Overload protection system

The system is designed for controlled exhaust between the seal and the piston rod via a built-in safety stop and a specially designed guide rail.

The benefits to you

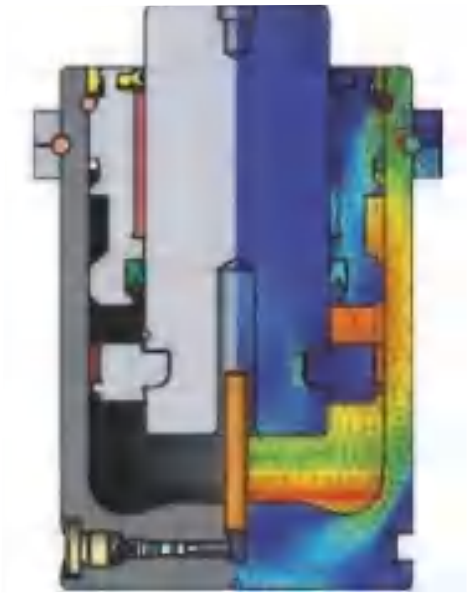
This feature reduces the risk of mold damage or injury if a CAM or die part driven by a pneumatic spring becomes stuck.

Overpressure protection system

The BBK-JINGBA overpressure protection system is designed to discharge excess air pressure in a controlled manner.

The benefits to you

This feature reduces the risk of module damage or personal injury when the in ternal air pressure exceeds the maximum allowable limit.



The concept has been adhered to since its introduction in 2008

BBK-JINGBA training program

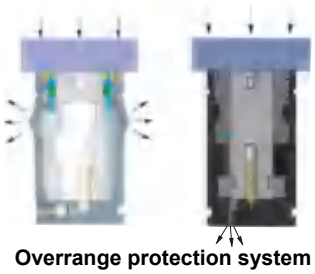
It is important to understand the most basic pneumatic spring technology, both theoretically and practically. This basic knowledge, together with training for more advanced products, is the essence of the BBK-JINGBA training program.

The benefits to you

Training is a useful tool for maintaining high quality, continuous progress, and guaranteed income. To fully understand and recognize the importance of safe and reliable performance, BBK-JINGBA's training program is undoubtedly the best and most creative way.

BBK-JINGBA Security application

Fake and inferior products may bring danger. With the BBK-JINGBA Safety application, you can identify, verify and manage your BBK-JINGBA air springs to avoid unnecessary risks.



Overrange protection system

The benefits to you

Our BBK-JINGBA security application can help you create a safer work environment. For more information.

Overload protection system

Overpressure protection system

BBK-JINGBA's safety features reduce the risk of product damage and personal injury

Overrange protection system

By design, the pressure spring deforms and depresses in a predefined manner in the event of an overshoot.

The benefits to you

This feature reduces the risk of mold damage or personal injury due to high pressure component separation in the event of overshoot of the pressure spring.

PED certified for 2 million strokes

The BBK-JINGBA pneumatic spring is designed, manufactured and tested according to PED 97/23/EC and can withstand 2 million full strokes.

The benefits to you

BBK-JINGBA products are PED certified for 2 million strokes, which ensures a safer part life under maximum operating conditions.

The G3T system

Our G3T system
Buffer the movement of the side piston rod, reduce friction and reduce operating temperature.

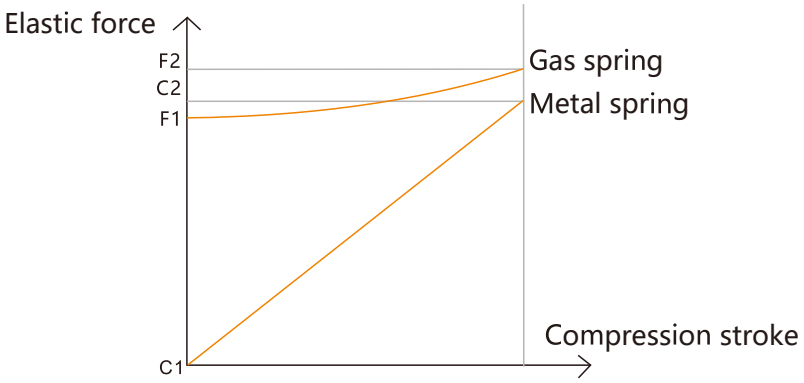
The benefits to you

Extended service life, allowing more strokes per minute, and allowing greater lateral movement of modules.

