



# *Stainless Steel Gas Springs*



### GLOBAL PLAYER IN GAS SPRINGS

Gas spring production is a highly competitive market with only a few innovative, high quality manufacturers who can do the job right. Destek Gas Springs is one of the few. What makes us different? We are committed to excellent quality and innovative ideas for the customer. The name DESTEK comes from the Turkish word "destek" and means "support". For us it means not only "supporting" your lids, covers and other weights with our gas springs but it also means "supporting" our customers and making them competitive in their markets by solving their problems as well. For many years now, we have not only been a supplier of gas springs but have also been proud of becoming an active partner of our customers. These strengths at Destek Gas Springs have helped our company grow from a small manufacturer in 1987 to a global player in gas springs. World wide well-known companies, both OE manufacturers as well as aftermarket companies, rely on our experience. DESTEK is represented in more than 10 countries and currently exports its products to more than 40 countries in 5 continents.

### HIGH CLASS SERVICE

Our people and our customers have made our growth possible over the past years. We continually strive to improve our service and capabilities for our customers and uphold this as our primary goal. Here at Destek, we have only one thing to offer, and this is exceptional service. Based on years of experience in production of gas springs, we are supplying our products to the Automotive, Medical Equipment, Furniture, Machinery, Transportation, Office Furniture and to the Office Equipment industries.



### QUALITY ASSURANCE AT EVERY MANUFACTURING STAGE

Although gas springs and end fittings are often a small component of the overall equipment package which they are included in, their function and reliability are paramount to the performance of the system as a whole. For this reason, DESTEK operates a stringent quality assurance system, certified in accordance with ISO 9001:2000 and ISO/TS16949:2002 quality systems, which ensures that scrupulous attention to detail is built in at every stage of design and manufacture of our products.



### WORKING PRINCIPLE OF GAS SPRINGS

Gas springs are a proven and reliable method of counterbalancing covers, flaps and objects. A gas spring is an energy-storage device filled with nitrogen. While the gas spring is compressed, the gas chamber volume is reduced due to the intrusion of the shaft into the gas spring tube; thereby causing the gas pressure to rise-storing more energy. This stored energy produces a force in the extension direction making the gas spring extend. More versatile than mechanical springs, Destek gas springs offer the advantages of speed-controlled dampening, cushioned end motion, simple mounting, compact size, flat force curve, and a wide range of available forces.



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# why stainless steel?

Need protection against corrosion, erosion and the ravage of time? Then look to Destek gas springs made of SAE304 or SAE316L grade stainless steel for superior corrosion protection. It's the ideal corrosion fighter in wash down areas for the food and packaging industries as well as outdoor environments.

## WHAT IS STAINLESS STEEL?

The many unique values provided by stainless steel make it a powerful candidate in materials selection. Engineers, specifiers and designers often underestimate or overlook these values because of what is viewed as the higher initial cost of stainless steel. However, for specific applications such as in the marine, chemical and food industries, stainless is often the best value option.

## BENEFITS OF STAINLESS STEEL

- ▶ **Corrosion resistance** – Resist corrosion in atmospheric and pure water environments; in most acids, alkaline solutions, and chlorine bearing environments.
- ▶ **Hygiene** – The easy cleaning ability of stainless makes it the first choice for strict hygiene conditions, such as in hospitals, kitchens and food processing plants.
- ▶ **Aesthetic appearance** – The bright, easily maintained surface of stainless steel provides a modern and attractive appearance.
- ▶ **Long term value** – When the total life cycle costs are considered, stainless is often the least expensive material option.
- ▶ **Non-Magnetic** – Stainless steel grades used for gas spring manufacturing are not magnetic. On request, almost non magnetic gas springs are available with almost iron free materials chosen with nearly no effect on magnetic fields.



## APPLICATIONS

- ▶ Ship building industry
- ▶ Marine Equipment
- ▶ Food Industry
- ▶ Food Processing Equipment
- ▶ Medical Equipment
- ▶ Pharmaceutical Industry
- ▶ Environmental technology applications
- ▶ Design applications



## IMPORTANT NOTICE

As minor quantities of fluid may leak from gas springs we suggest using foodgrade lubricating oils in place of industrial grade hydraulic fluids for applications in FOOD and/or MEDICAL industries. Please ask your Destek Sales Assistance for details.

