Important advices for installation

The use of easylift gas springs requires the knowledge and attention of some data and facts as do other technical systems which have to do with force development.
You can see the substantial criterions on this page. Our consultants will of course explain in detail all technical facts which are important for your application.
The facts mentioned here, are routine for a lot of our regular customers.

1. Bansbach gas springs will operate in surrounding temperatures from -30°C to +80°C. We can equip our springs with special seals to withstand temperatures as low as -55°C or as high as +200°C.
For applications in low temperature surroundings, a detailed clarification of the requirements is necessary.
The surrounding temperature has influence on the gas spring characteristic. Changes of the extension force as well as of the damping characteristics have to be considered and should be tested in advance within the application. Gas springs should not be overheated or put in open fire! Other environmental conditions can also influence the considerable life time of gas springs. Please take appropriate, preventive measures into consideration.

2. Gas springs are filled with pure nitrogen. Nitrogen is an inert gas, wich does not burn, will not explode and is not poisonous.
But:

Gas springs have very high internal pressure (up to approx. 300 bar). Do not open without instruction!

3. Disposal/Recycling: Gas springs consist mostly of metal and can be recycled, but first the gas spring must be pressureless.

4. All gas springs are labeled with the warning „Do not open, high pressure“, the part number and the production date. If these dates are unreadable (removed, painting of the gas springs or any other influences) we refuse the liability for damages which result from this fact. Warranties aren't possible anymore.

5. Bansbach gas springs can be used generally as a limit stop in both directions. The occuring forces should not exceed the following approximate values.

Series	max. Force(N)
3/8	600
3/10	600
4/12	1500
6/15	2500
6/15 NIRO	1750
6/19	2000
8/19	5000
8/19 NIRO	3000
8/20 ALU	3500
8/22	5000
8/28	7000
10/22	5500
10/22 NIRO	3000
10/28	8500
10/28 NIRO	6500
10/40	7000
12/28	9250
12/40	12500
14/28	7000
14/28 NIRO	6250
14/40	15000
16/28	10000
20/40 NIRO	15000
20/40	15000

This isn't valid for lockable gas springs and traction springs!

Attention: The figures refer to the average pressure range of the respective size.
Some connectors such as elbow joints may not be suitable for the above values.
In case of high limit stop forces as well as for permanent load, we recommend an additional mechanical limit stop.
In case of reaching the limit range or a permanent use as limit stop please contact Bansbach easylift.

6. Gas springs should be installed with the piston rod downwards. This position ensures the best damping effect. Only Bansbach gas springs include an integrated grease chamber which allows different directions of installation.

7. Gas springs should not be exposed to any tilting or sideforces during operation. If this is unavoidable, please check the installation and use suitable connecting parts.

8. If gas springs are damaged visibly (broken or deformed connecting parts, bended piston rod, dented cylinder) due to external cause (accident, collision, extreme overloading,...) the pressure has to be released before the gas spring is being dismantled or used. Please note our disposal and recycling instructions!

9. Gas springs are maintenance-free. Do not grease or oil the piston rod.

10. The piston rod must not be painted and should be protected against shocks, scratches and dirt as well as against aggressive and corrosive media. The cylinder should not be deformed. Any such damage will destroy the sealing system.

11. Bansbach gas springs usually can be stored in any position. Pressure loss through long storage is not to be expected. There are no negative values known, but there may be a sticking effect the first time you compress a spring, which may require a higher expenditure of force the first time (initial breakaway force). Please contact Bansbach easylift for special instructions about your specific gas spring.

12. Warranty claims expire latest 1 year from date of production. Manufacturing mistakes and/or quality defects are immediately noticeable. If you are unhappy for any reason with the delivered quality, we ask you to return the springs immediately. Your complaint and a copy of the original invoice must be enclosed.

13. If gas springs are sent to us for a detailed examination, the agreement for the demolition of this part is given and the property right expires.
A return delivery of single components is not possible.
If applicable please assign the delivery with e.g.: "For functional testing and please return the parts back".
Is no objection available, the delivered gas springs will be disposed 1 week after the announcement of the test result.
Basically applies: For unjustified claims we reserve the right to charge a lump-sum or the actual costs incurred for handling and disposal.

14. Bansbach gas springs which mostly consist of parts held in stock – are produced due to customer's orders. A cancellation, modification afterwards, change or refusal is therefore not possible.

15. Bansbach gas springs are built and tested for highest requirements and highest reliability. Installation advices as well as our comprehensive advice will help you in choosing your gas springs. But:

The examination of the suitability for the respective application has to be executed by the customer!

You aren't allowed to use in this application not suitable and faulty products.
We can not assume any liability for the function and the lifetime of your final product.

16. The gas spring accessories (such as releases systems for lockable gas springs) have been developed and matched to Bansbach gas springs.
A function with third-party products cannot be guaranteed.

17. Damping characteristics can create vibrations which lead to a resonator within the application and may cause noise. Little changes concerning the installation or the attachments may help to avoid them.

18. You can select your best dimensions yourself, within the mentioned limits. The tolerance for the lengths is generally deemed to be ± 2,5 mm; in series production, there is a tolerance of max. ±1mm. If very high demands are placed on durability and stability, please avoid the combination of small diameter + long stroke + high force.