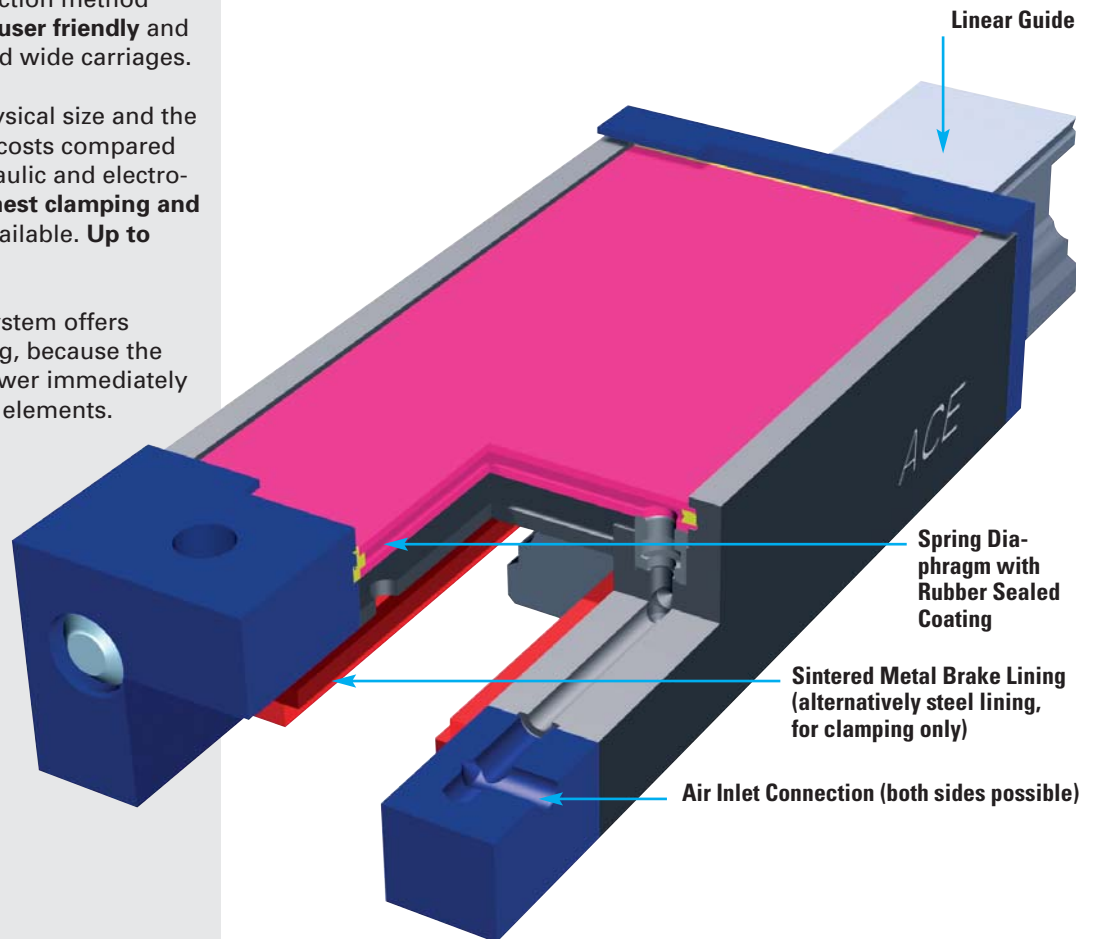


The innovative pneumatic clamping elements of the new **ACE LOCKED series L** offer a safe clamp/or brake system fitted directly on the guided rail. They are suitable for the majority of all rail sizes and manufacturers. For example, **INA, STAR/Rexroth, THK, Schneeberger** and many others are available.

The compact construction method makes the assembly **user friendly** and available for large and wide carriages.

Despite the small physical size and the very low installation costs compared with equivalent hydraulic and electronic solutions the **highest clamping and braking forces** are available. **Up to 10 000 N.**

The ACE clamping system offers optimal safety braking, because the loss of pneumatic power immediately applies the clamping elements.



**Rail sizes:** 15 to 65 mm

**Minimum holding forces:** 900 to 10 000 N (6 bar type)

**Clamping cycles/emergency use:** 100 000/500  
(for higher values please consult ACE)

**Material:** Clamping body and milled parts: tool steel; spring steel plate: spring steel; brake pads: sintered bronze or steel.

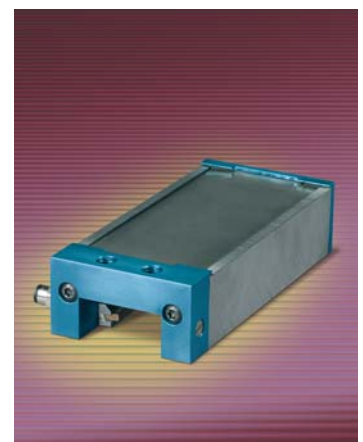
**Mounting:** In any position.

**Operating pressure:** 4 bar or 6 bar (standard type)

**Pneumatic medium:** Dried filtered air.

**Operating temperature range:** 15 to 45°C

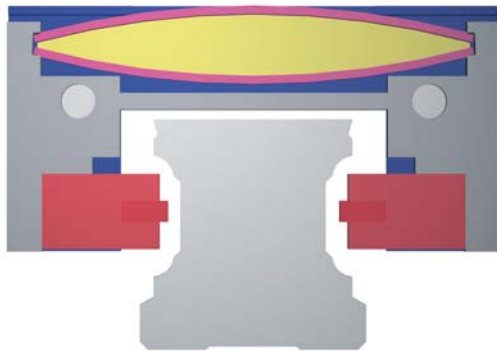
**On request:** Wipers, special profiles and removing kit.