# lifting, lowering, moving

## Inoxlift

The "Inoxlift" type is the stainless steel made of our most popular gas spring the "Lift". The Inoxlift gas spring works on counterbalance basis, i.e. the extension force balances the weight to be lifted, positioned or lowered. They meet the highest worldwide standards for lifting, counter-balancing, lowering, tilting and damping lids and covers. They are preferred if corrosion resistance is paramount and a high level protection against corrosive environments is mandatory.

There are thousands of applications where the Inoxlift type can be used. Basic applications are;

- ▶ wherever harsh conditions or environment are a concern.
- ▶ where a high level cleanliness and hygiene is necessary.
- ▶ where an aesthetic appearance is preferred.

Common applications are in the marine/ship building, medical equipment, chemical and food industries.

A wide range of size options and alternative end fittings and brackets are available to fulfill your demands for your individual application.

## Extras for Inoxlift gas springs

- ▶ Various Valve systems to enable you releasing or refilling of the gas pressure.
- ▶ Protection Tube in stainless steel to protect the piston rod against shocks, dirt and all kinds of scratches which are affecting the lifetime of the gas spring.
- ▶ Suitable for applications where the gas springs are installed in horizontal position or with the piston rod pointing upwards.
- ▶ with Special Extension Speed
- ▶ for Special Temperature Range (up to -45°C or up to +200°C)
- ▶ with Special Damping

Please contact our Sales Team if you are interested in any of these extras.



## Inox-GT-Lift (Stainless Steel Gas Traction Lift)

The working principle of the GT-Lift is the opposite of the Lift type gas spring. While the Lift type gas spring is always prepared to extend (i.e. to open lid and covers) the GT-Lift's function is to compress itself. Common applications of our GT-Lift gas springs are garage doors, exhaust systems, machinery, etc.

As a supplier of one of the world's largest range in gas springs and dampers we offer also the GT-Lift in Stainless Steel. Please contact your Destek Sales Assistant for details on Inox-GT-Lift gas springs.





# lifting and adjusting

## Inox-Blocklift

In comparison to our "Inoxlift" type gas spring the added feature of the Inox-Blocklift is an internal locking mechanism, which allows the gas spring to be locked at any desired position. This locking mechanism is activated by operating the "release pin", located either at the end of the piston rod or on the tube end. While the release pin is pressed, the locking function is released and the Inox-Blocklift works like a normal gas spring on counterbalance basis. Now, the piston rod can extend or can be pushed in as force is applied to the system. As soon as the pressure on the release pin is taken off, the locking mechanism locks immediately causing the Inox-Blocklift to stay in that position.

### Common applications of Inox-Blocklifts are;

- ▶ for various position adjustments on medical equipment such as on hospital beds, etc.
- ▶ for various applications in the Yacht industry such as on marine seating systems (helm seating)
- ▶ for various position adjustments on wheelchairs

## Main Inox-Blocklift variants

### ▶ Rigid Blocklift in Extension (BLP1)

On some applications total rigidity is paramount when the Blocklift is locked. If this rigidity is required in the extension direction, the BLP1 will fit your requirements.

If overload in extension direction is applied when the Blocklift is locked, there won't be any movement of the piston rod whereas overloads in compression direction will cause a movement of a few millimetres.

### ▶ Rigid Blocklift in Compression (BLP2)

If on the application the Blocklift must have a total rigidity in compression direction whilst the Blocklift is in locked position, our BLP2 Blocklift will provide a firm and reliable positioning adjustment. In case of overloads in compression direction, while the Blocklift is locked, the piston rod will stay rigid. Loads in extension direction will cause a small movement of the piston rod but as soon as the load is released, the piston rod will return to its initial position.



