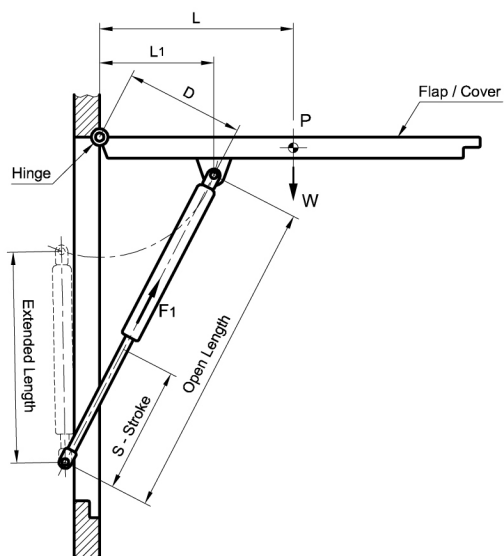
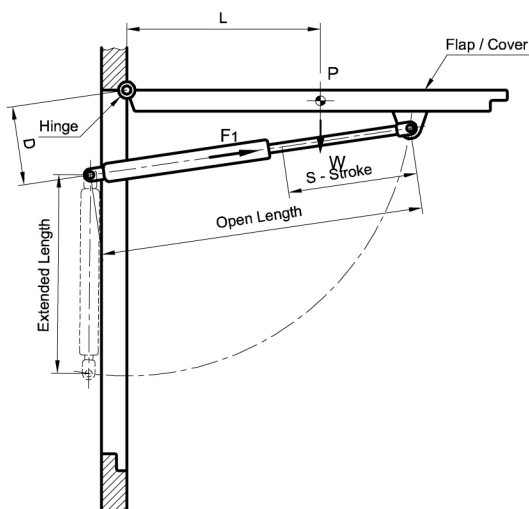


CALCULATION SHEET

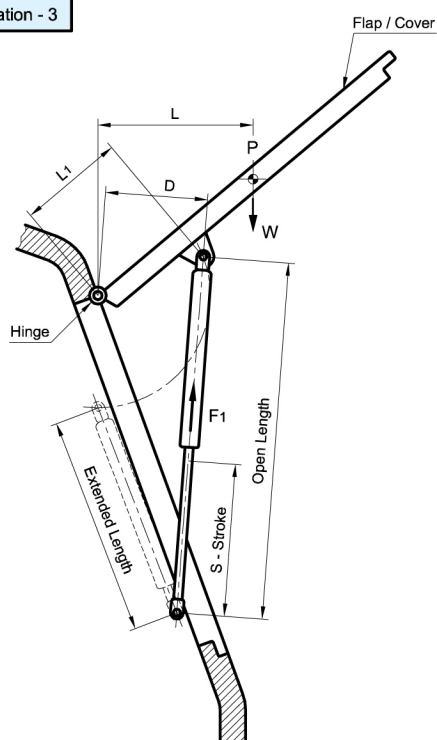
Installation - 1



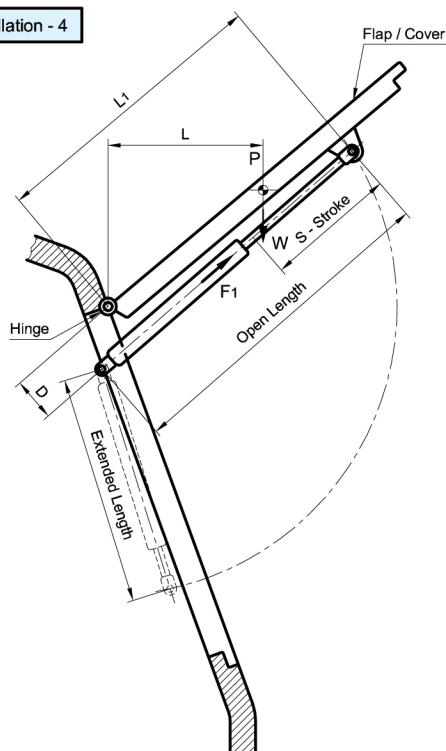
Installation - 2



Installation - 3



Installation - 4



Explanation:

P Center of Gravity

L1 Horizontal distance between gas spring mounting point and hinge

for Installation 1 & 3 we advice $L1 = \sim 2/3$ of L and $D = \sim 0,8$ of Stroke

for Installation 2 & 4 we advice $D = 1/3$ to $2/3$ of L1

W Weight of flap in N

L Vertical distance of F1

D Horizontal distance between center of gravity and hinge

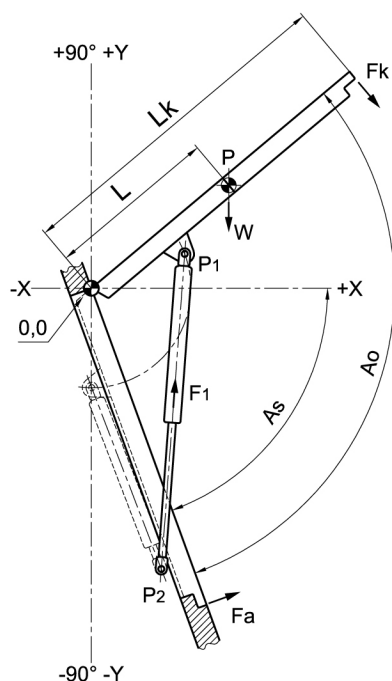
n >Number of gas springs

$$F1 = \frac{W \times L}{D \times n} \pm 10\%$$

GAS SPRING CALCULATION REQUEST SHEET

COMPANY :
FROM :
ADDRESS :
PHONE : TELEFAX :

Name of project / inquiry :
Estimated annual quantity : Delivery / batch quantity :



P1 : Fixing point of flap X : Y :
P2 : Fixing point of frame X : Y :
(If fixing points are not specified yet please indicate possible fixing points.)
0,0 : Pivot point (Hinge)
Lk : Length of lid from pivot point (mm) (in)
L : length of center of gravity from pivot (hinge) point (mm) (in)
As : Closed position angle of lid : degrees
(0° to -90° (-) 0° to +90° (+))
Ao : Required opening angle of lid : degrees
Fw : Weight of lid (N) (lb)
F1 : Nominal Force of gas springs (N)
Fk : External force (for example hand force) to close the flap (N) (lb)
Fa : External force (for example hand force) to open the flap (N) (lb)
When should the gas spring take over lifting?
() instant lift () degrees

Function of gas spring ☐ Moment / Force balancing ☐ Holding at open / closed position
Is there a separate locking device ☐ in open position ☐ in closed position
The flap is mainly ☐ Open ☐ Closed
Do you need damping? ☐ in extension mm/in ☐ in compression mm/in
Ambient Temperature range °C to °C or °F to °F
Operating environment ☐ Aerial ☐ Water ☐ Food-medical ☐ Other:.....
Does the application require biological / foodgrade oil? ☐ Yes ☐ No
Does the operating environment require stainless steel (Inoxlift) ☐ SAE 304 ☐ SAE316L ☐ No
Cycle frequency (number of operations per hour, per day)
Do you need Lift&Lock feature? ☐ LT ☐ LE ☐ LC ☐ LD
Do you need variable positioning over the entire stroke range (Stoplift)? ☐ Yes ☐ No
Please briefly describe your application and your expectations? :

DATA SHEET / EIGENSCHAFTEN

TECHNICAL SPECIFICATION

EIGENSCHAFTEN

INSTALLATION

VERTICAL :

PISTON ROD DOWNWARDS

☐

PISTON ROD UPWARDS

☐

HORIZONTAL

☐

APPLICATION

INSTALLATION

VERTIKAL :

KOLBENSTANGE NACH UNTEN

☐

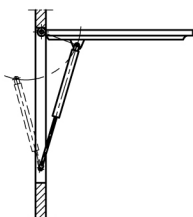
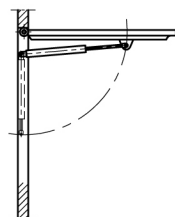
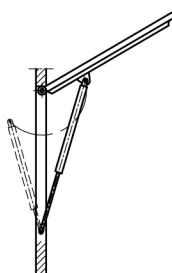
KOLBENSTANGE NACH OBEN

☐

HORIZONTAL

☐

ANWENDUNG

☐☐☐☐

OTHER / SONSTIGES

DAMPING

DAMPING ON EXTENSION :

☐NORMAL ☐NO ☐STRONG ☐HYDRAULIC STROKE

DAMPING ON COMPRESSION :

NO ☐YES ☐DÄMPFUNG

BEIM AUSFAHREN :

☐NORMAL ☐NEIN ☐SCHWACH ☐HYDRAULISCHER HUB

BEIM EINFAHREN :

