

Gas Springs – New Generation FOR YOUR SAFETY



Maximum safety for persons and tools: At FIBRO, safety and reliability are paramount.

Particularly when it comes to our gas springs. With their unique range of safety features, FIBRO gas springs are one of the safest on the market.

FIBRO safety features ¹⁾



PED approval for 2 million strokes

FIBRO gas springs are developed, manufactured and tested for a minimum of 2 million* full strokes in accordance with PED 2014/68/EU. The springs deliver this full performance at the maximum permissible limits in terms of filling pressure and operating temperature – even when combined with any of the various mounting types available.

* Calculation value for durability

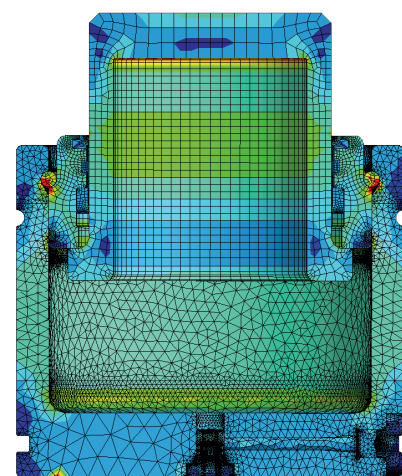
The benefit for you:

► **Guaranteed safety and reliability for the entire service life of the spring**

Repair kits and qualified training sessions available through FIBRO Service offer increased effectiveness and process reliability.

Manuals

All current operating instructions are available under the link www.gassprings.fibro.com or can now also be scanned from the QR code of the label.



Overpressure protection

Conventional gas springs can burst if the internal pressure rises above a maximum permitted value. If this happens, parts flying around can become dangerous projectiles.

FIBRO gas springs are different:

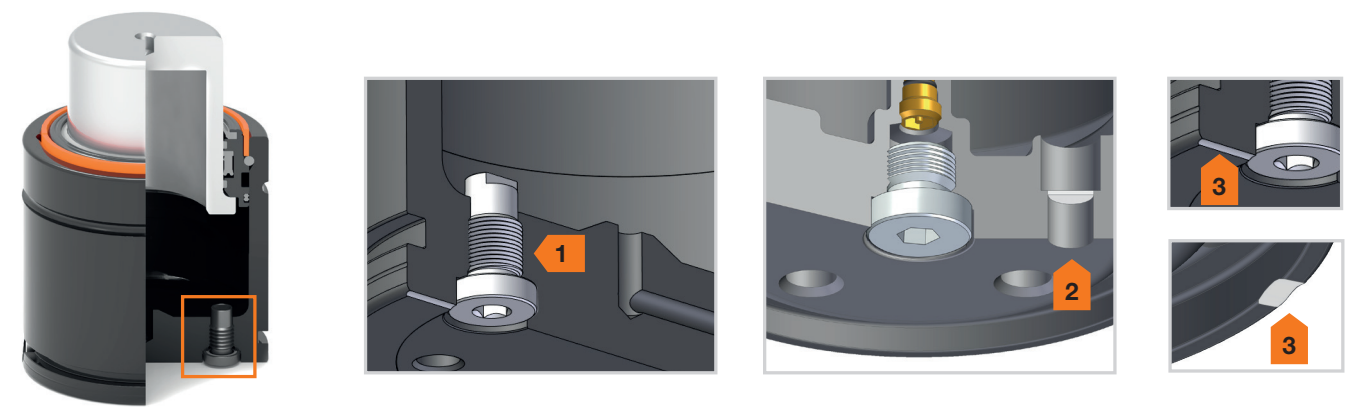
if the pressure rises above the maximum permitted value, the safety collar on the sealing set is automatically destroyed. The gas then escapes into the atmosphere and the gas spring is depressurised.

The benefit for you:

► **No risk of bursting parts in the event of overpressure**

Possible causes of triggering:

Incorrect filling (max. filling pressure 150 or 180 bar, nitrogen), infed of liquid operating material, etc.



- | | | |
|---|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Bursting screw | This is standard for:
2482.77. - 2480.24. - 2480.25. - 2480.15. - 2488.15. - 2487.15. - 2487.15.33. -
2485.15. - 2490.15. - 2497.15. |
| 2 | Overpressure membrane | |
| 3 | Evacuation groove | |



Overstroke protection

Conventional gas springs may burst in the event of an over-extended stroke. Components may come loose and be ejected.

FIBRO gas springs are different:

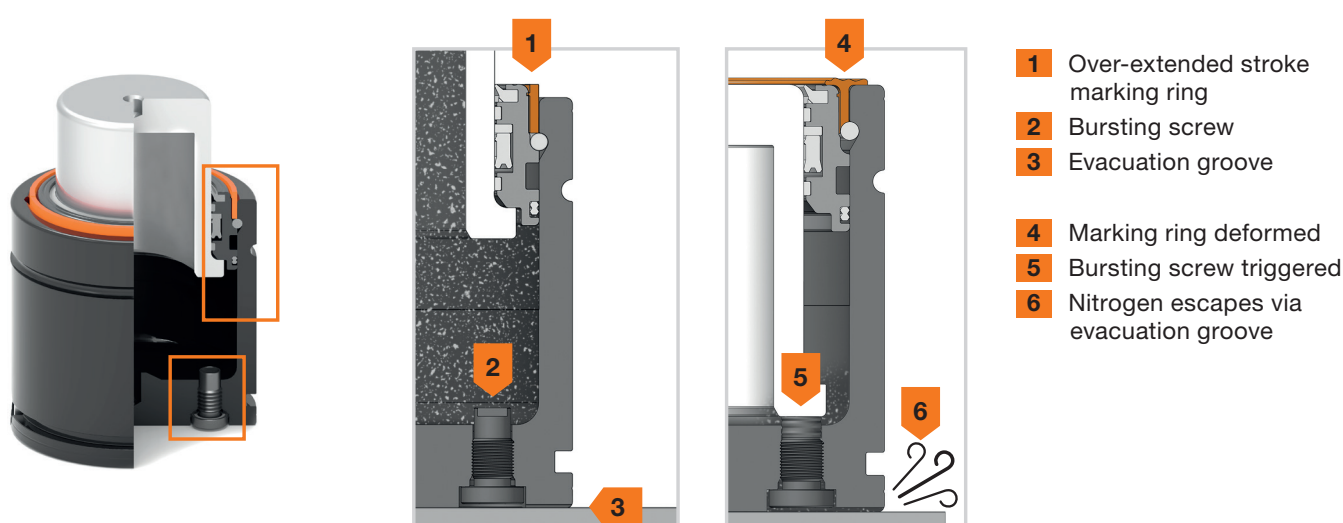
If an overstroke occurs, depending on the type of spring, the patented protection systems ensure that either the piston rod destroys a rupture screw in the cylinder base or the seal on the cylinder wall of the gas spring deliberately loses its sealing function.

The benefit for you:

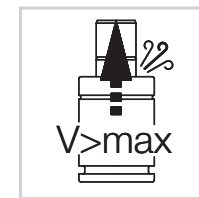
► **No risk of parts flying around in the event of an overstroke**

Possible causes of triggering:

Lack of stroke limitations in the tool/machine and placing the piston rods under a load (e.g. sheet-metal holder, slide reset, etc.), double sheet, incorrect installation position, etc.



- This is standard for:
2482.77. - 2480.24. - 2480.25. - 2480.15. - 2488.15. - 2487.15. - 2487.15.33. - 2485.15.



Return stroke protection

If, for any reason, tool components should get stuck and the piston rod should be freely released from its compressed position, conventional gas springs may pose a safety risk as the piston may not be retained in the gas spring. Conventional gas springs may burst in the event of an over-extended stroke. Components may come loose and be ejected.

FIBRO gas springs are different:

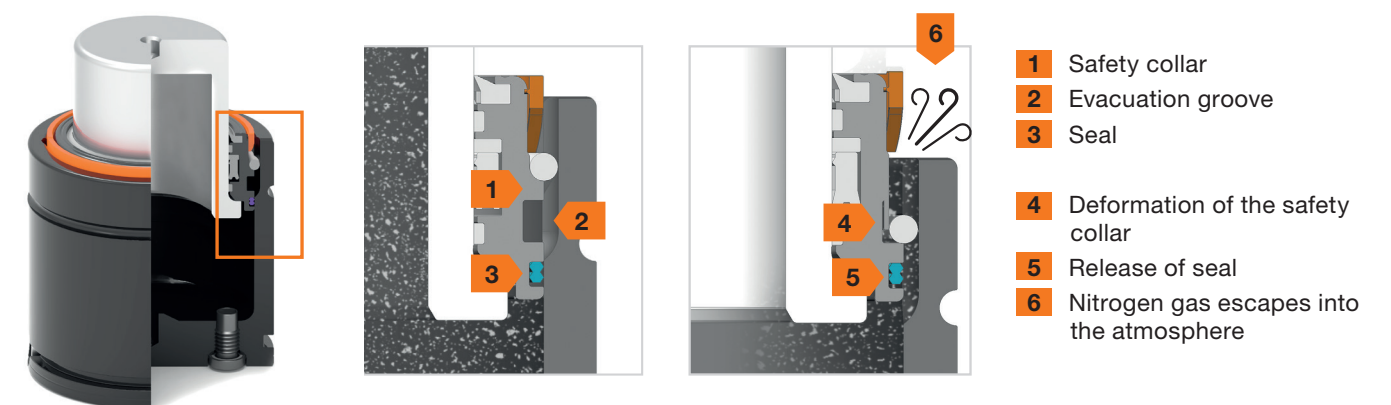
Special sealing inserts in combination with evacuation grooves ensure safety. If the speed is too high during the return stroke, the collar in the sealing insert will automatically break. The integrated evacuation grooves in the cylinder tube allow the gas to escape into the atmosphere and the gas spring becomes depressurised.

The benefit for you:

► **No risk of a piston rod firing out if the return stroke is too fast**

Possible causes of triggering:

Sudden loosening of jammed components, such as sheet-metal holder, slide, ejector, scraper function, etc.

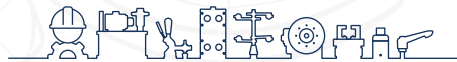


- This is standard for:
2482.77. - 2480.24. - 2480.25. - 2480.15. - 2488.15. - 2487.15. - 2487.15.33. - 2485.15.

After a protection function is triggered, the spring cannot be repaired and can no longer be used. It must be replaced completely.

¹⁾ The safety features mentioned here have been implemented – with few exceptions – on all FIBRO gas springs (similar functionality in 2497.15 and 2490.15). Please refer to the relevant data sheets to check the current safety equipment which is provided with the gas spring you are interested in, or contact FIBRO GmbH directly for more information. For the safe handling of gas springs and other nitrogen products, the safety regulations must be observed. Maintenance work on the product may only be done, if nitrogen gas is no longer contained in the gas spring.





inf @ /CESEHSA.com.mx