### ▶ Spring Blocking (BLP3)

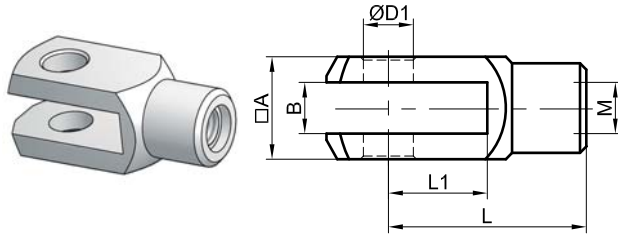
The BLP3 Blocklift is best suited if on the application some comfort is required even when the Blocklift is locked. The BLP3 "Spring Blocking" Blocklift can be cushioned when it is locked.

### ▶ One way lockable Inox-Blocklifts

Thanks to the design of the new developed locking system, Blocklifts which can be locked only in one direction but work free in the opposite direction are available as "Rigid in extension – Not lockable in compression (BLP6)" and "Rigid in compression – Not lockable in extension (BLP7)".

### Please note

The Inox-Blocklift types described above are only the most popular ones. Please contact our sales team if you need any other specific Inox-Blocklift type.



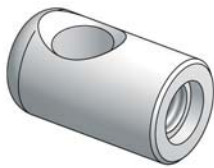
Material: SAE303 / SAE304

Order Nr.	ØD1	M	L	L1	□A	B
B275	Ø5.1	M6	20	10	□10	5
B276	Ø6.1	M6	24	12	□12	6
B277	Ø8.1	M6	32	16	□16	8
B278	Ø8.1	M8	32	16	□16	8
B279	Ø10.1	M10	40	20	□20	10
B280	Ø12.1	M10	40	20	□20	10
B281	Ø25	M20x1.5	100	50	□50	25



Material: SAE303 / SAE304

Order Nr.	ØD1	M	L	L1	ØD	Thickness
B287	Ø6.1	M6	16	7.5	Ø10	6
B288	Ø8.1	M6	20	8	Ø14	10
B289	Ø8.1	M8	20	8	Ø14	10
B290	Ø10.1	M10	30	14	Ø18	10
B291	Ø14.1	M14x1.5	40	22	Ø25	14



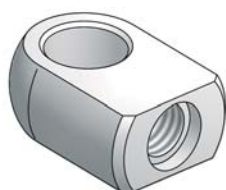
Material: SAE303 / SAE304

Order Nr.	ØD1	M	L	L1	ØD
B297	Ø6.1	M6	16	25	Ø14
B298	Ø8.1	M6	16	25	Ø14
B299	Ø8.1	M8	16	25	Ø14
B300	Ø6.1	M6	22	31	Ø14
B301	Ø8.1	M8	22	31	Ø14
B302	Ø10.1	M8	22	32	Ø16
B303	Ø10.1	M10	22	32	Ø16



Material: Plastic

Order Nr.	ØD1	M	L	ØD	Thickness
B81	Ø6.1	M6	22	Ø21	10
B85	Ø8.1	M6	22	Ø21	10
B82	Ø8.1	M8	22	Ø21	10
B86	Ø8.1	M6	28	Ø21	10
B87	Ø10.1	M6	28	Ø21	10
B88	Ø12.1	M6	28	Ø21	10
B89	Ø8.1	M8	28	Ø21	10
B90	Ø10.1	M8	28	Ø21	10



Material: SAE303 / SAE304

Order Nr.	ØD1	M	L	ØD	Thickness
B309	Ø6.1	M6	13	Ø15	10
B310	Ø8.1	M6	13	Ø15	10
B311	Ø8.1	M8	13	Ø15	10
B312	Ø6.1	M6	16	Ø18	10
B313	Ø8.1	M6	16	Ø18	10
B314	Ø8.1	M8	16	Ø18	10
B315	Ø10.1	M8	16	Ø18	10

# END FITTINGS

Order Nr.	Ball	M	L
B321	Ø10	M6	18
B324	Ø10	M8	18
B326	Ø13	M8	25
B328	Ø13	M8	30
B330	Ø16	M8	35
B332	Ø16	M10	35

Material: SAE303 / SAE304

Order Nr.	Ball	M	L	M1	L1	L2	S
B322	Ø10	M6	18	M6	13	25.5	SW10
B323	Ø10	M6	18	M8	13	26	SW13
B325	Ø10	M8	18	M8	13	26	SW13
B327	Ø13	M8	25	M8	16	29	SW13
B329	Ø13	M8	30	M8	16	29	SW13
B331	Ø16	M8	35	M10	20	36	AA13
B333	Ø16	M10	35	M10	20	36	AA13