Overview

1.Mold special - nitrogen spring

The special nitrogen spring for mold (referred to as the die nitrogen spring or nitrogen spring or nitrogen cylinder or nitrogen cylinder) is a new type of elastic component with high pressure nitrogen as the working medium. It has small size, large elasticity, long stroke, smooth work, precision manufacturing, long service life (one million times), gentle elastic curve, etc. It has the performance of conventional elastic components such as metal spring, rubber and air cushion, which can make up for its shortcomings, and replace conventional components to complete the work that is difficult to complete, simplifying mold design and manufacturing. It is convenient to install and adjust the mold, extend the service life of the mold, and ensure the stability of product quality. It can be used as an independent part, installed in the mold, and can also be designed as a nitrogen spring system, as part of the mold work, can be very convenient in the system to achieve constant elastic pressure and delay action, is a new generation of the most ideal elastic parts with a lot of performance.

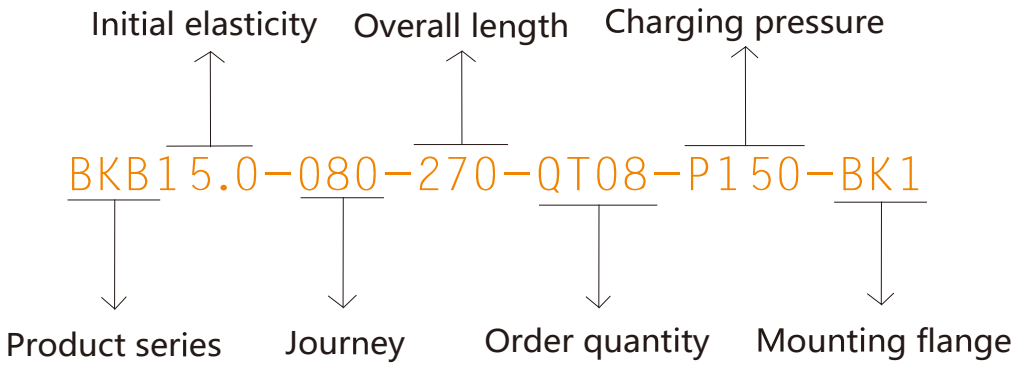


Comparison of elastic curves

1.Mold special - nitrogen spring

1. Nominal bomb pressure F: refers to the series of nitrogen spring at 20 ° C, the inflation pressure is 15Mpa after the initial state pressure: in the user has no special requirements, the initial bomb pressure value are manufactured according to the nominal bomb pressure. The nominal bomb pressure of the same series of nitrogen springs is the same.
2. Stroke S: refers to the working stroke of the model of nitrogen spring, these strokes can be fully utilized, but in order to prevent the occurrence of nitrogen spring beyond the stroke and overload in the mold replacement or debugging, it is recommended to retain ⩽5mm or 10% of the spare stroke in the design.
3. Total length L: refers to the manufacturing length of the type of nitrogen spring, that is, the maximum length in the natural state, which must meet:Total length L⩾ base length J+2X stroke S.
4. Working life: under the correct installation and correct use, the working life of the nitrogen spring (stroke ⩽50mm) is more than 1 million times. If the stroke is greater than or equal to 50mm, the actual cumulative stroke of the nitrogen spring will be calculated as its life. That is, Working life = 100,000m ÷ (actual travel X2).

3.Nitrogen spring identification model parameter method



Example: BKB15.0-080-270-QT08-P150-BK1
It is a special nitrogen spring for the "ISO standard" mold, with a nominal bomb pressure of 15.0KN (that is, 1.5T) and a stroke of 80mm, and a total length of 270mm in the natural state. The diameter of the piston rod is 36mm, and the outer diameter of the working cylinder is 75mm. The nitrogen spring is connected to the system using the pipeline (it can not be marked when it is used independently) The installation attachment of the BK1 bottom groove pressure plate (it can not be marked when it is not ordered or ordered separately); The inflation pressure is 15Mpa (if 15Mpa or connected system is used , it can not be marked)

4.Characteristics of nitrogen spring

1. Durable

Product piston rod after precision machining, good wear resistance, surface HV1000 or more, HRC40 or more precision Ra0.02um or less, high quality piston rod and the world's top TSS seal high-performance seal
The device ensures the long-term life of the nitrogen spring, the product has been tested by the national automobile quality supervision center, the quality is qualified, after the completion of the effective travel, the pressure reduction rate is below 5%, fully in line with international standards.

2. Can reduce costs

The nitrogen spring has the characteristics of small volume, large elasticity, long life and constant elastic pressure. Small volume can save the mold space, large elastic pressure can reduce the number of springs, long life can reduce the number of mold maintenance, so the total cost of the mold is reduced.

3. Absolute security

The design of the product is fully based on the premise of safety, and the design of improper use of safety pressure relief tank under unconventional circumstances; In addition, compared with the pipe welding molding process used in other products, the company adopts the integral cutting molding method and automatic unique welding process to ensure the safety and reliability of products.