

## Movement to be expected once the spring is in position

The gas spring is placed behind the gate, therefore it will always try to push it closed.

Depending on the force you order and friction in the hinge, the gas spring will close the gate fully in 5 to 12 seconds.

## How much force do you need ?

α **If there is no friction at all in the hinge** and it is not likely to start crimping (e.g.: Indoor gates) then a gas spring charged at 100 Newton is enough and you can order part number F100600/BB/0100

### α **When there is some friction in the hinge**

- If it take a continuous 0.2 to 1.5kg of force at 1 metre to close the gate (e.g.: You cannot push it easily with the tip of your finger), then go for part number F100600/BB/0200
- If it takes between 1.5 to 2.5kg of force at 1m to close the gate then go for part number F100600/BB/0300
- If it takes more than 2.5kg of force at 1m then you should consider alternative heavy duty solutions or use 2 or more springs per gate.

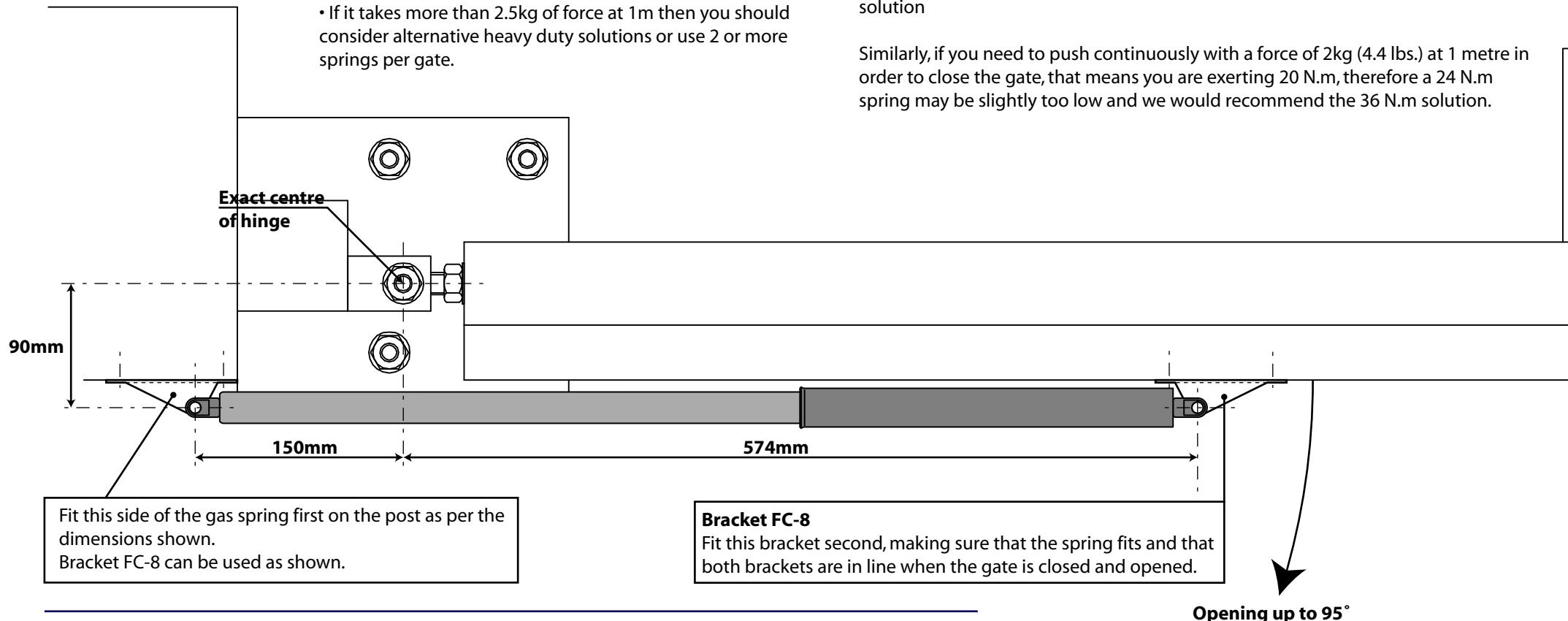
## A scientific look at the force

When fitted as per the drawing below a F100600 gate gas spring will generate an almost continuous moment of:

- 12 Newton x Metre (N.m) when charged at 100 Newton (N)
- 24 N.m when charged at 200 N
- 36 N.m when charged at 300 N

If you need to push continuously with a force of 1kg (2.2 lbs.) at 1 metre in order to close the gate, that means you are exerting 10 N.m, therefore a 12 N.m spring may not be enough. Try to always have at least 12 N.m extra and go for the 24 N.m solution

Similarly, if you need to push continuously with a force of 2kg (4.4 lbs.) at 1 metre in order to close the gate, that means you are exerting 20 N.m, therefore a 24 N.m spring may be slightly too low and we would recommend the 36 N.m solution.



Fit this side of the gas spring first on the post as per the dimensions shown.  
Bracket FC-8 can be used as shown.

**Bracket FC-8**  
Fit this bracket second, making sure that the spring fits and that both brackets are in line when the gate is closed and opened.

Opening up to 95°



**Industrial Gas Springs Ltd**

22 Wates Way, Mitcham, Surrey CR4 4HR, England

Tel: +44 (0)208 646 6595 - Fax: +44 (0)208 646 6595 - [www.industrialgassprings.com](http://www.industrialgassprings.com)

Gas springs are charged with nitrogen gas and should be handled carefully - Please check our web site for further information