JA ☐NEIN ☐SPEEDEXTENSION SPEED : NORMAL ☐SLOW ☐FAST ☐

COMPRESSION SPEED :

FAST ☐SLOW ☐GESCHWINDIGKEITBEIM AUSFAHREN : NORMAL ☐LANGSAM ☐SCHNELL ☐

BEIM EINFAHREN :

SCHNELL ☐LANGSAM ☐

IF NOT STATED ABOVE : THE PRODUCTION WILL BE

INSTALLATION : PISTON ROD DOWNWARDS

DAMPING ON EXTENSION : NORMAL

HYDRAULIC STROKE : NORMAL

EXTENSION SPEED : NORMAL

COMPRESSION SPEED : FAST

FALLS NICHT ANGEGEBEN

INSTALLATION : KOLBENSTANGE NACH UNTEN

DÄMPFUNG : NORMAL

HYDRAULISCHER HUB : NORMAL

AUSFAHRGESCHWINDIGKEIT : NORMAL

EINFHRGESCHWINDIGKEIT : SCHNELL

○ : RECOMMENDED / EMPFEHLUNG

INQUIRY SHEET / ANFRAGEBOGEN

COMPANY / FIRMA :

FROM / VON :

ADDRESS / ADRESSE :

PHONE / TELEFON : TELEFAX :

We ask you to offer us gas springs as specified below / Wir bitten um ihr Angebot für :

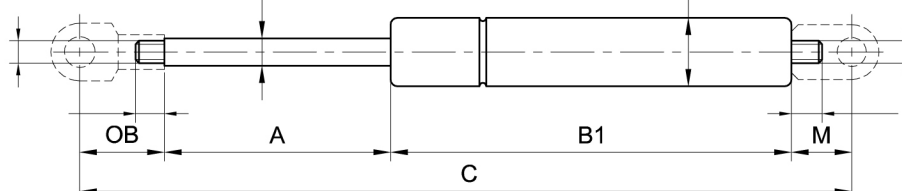
QUANTITY - DELIVERY / LOSGRÖÖE : QUANTITY - YEAR / JAHRESABNAHME :

REMARKS / SONSTIGES :

Please describe application / Bitte Anwendung beschreiben :

$$F_1(N) :$$

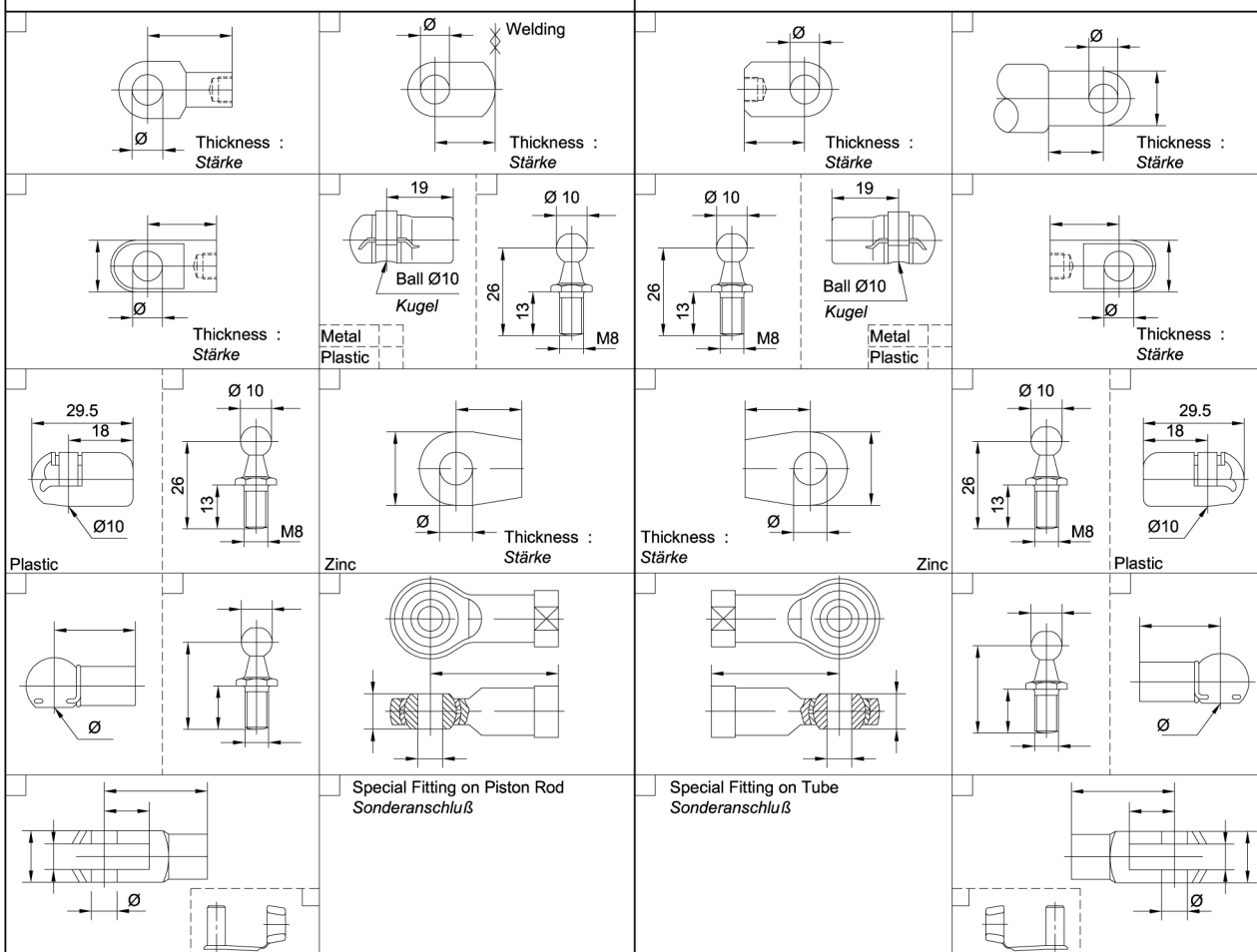
(Force in Newton / Kraft in Newton)

