

~~LOCKABLE GAS~~ ~~SPRING~~



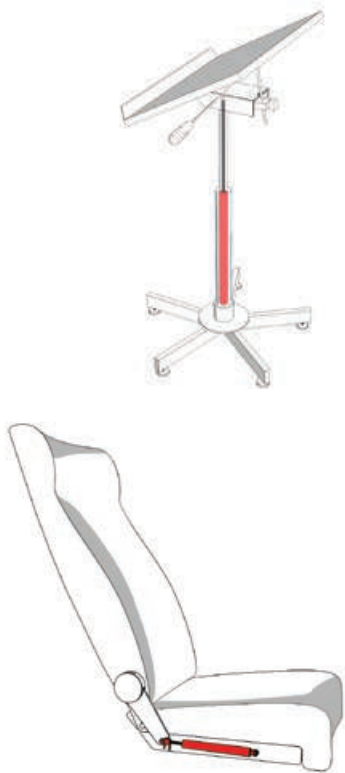
LOCKABLE GAS SPRING

General information

FIELDS OF APPLICATION

Lesjöfors lockable gas springs are used in situations where one needs to lock the stroke in a desired position, without the need for external locking mechanisms.

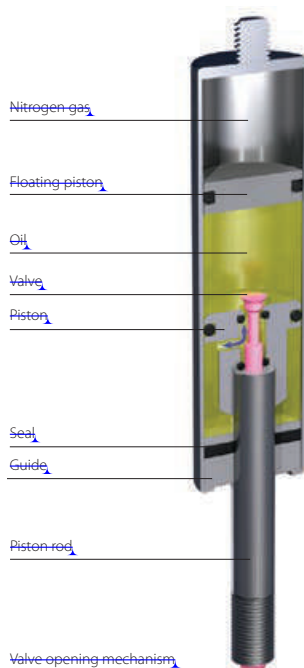
Typical areas of use include step-less desk settings, chair seats and backs, fitness machines, control panels and consoles, as well as beds and patient equipment.



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 push pin integrated at the end of the piston rod. In the closed position, no oil or gas can pass by the piston, thereby locking the stroke.

Rigidly lockable gas springs (RLE and RLC), have oil on both sides of the valve-equipped piston. A certain volume of nitrogen gas, separated from the oil, produces the spring characteristics. Elastically lockable gas springs (EL), have nitrogen gas on both sides of the piston.





RANGE

Our standard range of lockable gas springs comprises of 70 different RLE springs that can be combined with a range of operating controls and end fittings. Additionally, we can offer custom solutions for stroke, force, colors and locking types RLC and EL.

Type RLE – Rigid Locking on Extension

Lesjöfors lockable gas spring type RLE is part of our standard range. This type produces a high, rigid locking force in the direction of extension.

Locking Rigidity Under Compression	Max 5,8 * F1 (N)
Locking Rigidity Under Extension	Max 7000 (N)
Stroke (B)	10 – 250 (mm)
Extension Force (F1)	80 – 1000 (N)
Progression (K)	< 1,5
Extension Speed (v)	~0,1 (m/s)
Release Pin Force	Max 0,25 * F1 (N)
Release Pin Travel	Max 3,5 (mm)



Type RLC – Rigid Locking on Compression

Lockable gas spring type RLC is designed to provide a high, rigid locking force in the direction of compression.

Locking Rigidity Under Compression	Max 10000 (N)
Locking Rigidity Under Extension	Max 4,8 * F1 (N)
Stroke (B)	10 – 120 (mm)
Extension Force (F1)	80 – 1000 (N)
Progression (K)	< 1,6
Extension Speed (v)	~0,1 (m/s)
Release Pin Force	Max 0,25 * F1 (N)
Release Pin Travel	Max 3,5 (mm)



TYPE EL – Elastic Locking

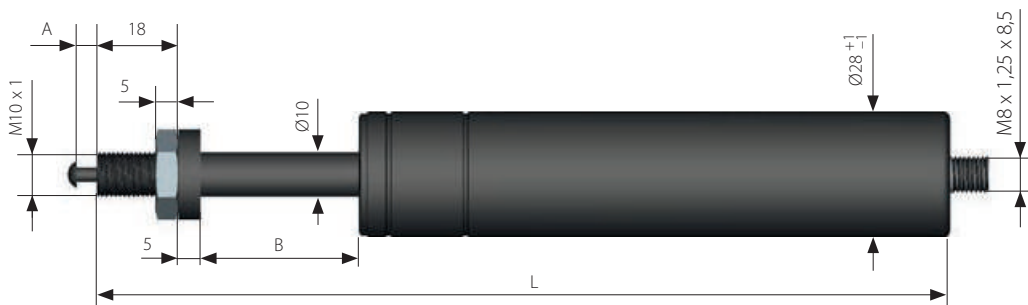
Lockable gas spring type EL, is designed to provide an elastic deflection in both locking directions.