Material: SAE303 / SAE304

Order Nr.	Ball	M	L
B223	Ø10	M6	25
B224	Ø10	M8	25

Material: Plastic

Order Nr.	Ball	M	L	M1	L1	L2	S
B334	Ø10	M6	25	M6	13	25.5	SW10
B335	Ø10	M6	25	M8	13	26	SW13
B336	Ø10	M8	25	M8	13	26	SW13

Material  
 Ball Head : Plastic  
 Ball Stud : SAE303 / SAE304

Please ask for end fittings in SAE316L material

Please ask for alternative Blocklift Release Systems

Please ask for alternative Stainless Steel Brackets

## Stainless Steel Blocklift Gas Springs Edelstahl Blocklift Gasfedern

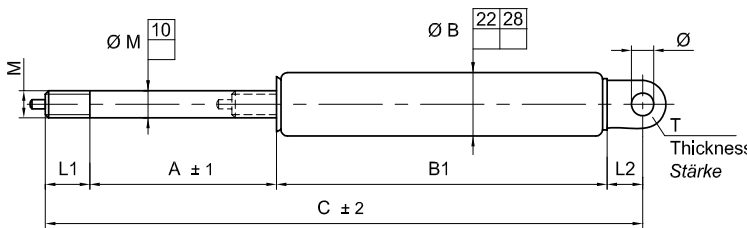
### INQUIRY SHEET / ANFRAGEBOGEN

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 / LOSGRÖßE : ..... QUANTITY - YEAR / JAHRESABNAHME : .....

REMARKS / SONSTIGES : .....



- BL1 Rigid Blocking in Extension  
Starre Blockierung in Zugrichtung
- BL2 Rigid Blocking in Compression  
Starre Blockierung in Druckrichtung
- BL3 Spring Blocking  
Federnde Blockierung

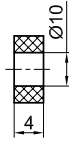
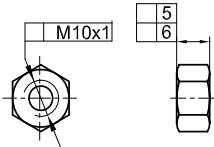
Material  SAE 304  
 SAE 316L

ØM	ØB	A	C	F <sub>1</sub> (N)	B1	L1	M	L2	Ø	T
							M10x1			

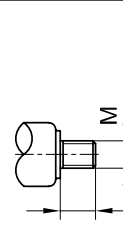
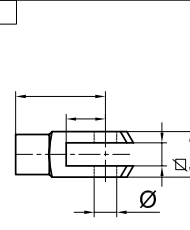
#### Extras on Rod end / Extras am Kolbenende

Screw nut / Mutter

Rubber bumper / Gummipuffer



#### Extras on Tube end / Extras am Rohrende



Please choose from page 7-8 or make a drawing / Bitte aus Seite 7-8 wählen oder Skizze des Anschlusses zeichnen

#### INSTALLATION

VERTICAL :

PISTON ROD DOWNWARDS   
 PISTON ROD UPWARDS

HORIZONTAL :

#### EINBAU

VERTIKAL :

KOLBENSTANGE NACH UNTEN   
 KOLBENSTANGE NACH OBEN

HORIZONTAL :

#### RELEASE TYPE

RELEASE WAY :

2,5 mm  1,5 mm  max.1 mm

RELEASE FORCE :

STANDARD  SOFT

#### AUSLÖSETYPE

AUSLÖSEWEG :

2,5 mm  1,5 mm  max.1 mm

AUSLÖSEKRAFT :

STANDART  SANFT

EXTENSION SPEED

..... m/s

NORMAL  SLOW  FAST

COMPRESSION SPEED SLOW  FAST

AUSFAHRGESCHWINDIGKEIT

..... m/s

NORMAL  LANGSAM  SCHNELL

EINFUHRGESCHWINDIGKEIT SLOW  FAST

: STANDARD  
(If not stated, "standard" features will be considered as valid.)

: STANDART  
(Falls nicht angegeben werden Standartwerte in acht genommen.)

DESTEK  
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VE TİCARET A.Ş.

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