

## Gas Struts

### PLEASE NOTE:

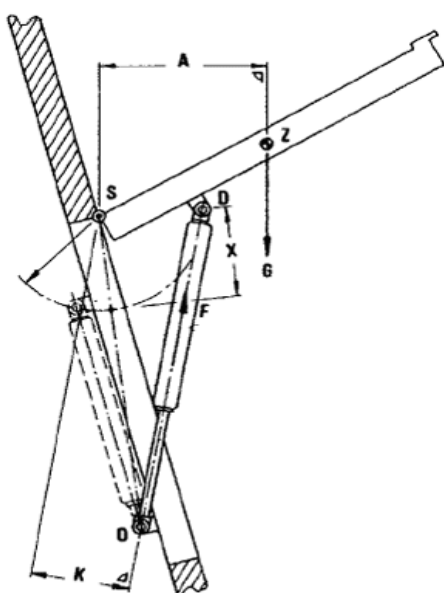
The value F, for individual models applies for a gas strut temperature of 20°C; the extension force changes by 3.4% per 10°C deviation of temperature. When choosing gas struts please take into consideration the conditions in which they will function.

### INSTRUCTIONS FOR INSTALLING GAS STRUTS

Please take note of the following during installation and use:  
 Installation with piston rod facing downwards  
 Lateral forces on gas struts are not permissible  
 Protect piston rod from dirt, damage and paint  
 Do not undertake any mechanical work on the gas strut  
 Do not open! High pressure up to 200 bar!  
 Do not expose to heat over 120°C!

### HOW DO YOU SELECT THE CORRECT GAS STRUT

Determine what load you want to lift (see diagram and calculation below)  
 Based on the load you want to carry select the appropriate Newton capacity and cylinder diameter  
 Determine the stroke length required i.e. open length minus closed length  
 Determine the stroke length required, i.e. open length minus closed length  
 Determine the open and closed lengths to fit in the gas strut  
 Select the appropriate end fitting (ball type is most commonly used)



G = 36 Kg. A = 500mm. K = 200mm.

- G = Flap weight in kg.
- Z = Centre of gravity (G) of the flap.
- S = Hinge point of the flap.
- D = Point of force of the gas spring on the flap.
- O = Point of force of the gas spring on the fixed object.
- A = Horizontal distance between position of G and the hinge point S.
- K = Perpendicular distance between gas spring and hinge point.
- X = Max. typical stroke.
- F = Force of the gas spring.

$$F = \frac{36 \text{ kg} \times 500 \text{ mm}}{200 \text{ mm}}$$

$$= 90 \text{ kg}$$

$$+ 10\% = 99 \text{ kg}$$

$$99 \text{ kg} \times 10 = 990 \text{ Newton}$$

$$990 \text{ Newton}$$