

# LOCKABLE GAS SPRING



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General information

## STANDARD RANGE

Our standard range of lockable gas springs comprises 70 different items that can be combined with a number of operating controls and end fittings.

You can find details of our standard range of lockable gas springs and operating accessories on pages 194–197.

We can also offer variants of lockable products or products produced to your own custom specifications. More information about the custom variants we produce can be found on page 193.

You can also visit our website, [www.lesjoforsab.com](http://www.lesjoforsab.com), which features all the latest product news.

## FIELDS OF APPLICATION

Lesjöfors lockable gas springs are used in situations where you want to lock stroke movement in the required position without using external locking mechanisms.

Typical areas of use include stepless desk setting, chair seats and chair backs, fitness machines, control panels and consoles, beds and patient equipment. In short, all applications where ergonomic requirements demand stepless setting.



## TECHNICAL INFORMATION

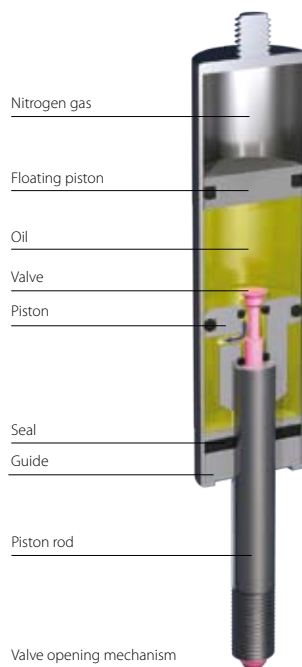
The lockable gas spring has a piston with a built-in valve, which can be opened and closed by the user via a mechanism integrated in the end of the piston rod. In the closed position, no oil or gas is allowed to pass by the piston, locking the stroke.

Lockable gas springs with a rigid locking function have oil on both sides of the valve-equipped piston. A certain volume of nitrogen, separated from the oil, produces gas spring characteristics. Lockable gas springs with a sprung (elastic) locking function have nitrogen on both sides of the valve-equipped piston.

## LOCKABLE GAS SPRING TYPE RLE

The Lesjöfors lockable RLE (Rigidly Lockable in Extension) gas spring is part of our standard range and is the most universal of the lockable products available. The valve-equipped piston in the RLE spring is enclosed by oil on the piston side of the tube. The other end of the tube contains a small amount of compressed nitrogen gas, separated from the oil by a floating piston. This design produces a high, rigid locking force in the direction of extension.

RLE springs are suitable for use in various applications, including adjustment of back supports or the raising and lowering of work surfaces, screens, desks and instrument panels.



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General information



## CUSTOM RANGE

As with our conventional gas springs, we can offer custom solutions and special products for situations when our standard range is insufficient.

In addition to special lengths, forces, colours, finishes and end fittings for RLE products, we can also offer the following other product types.

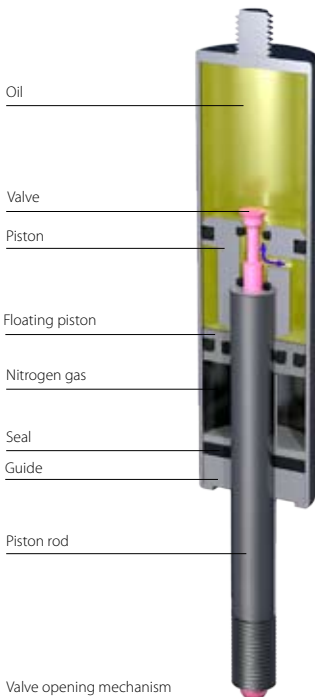
### RLC (Rigidly Lockable on Compression)

Lockable RLC gas springs have a floating piston enclosing the piston rod. This separates the nitrogen gas closest to the tube's piston rod side from the oil in the rest of the tube.

This design ensures that a rigid and high locking force is obtained in the direction of compression.

RLC is suitable if you want rigid locking of designs where heavier loads may occur in the gas spring direction of slide.

Common applications include care beds for heavier patients, massage tables and suchlike.



### EL (Elastically Lockable)

This product type has no floating piston and has nitrogen gas on both sides of the valve-equipped piston instead of oil, meaning that it can provide sprung locking in both directions.