[illegible][illegible]

ØM	ØB	A	C	F ₁ (N)	B1	OB	M

ROD END FITTING / KOLBENSTANGENANSCHLUß

TUBE END FITTING / DRUCKROHRANSCHLUß



DATA SHEET / EIGENSCHAFTEN

TECHNICAL SPECIFICATION

EIGENSCHAFTEN

INSTALLATION

VERTICAL :

PISTON ROD DOWNWARDS ☐PISTON ROD UPWARDS ☐HORIZONTAL ☐

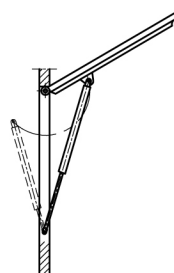
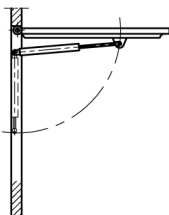
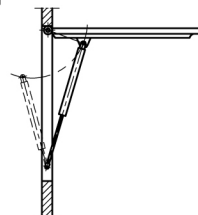
APPLICATION

INSTALLATION

VERTIKAL :

KOLBENSTANGE NACH UNTEN ☐KOLBENSTANGE NACH OBEN ☐HORIZONTAL ☐

ANWENDUNG



OTHER / SONSTIGES

DAMPING

DAMPING ON EXTENSION :

NORMAL ☐NO ☐STRONG ☐HYDRAULIC STROKE

DAMPING ON COMPRESSION :

NO ☐YES ☐DÄMPFUNG

BEIM AUSFAHREN :

NORMAL ☐NEIN ☐SCHWACH ☐HYDRAULISCHER HUB

BEIM EINFAHREN :

JA ☐NEIN ☐SPEEDEXTENSION SPEED : NORMAL ☐SLOW ☐FAST ☐

COMPRESSION SPEED :

FAST ☐SLOW ☐GESCHWINDIGKEITBEIM AUSFAHREN : NORMAL ☐LANGSAM ☐SCHNELL ☐

BEIM EINFAHREN :

SCHNELL ☐LANGSAM ☐

IF NOT STATED ABOVE : THE PRODUCTION WILL BE

INSTALLATION : PISTON ROD DOWNWARDS

DAMPING ON EXTENSION : NORMAL

HYDRAULIC STROKE : NORMAL

EXTENSION SPEED : NORMAL

COMPRESSION SPEED : FAST

FALLS NICHT ANGEGEBEN

INSTALLATION : KOLBENSTANGE NACH UNTEN

DÄMPFUNG : NORMAL

HYDRAULISCHER HUB : NORMAL

AUSFAHRGESCHWINDIGKEIT : NORMAL

EINFHRGESCHWINDIGKEIT : SCHNELL

○ : RECOMMENDED / EMPFEHLUNG