



Gas Springs | Damper Solutions

« Providing quality engineered solutions that you can rely on, time and time again. »



CAMLOC® GAS SPRINGS AND DAMPER SOLUTIONS Support for safely lifting, positioning, lowering and counterbalancing weights

Camloc[®] solutions offer a high versatility and a wide range of applications.

What is a gas spring?

In simple terms, a gas spring is a sealed energy source containing a pressurised inert gas (Nitrogen) and a small amount of oil. Being self contained units, they require no power source or maintenance. Manufactured in either mild or stainless steel, they are of tough rigid construction with high structural integrity.

Why Camloc gas springs?

Camloc gas springs incorporate proven engineering techniques, with thousands of cycles of testing, to ensure they meet the standards demanded by customers. Camloc gas springs are produced to the highest international standards, including BS EN ISO 9001. Camloc[®] products are used across sectors including rail, aerospace, the military and signage.

A wide range of products and individal solutions

A wide range of size options is available, covering rod diameters from 6 mm to 14 mm and tube diameters from 15 mm to 28 mm. The weight range supported by Camloc gas springs can be from a few kilos up to half a tonne (5000 Newtons). In addition to the extensive selection of standard solutions, individual solutions are also possible. Please contact your local Bossard sales representative!



SWIFT & SURE Compression gas spring



The popular standard fixed force gas strut – the Swift and Sure – is available in an extensive range of sizes with a wide range of end connectors and brackets.

- Self-contained unit
- Maintenance-free
- Fixed and variable force options
- Optional piston rod shroud available
- Free custom design service
- Sized to your application

STOP & STAY Multi-Positional gas spring



Stop and Stay and Stop and Stay + both enable multi-position holding of a counter-balanced weight over the full stroke of the strut.

- Multi-Positions holding of counter-balanced weights
- Positional control
- Choice of either adjustable or pre-set type friction control
- Available in stainless steelw
- Safe and easy to operate
- Available with Vari-Lift[™] valve

ECONOLOC Self-locking gas spring



Econoloc eliminates the need for separate safety rods. Positively locking when fully extended, they protect users from injury in the event of overload or misuse

- Eliminates the need for separate safety rods in critical lift-assist operations
- Operates automatically
- Safe & easy to use
- Self-contained unit
- Maintenance free

BLOCKLIFT Locking gas spring



The Blocklift range includes four products suited to a variety of applications including the BL1 which remains rigid in extension, the BL2 which remains rigid in compression, the BL3 with elasticity and cushioning and the BL4, which remains rigid in both extension and compression.

- Locks in any position on the length of stroke
- Single-handed operation
- Safe to use with easy positional control
- Self-contained unit and maintenance-free
- Available in carbon or 316L stainless steel

Adjustable force gas spring



Vari-Lift[™] is the adjustable force version of the Swift & Sure designed to be de-gassed whilst in position on the application, saving you both time and effort.

- No need to calculate force
- Adjustable to any force within range
- Force can be adjusted after installation
- Simple adjustment using standard tool supplied
- Ideal for prototyping and short production runs
- Available as an option on most types of Camloc gas springs
- Ideal where application weights vary
- Available in stainless steel

STAINLESS STEEL Enduring & Lasting



Camloc 316L grade Stainless Steel gas springs give increased corrosion resistance in harsh environments such as marine, food, pharmaceutical and chemical.

- High corrosion resistance especially in the marine environment
- 1000 hours salt spray tested
- 316L stainless steel rod & tube
- Custom designed to your application
- Top quality Stainless Steel Rods

BESPOKE DAMPERS

Cam shoc



Cam-Shoc dampers are self-contained, maintenance-free, hydraulic damping units. They are designed and engineered to absorb, meter and control kinetic energy.

- Self-contained unit
- Maintenance-free
- Compact design
- Durable and reliable
- Custom damper design, sized to your application

ACCESSORY End fittings



Manufactured in a range of materials including nylon, steel, stainless steel and zinc to suit both your gas spring and application perfectly.

- Steel Ball Joints
- Nylon Ball Joints
- Steel Eyes
- Nylon Eyes
- Zinc Eyes
- Steel Clevis Forks

FIXATION Mounting brackets



Camloc designs its mounting brackets and pins to offer customers a wide range of options to suit almost any application.

- Easy installation
- A wide range of end fit options available
- Salt spray tested under ASTM B117

PROVEN PRODUCTIVITY - A PROMISE TO OUR CUSTOMERS The strategy for success



From years of cooperation with our customers we know what achieves proven and sustainable impact. We have identified what it takes to strengthen the competitiveness of our customers. Therefore we support our customers in three strategic core areas.

Firstly, when finding optimal **Product Solutions**, that is in the evaluation and use of the best fastening part for the particular function intended in our customers' products.

Second, our **Assembly Technology Expert** services deliver the smartest solutions for all possible fastening challenges. Our services cover from the moment our customers developing a new product, to

assembly process optimization as well as fastening technology education for our customers' employees.

And thirdly, optimising our clients' productions in a smart and lean way with **Smart Factory Logistics**, our methodology, with intelligent logistics systems and tailor-made solutions.

Understood as a promise to our customers, "Proven Productivity" contains two elements: Firstly, that it demonstrably works. And secondly, that it sustainably and measurably improves the productivity and competitiveness of our customers.

And this for us is a philosophy which motivates us every day to always be one step ahead.

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