GSG-19/GSG-22 Gate Gas Spring

Extension Forces 300 N, 400 N, 500 N & 800 N

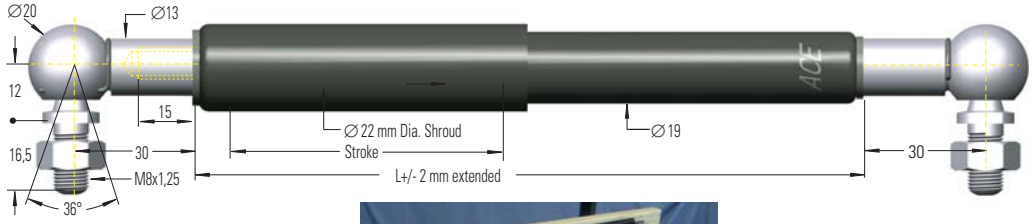
End Fitting **GSG-22** **End Fitting**

C10

Angle Ball Joint
C10
Gates Over 750 mm Wide

GSG-19

C8



Angle Ball Joint
C8
Gates Under 750 mm Wide

For alternative End fittings see page 140

Adjuster Knob Tool
U10/U8

Available in Stainless Steel and Special Lengths

Hidden Gas pressure vent valve

Gate Gas Spring Application

A specially designed gas spring acts as a safety product. The gate gas spring provides a steady, slow and controlled opening and closing of entrance gates in Schools, Sports facilities and Homes where an Electro-magnetic security lock and CCTV is often used in conjunction, to achieve a high level of security. The special gas spring also steadies the gate when opening and closing in strong winds, although it always automatically closes slowly to allow plenty of time tor people to pass through. The gate type gas springs are self-contained, environmentaly friendly and maintenance free for tens of thousands of automated gate operations.

The gas springs are supplied with a choice of 300 N, 400 N, 500 N, 800 N closing forces. However each gas spring has a gas pressure valve hidden in the stud of the body end fitting. This can be carefully vented by threading on the adjuster knob tool to allow small amounts of the nitrogen gas to be vented to suit each particular gate.

Dimensions

Type	Stroke	L extended
GSG-19-150	150	440
GSG-22-250	250	695

Ordering Example

GSG-22-250-CC-V-500

Technical Data

ACE gas springs are self-contained and maintenance free.

Mounting position: Can be mounted in any position.

Oildamping length: complete stroke

Operating temperature range: -20°C to +80°C

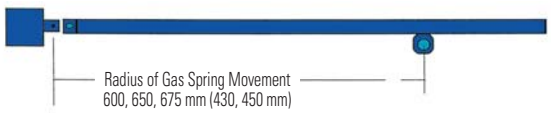
Operating fluid: Nitrogen gas and oil

Material: Body: powder coated steel. Piston rod: ceramic coated steel. End fittings: zinc plated steel or aluminium. Rod Shroud plastic or aluminium.

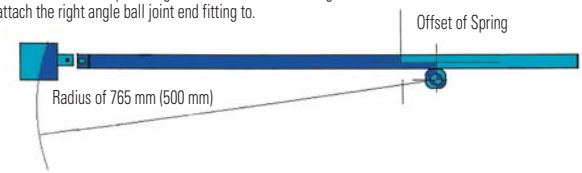
Design and Layout for GSG-22-250-CC (GSG-19-150-CC)

1) All dimensions and points are taken from the centre of the hinge pin.

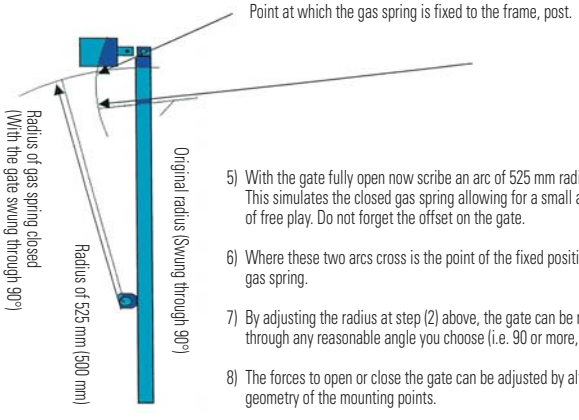
2) Choose a position along the length of the gate for the point of the gas spring, (e.g. 600 mm, 650 mm, 675 mm). This forms the radius of the gas spring movement.



3) Allow an offset on this point to give room at the side of the gate for a bracket to attach the right angle ball joint end fitting to.



4) From this point scribe an arc of 765 mm radius. This simulates the fully extended gas spring.



5) With the gate fully open now scribe an arc of 525 mm radius. This simulates the closed gas spring allowing for a small amount of free play. Do not forget the offset on the gate.

6) Where these two arcs cross is the point of the fixed position for the gas spring.

7) By adjusting the radius at step (2) above, the gate can be made to open through any reasonable angle you choose (i.e. 90 or more, or less)

8) The forces to open or close the gate can be adjusted by altering the geometry of the mounting points.

Issue 4. 2006 Specifications subject to change