Load Under Compression	Max 10000 (N)
Load Under Extension	Max 7000 (N)
Stroke (B)	10 – 250 (mm)
Extension Force (F1)	80 – 1000 (N)
Progression (K)	< 1,2
Extension Speed (v)	~0,1 (m/s)
Release Pin Force	Max 0,25 * F1 (N)
Release Pin Travel	Max 3,5 (mm)



LOCKABLE GAS SPRING

TYPE 28-10 RLE



Rigid locking in direction of extension

All dimensions 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 199-202

Fittings for tube end: See pages 177-191

1 kp = 9,80665 Newtons, 1 Newton = 0.10197 kp

L	B	F ₁	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	F ₁	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

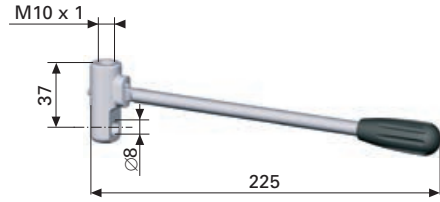


110. Control head with lever

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.

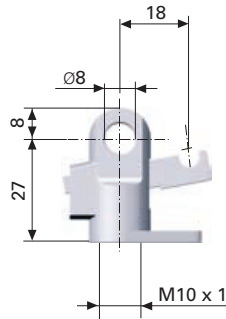
Approx. 8 mm wire movement required.

Reduction 1:2

Loop thickness: 11 mm

Material: Zinc

Cat. no. 8050



310. Control head light

For remote control of valve opening mechanism via wires.

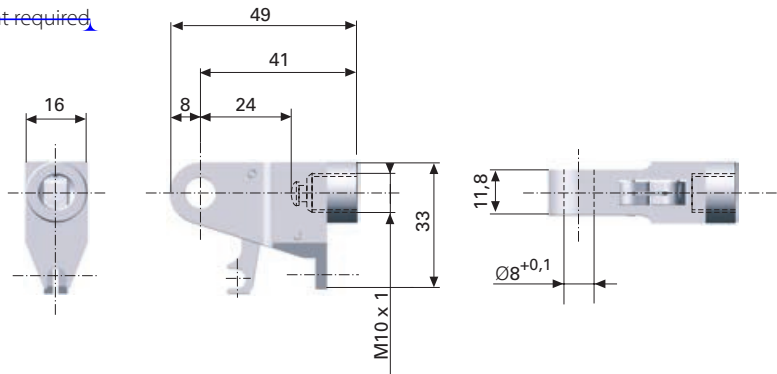
Release force only 2% of F₁.

Approx. 23 mm wire movement required.

Reduction 1:10

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





For wire control of control head

All dimensions are in mm

402. Control handle

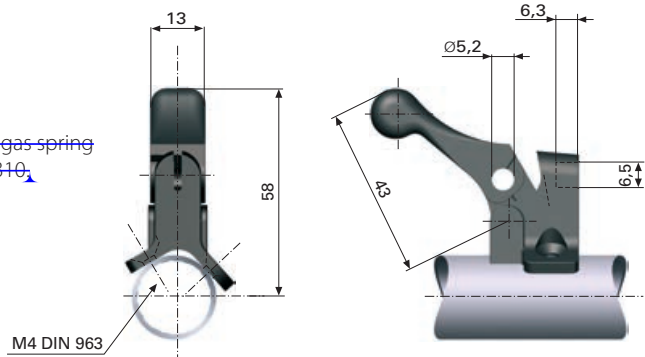
Fits wire type A

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

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

Material: Zinc / plastic

Cat. no. 9423



410. Control handle

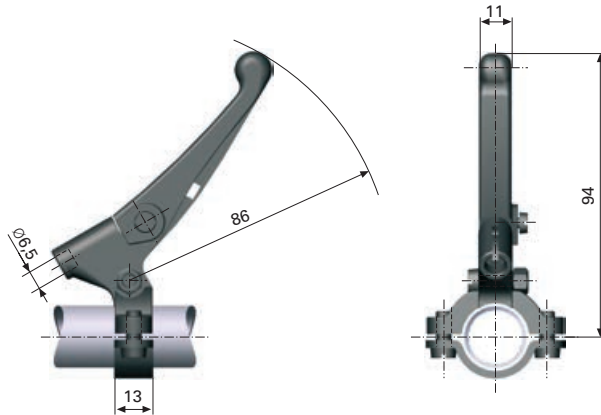
Fits wire type C

Compatible with control head no. 300

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

Material: Zinc / plastic

Cat. no. 9425



PUSH BUTTONS

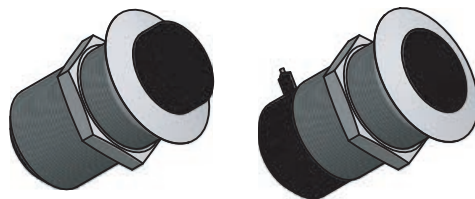
Control cables

Comes complete with bowden cable

For use in combination with Release Head 9819
 Max gas spring force = 500N

Types R = Raised Button
 F = Flat Button

A = Axial connection
 L = Lateral connection



Part Number	Type	Bowden-Cable Length (L)
650	RA	500
651	RA	1000
652	RL	500
653	RL	1000
654	FA	500
655	FA	1000
656	FL	500
657	FL	1000

