
✦ Do not cycle more than 15 times per minute.
✦ Under no circumstances attempt to regas a spring. This is an extremely hazardous operation.
✦ Do not reduce the force of the spring below its specified minimum working force

Size 6 mm rod - Charged at 400N with Release Valve Minimum working force: 40N

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<tr>
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Lengths in mm (+/- 2mm)
Gas Springs Specification

Size 8 mm rod - Charged at 600N with Release Valve  
Minimum working force: 100N

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Lengths in mm (+/- 2mm)

Size 10 mm rod - Charged at 1200N with Release Valve  
Minimum working force: 150N

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Lengths in mm (+/- 2mm)

Size 14 mm rod - Charged at 2500N with Release Valve  
Minimum working force: 250N

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Lengths in mm (+/- 2mm)
ADJUSTING A STANDARD COMPRESSION GAS SPRING WITH A RELEASE VALVE

♦ Upon receipt fit the gas spring to the application, operate the springs and observe the movement. Care should be taken on this first compression. The supplied force in the spring might be so great that damage could occur to the part to which the gas springs are attached. For example, if the springs are attached to a sheet metal lid.

♦ Safely support the load and remove the gas springs. Unscrew the end-fitting from the body end (the piston chamber). There may be a threaded stud located in the body that will also need to be removed, please note that this stud has a hole drilled on one end of it to fit over the valve. The valve can now be seen by looking down into the gas spring.

♦ Hold the spring with the rod down and the valve facing away from you. Screw in the release valve key until you can feel the tip of the valve. In one flowing movement turn clockwise a quarter of a turn and immediately turn anti-clockwise a quarter of a turn. The sound of escaping gas should be heard (it is best to carry out this procedure in a quiet environment).

♦ The gas spring has a very small volume of nitrogen at high pressure. On the small size 6 and 8 mm springs, a release of nitrogen lasting more than a second could reduce the spring's force by 100 Newtons.

♦ Refit the gas springs to the application. If the force is still too great, repeat the above procedure until satisfied. If two gas springs are attached remove approximately the same amount of gas from each spring.

♦ If, as it occasionally happens, you let out too much gas, it is possible to recharge release valved springs. Please contact Farnell InOne technical support.

FOR A VARIETY OF REASONS IT IS EXTREMELY DANGEROUS TO ATTEMPT TO REGAS THE GAS SPRINGS. THIS SHOULD NOT BE ATTEMPTED UNDER ANY CIRCUMSTANCES.

For technical support please contact:
Farnell InOne Technical Support
Tel: 08701 200 202 - Fax: 08701 200 203 - techsales@farnellinone.co.uk
www.farnellinone.co.uk