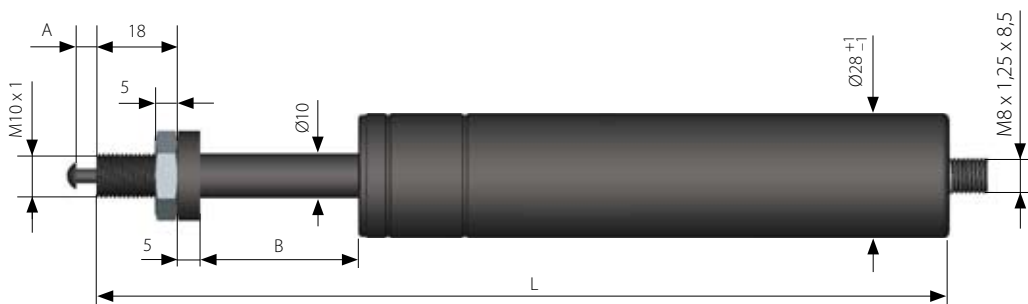
A lockable EL gas spring is ideally suited for instances where energy absorbing deflection is required in both directions.

One example of this area of use is furniture where sprung comfort is required.



# LOCKABLE GAS SPRING

TYPE 28-10 RLE



## Rigid locking in direction of extension

All dimensions are in mm

L = Length +/- 2

A = Release movement = Max 3,5

B = Stroke

F1 = Spring force in Newtons

Force range: 200-1000 Newtons

Locking force: 7000 N in direction of extension  
5 x F1 in direction of compression.

Release mechanisms See pages 195-197.

Fittings for tube end: See pages 179-190.

1 kp = 9.80665 Newtons, 1 Newton = 0.10197 kp

L	B	F1	Cat. no.
130	15	200	9383
130	15	300	9384
130	15	400	9385
130	15	500	9386
130	15	600	9387
130	15	800	9388
130	15	1000	9389
160	25	200	9390
160	25	300	9391
160	25	400	9392
160	25	500	9393
160	25	600	9394
160	25	800	9395
160	25	1000	9396
191	35	200	9397
191	35	300	9398
191	35	400	9399
191	35	500	9400
191	35	600	9401
191	35	800	9402
191	35	1000	9403
270	55	200	8001
270	55	300	8002
270	55	400	8003
270	55	500	8004
270	55	600	8005
270	55	800	8006
270	55	1000	8007
270	75	200	9405
270	75	300	9406
270	75	400	9407
270	75	500	9408
270	75	600	9409
270	75	800	9410
270	75	1000	9411

L	B	F1	Cat. no.
359	95	200	8008
359	95	300	8009
359	95	400	8010
359	95	500	8011
359	95	600	8012
359	95	800	8013
359	95	1000	8014
411	117	200	8015
411	117	300	8016
411	117	400	8017
411	117	500	8018
411	117	600	8019
411	117	800	8020
411	117	1000	8021
509	155	200	8022
509	155	300	8023
509	155	400	8024
509	155	500	8025
509	155	600	8026
509	155	800	8027
509	155	1000	8028
570	195	200	9412
570	195	300	9413
570	195	400	9414
570	195	500	9415
570	195	600	9416
570	195	800	9417
570	195	1000	9418
650	210	200	8029
650	210	300	8030
650	210	400	8031
650	210	500	8032
650	210	600	8033
650	210	800	8034
650	210	1000	8035

# LOCKABLE GAS SPRING

Release mechanisms

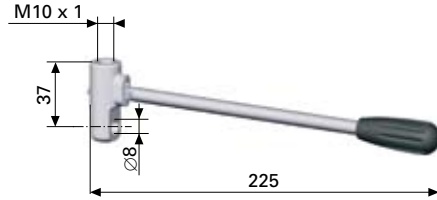


## 110. Control head with lever

For direct control of valve opening mechanism.

Material: Head in zinc, lever in steel with plastic handle.

**Cat. no. 4622**



## 300. Control head

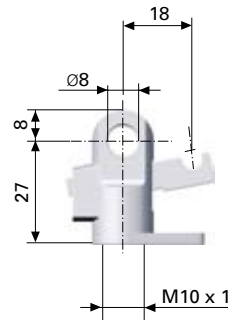
For remote control of valve opening mechanism via wires.

