

**OVERVIEW** 

# New Generation <a href="#">T Gas Springs</a>







## Gas springs The new generation

#### Your advantages at a glance

#### Consistent geometry

Dimensions, forces and fastening options are almost identical to the current version almost identical and therefore 1:1 interchangeable.

#### Higher performance

Due to the one-piece piston rod, the piston speed is increased and a higher output can be achieved. a higher output can be achieved.

#### High-quality safety features

The new generation complies with VDI 3003, 3004 and ISO 11901 and our high-quality safety features.

The visual overstroke marking with an orange-colored dirt protection ring is easy to recognize.

#### Permanent legibility thanks to laser marking

Permanent laser marking of the article number with new counter number, e.g. Gas spring, POWER LINE:

"2487.12.02400.032" becomes "2487.15.02400.032"

### Wide range of products and first-class service

#### Our new generation

- + Spring Plungers with a hexagon socket according to VDI 3004
- + Gas springs in small dimensions with low spring force
- Standard gas springs
- + Gas springs with increased spring force HEAVY DUTY
- Gas springs with increased spring force and low shut-height POWERLINE, also with reinforced spring base
- MAXFORCE gas springs high forces in a small installation space
- Compact gas springs
- + Gas springs with low shut-height
- + Gas springs with external thread
- Controllable gas springs

#### Your service partner

Our service team is at your disposal worldwide – for example, to carry out set-up and upkeep of gas springs or to support you with the correct integration, not only for FIBRO gas springs, but also for third-party brands. Our service team also refills springs.

We also offer training courses on the correct handling of gas springs for your employees – including on-site training at your premises.

#### **#FIBRO**



## FOR YOUR SAFETY



#### 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.



### Protected piston rods: The FIBRO-TEX and piston cover

The FIBRO piston rod protection, FIBRO-TEX and the piston cover \* reliably protects the piston rod of the gas spring against dirt, oil, and emulsion. This prevents damage to the surface of the piston rod and leakage at the inner seals.

\* Standard for gas springs, KOMPAKT

#### The benefit for you:

 Significantly longer service life for gas springs under harsh operating conditions



#### Wireless monitoring:

### The Wireless Pressure Monitoring (WPM) System

The Wireless Pressure Monitoring System (WPM) (patent pending) wirelessly monitors the pressure and temperature of FIBRO gas springs. Before a defective part is produced, the press operator receives a message from the WPM and can take appropriate action.

#### The benefits for you:

- Preventative quality assurance
- High process reliability
- Minimised tool down time
- Reduced maintenance and costs

Potential faults are individually displayed. As a result, service intervals can be extended. Maintenance and repair costs are reduced.



#### **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.

## FOR YOUR SAFETY



#### 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 permissible value, the pressure relief diaphragm or the bursting screw in the spring base is triggered. The gas escapes to the outside and the gas spring is depressurized. 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), infeed of liquid operating material, etc.



#### **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:

In the event of an over-extended stroke, the patented protection system (depending on the spring type) ensures that either the piston rod destroys a bursting screw in the base of the cylinder or the seal on the cylinder wall of the gas spring loses its sealing function in a specific way.

#### 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.





#### **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.

#### 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.



safety features

You will find on our website



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