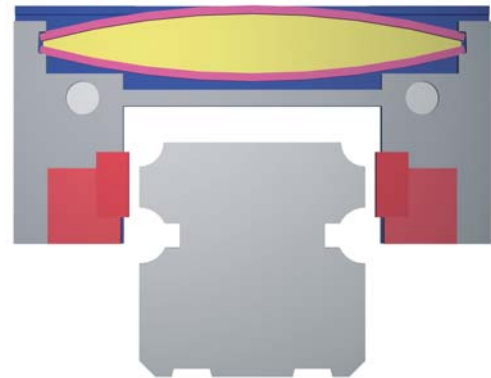
### Design and Function

#### ACE LOCKED-Series Type L Released

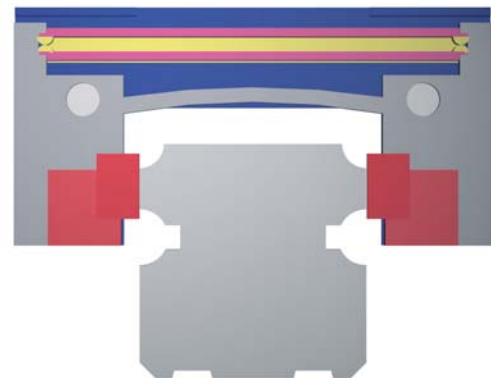
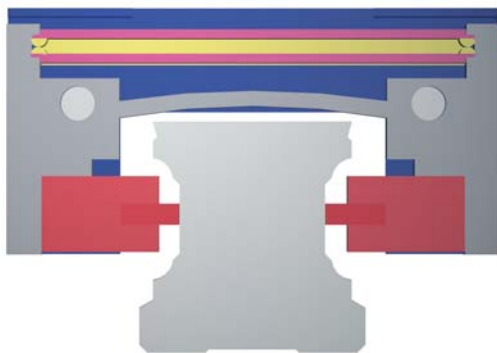
The chamber between the two flexible spring steel diaphragms is filled with compressed air. The spring plates deform and the horizontal dimension shortens. This causes the clamp shoe mounting plates to move away from the rail, releasing the clamps and permitting free movement.



Example: STAR/Rexroth-installation



Example: NSK-installation

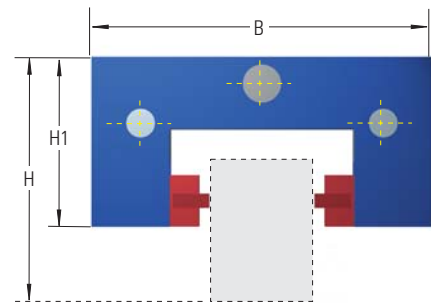


#### ACE LOCKED-Series Type L Engaged

The compressed air in the chamber between the two flexible spring steel diaphragms is released. The spring plates return to their original position increasing the horizontal dimension. This causes the clamp mounts to move towards the rail, applying the clamping shoe.

Part Number LC . . .

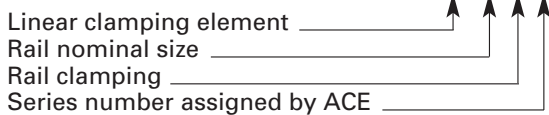
8



Starting with rail size 45, we recommend the use of a second holding block.  
Prices and dimensions on request.

**Ordering Example**

LC 25-S-X



**Complete Details Required when Ordering:**

- Rail manufacturer, rail type, rail size
- Carriage type (height/width)
- Number of clamping cycles per hour
- Operating mode (dry, oiled, greased)
- Name of oil or grease

The calculation and selection of the correct clamping device should be made or approved by ACE. To assist you, please use the request form on page 15. For general information see page 13.

**Dimensions and Capacity Chart**

Type Part number	L	B	high carriage			low carriage			B1	C	G	M	Holding Force* N	Weight kg
			H	H1	A	H	H1	A						
LC 20-S	97.5	43	30	19.5	13.5	30	19.5	13.5	6	15	M5	M5	900	0.32
LC 25-S	117.5	47	40	29	19.5	36	25	15.5	6	20	M5	M6	1 200	0.50
LC 30-S	126.5	59	45	32.5	20	42	29.5	17	10	24	M5	M8	1 800	0.90
LC 35-S	156.5	69	55	42	29.5	48	35	22.5	10	24	1/8"	M8	2 800	1.26
LC 45-S	176.5	80	70	52	36.5	60	42	26.5	10	26	1/8"	M10	4 000	2.30
LC 55-S	202.5	98	80	59	38	70	49	28	12.5	30	1/8"	M12	6 000	3.90
LC 65-S	259.5	120	100	74	48	90	64	38	15	40	1/4"	M12	10 000	5.00

\* The holding forces as shown in the capacity chart were determined on dry rails for roller systems. Different holding forces may occur for other rails. Depending on the grease used, calculate with 60% of the indicated holding forces on greased rails. Special pads with full holding forces to clamp (not brake) on greased rails are available. Release of the clamping is actioned by an operating pressure of 5.5 to 6 bar; different operating pressures on request.