Approx. 8 mm wire movement required

Loop thickness: 11 mm

Material: Zinc

**Cat. no. 8050**



## 310. Control head light

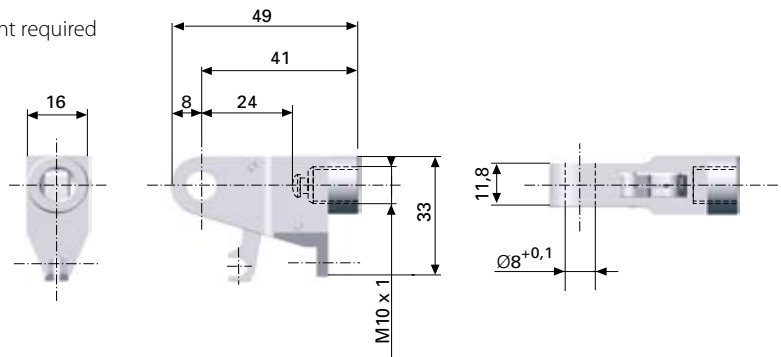
For remote control of valve opening mechanism via wires.

Release force only 2% of F1

Approx. 23 mm wire movement required

Material: Zinc

**Cat. no. 9819**



# LOCKABLE GAS SPRING

Control cables

## Complete with fittings and adjuster screw

Wire diameter: 1.25 mm

Black outer casing, diameter: 4.6 mm

Adjustment screw: M5x16

Fitting: L=7.0 x Ø=5.0

### Type A

With fittings on both ends.

Maximum wire movement 20 mm

No.	Length, mm	Cat. no.
500	500	9426
501	750	9427
502	1000	9428
503	1500	9429



### Type B

With fittings on both ends.

Maximum wire movement 33 mm

No.	Length, mm	Cat. no.
510	500	9430
511	750	9431
512	1000	9432
513	1500	9433



### Type C

With fitting on one end and the other end free for screw locking, in handles for example.

Maximum wire movement 33 mm

No.	Length, mm	Cat. no.
520	500	9434
521	750	9435
522	1000	9436
523	1500	9437



# LOCKABLE GAS SPRING

Control handles



## For wire control of control head

All dimensions are in mm

### 400 and 401. Control handle

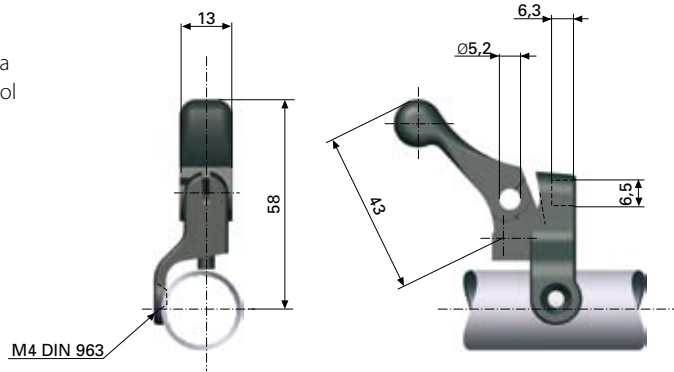
Fits wire type A.

Compatible with control head no. 300 on a gas spring with  $F_1 = \max 500 \text{ N}$  and control head no. 310.

Fitted on pipe  $\varnothing 22 \text{ mm}$

Material: Zinc / plastic

No.	fitting	Cat. no.
400	Left	9421
401	Right	9422



### 402. Control handle

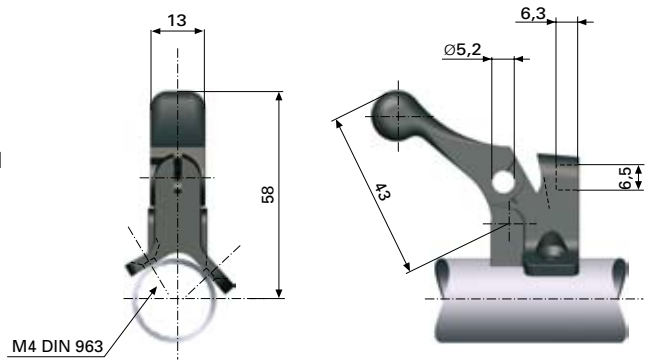
Fits wire type A.

Compatible with control head no. 300 on a gas spring with  $F_1 = \max 500 \text{ N}$  and control head no. 310.

Fitted on pipe  $\varnothing 20\text{-}25 \text{ mm}$

Material: Zinc / plastic

**Cat. no. 9423**



### 410. Control handle

Fits wire type C.

Compatible with control head no. 300.

Fitted on pipe  $\varnothing 22 \text{ mm}$

Material: Zinc / plastic

**Cat. no. 9425**

