GAS STRUTS

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GAS STRUTS (STAINLESS STEEL)

Dimensions:

What is the drop size of the door / lid / bonnet you are lifting? the example shown the door has a 1000mm drop, this means (Y = 1.0)

Weight:

One way is to take a long rod or broomstick and with a set of bathroom scales choose the side midpoint of the door in this case 500mm if you can only weigh from the end of the door then double the weight as the force gets harder the closer you move to the hinge.

Below (X = 40kg) mid point weight.

Distance from hinge to Bracket:

Gas struts should be mounted on the door approximately 20% distance from the hinge so if our door 1000mm drop, 20% from hinge would be 200mm (Z = 0.2)

What length should the Strut be:

Gas strut length should be approximately 60% of the door drop so in this case our door is 1000mm so 595mm long struts are needed.

- Door weight (X)
- Door length (Y)
- Distance between the door hinging and the gas springs fixing point onto the door (Z)
- Number of gas springs (N)
- · Gas spring thrust pressure (S)

The Formula to be applied to this calculation of (S):

X x Y S = + 5 Kg 2 N x Z (+5 Kg. = c

(+5 Kg. = constant added weight for the frictions)

Example:

- Door weight (X) 40kg
- Door length (Y) 1m

 Distance (Z) – 0.2 Number of gas springs (N) – 2 40 x 1.0CAUTION..... S = + 5 Kg = 55 kg./P $(2x2) \times 0.23$ Contents of Gas Struts are under high presure Therefore two 550N gas springs have to be fitted. **LENGTH** PART NO. DESCRIPTION **PRESSURE** GSK100N-316-6-SS to GSK400N-316-6-SS Gas strut 6mm dia. shaft x 15mm dia. tube 316mm 100 - 400N GSK100N-525-8-SS to GSK800N-525-8-SS Gas strut 8mm dia, shaft x 18mm dia, tube 525mm 100 - 800N 100 - 1100N GSK100N-816-10-SS to GSK1100N-816-10-SS Gas strut 10mm dia. shaft x 22mm dia. tube 816mm



