

Installation and Operating Instructions

1. Security Advice:

Caution:

Please read the complete documentation carefully before starting the set-up operation!



1.1. Depending on the type of application danger will be caused by:

- Contusion during installation caused by unsecured connecting construction
- Injury as a result of improper pneumatic connections
- Malfunction of the pneumatic supply, e.g. because of pressure fluctuations
- Loose pneumatic connection
- Loose attachment screws
- Removal of the spring cap
- Not turning off the operating instrument during installation or repair works at the clamping element
- Human malpractice
- Non-observance of the information and warning facilities during installation and the set-up operation

Installation instructions have to be followed and the necessary equipment and supplies have to be used during installation, modifications, maintenance and repair. Throughout every working process on the clamping elements the appropriate accident prevention regulations, VDE security and installation instructions have to be followed.

1.2. The application of the clamping elements – in accordance with regulations – implies that this technology will be utilized exclusively in consideration of the realm of possibilities defined by technical specification. All different ways of use exclude further liability of the Zimmer GmbH.

2. Model LKP (without spring storage), LKPS (inc. spring storage)

The clamping element is preset to the appropriate track gauge ex factory. The contact sections are pressed onto the non-attached areas of the track guide. Therefore, the process of clamping does not influence the precision and the economic lifetime of the track.

2.1. Operational Area:

The LKP/LKPS models are designed for static use.

- max. surrounding temperature 70°C
- pneumatic operating pressure min. 5,5 bars, max. 8bars
- check-up of all pneumatic connections in regular intervals

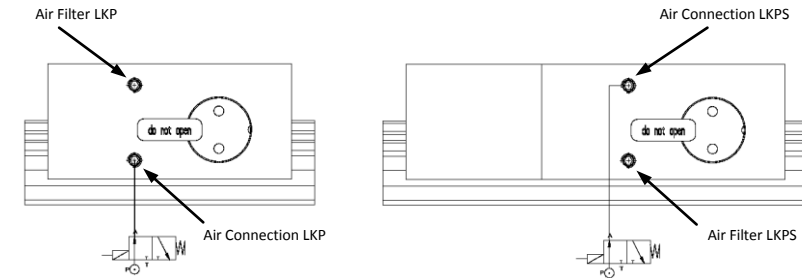
Caution:

Clamping processes during operation may cause damage of the clamping element as well as the linear guide.

3. LKP/LKPS

The model LKPS can be operated as a plain spring storage element.

Fig. 1 Diagram of Connection



3.1. For a transportation lock, the spring energy storage is pre-stressed by a spacer between the contact sections.

Caution:

It is permitted to remove the transportation lock, only if the air connection is pneumatically pressurized to at least 5.5 bars according to instructions.

It is permitted to release pressure from the clamping element, only if an associated guide rail or a transportation lock exists!

4. Installation Instructions

4.1. General:

For mounting the clamping elements, used screws have to comply with the category of solidity of min. 8.8. Attachment screws have to be tightened with the required moment (Tab.1). The maximum holding load is reached only by a rigid connection construction which must cover the complete connection surface of the clamping element.



Caution: The cap of the security clamping must not be removed, spring storage!

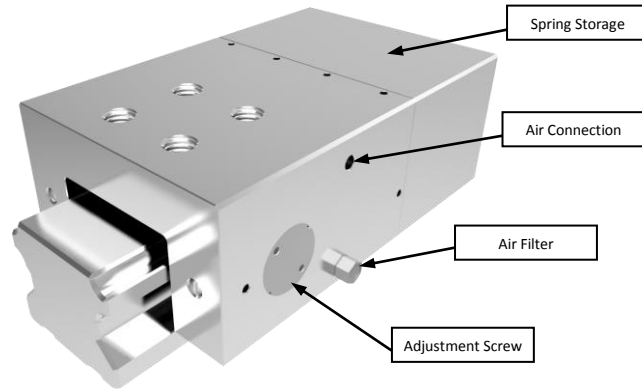
4.2. Installation / Uninstalling:

- Removal of the blanking plug
- Attachment of pneumatic connections
- Relieve Model LKPS by pressure and remove the transportation lock
- Pay attention to cleanliness and flatness of the mounting surface
- Set clamping element onto linear guide
- In case of using an adapter plate PLK, place this adapter plate between the clamping element and the connecting construction as a device of leveling
- Turn the screws loosely into the screw threads
- Clamp model LKPS by depressurizing
- Clamp model LKP by pressurizing
- Tighten attachment screws with the required moment (Tab.1)
- For uninstalling perform in reverse order

Type:
LKP/LKPS 15 – 55

Version 1.1 / 21.03.2014

Clamping Elements



Manufacturer's Statement

In terms of the EC – Machinery Directive 98/37/EC, Appendix II B

Herewith we certify that the type of construction

Product's Name: Clamping Elements

Part Number: LKP/LKPS

is – in its delivered version - intended to be installed into a machine or for the assembly with other machines in order to create a new machine, and that its start-up is prohibited until it is proved that the machine, in which the above-named machine shall be integrated, corresponds to the EC – Machinery Directive 98/37/EC.

.....
Legally binding signature (business management)

5. Operational Test

- 5.1. After the appropriate installation of the clamping element the operating readiness has to be tested

The mobility has to be tested by manually moving the slide.

The process of clamping has to be tested by manually moving the connecting construction.

The appropriate mounting of the fixed and flexible pneumatic pipe installation has to be tested by visual control.

All pneumatic connections at the pressurized element have to be visually checked for leakage.

All attachment screws have to be checked for their required moment (Tab.1).

6. Technical Data

Table 1

Size	Connection	estimated Consumption per Cycle at 6bar [cm ³]	Attachment Screws Category of Solidity 8.8	Moment in Nm [Nm]
15	M3	23	M4	2,8
20	M3	37	M5	5,5
25	M5	54	M6	5,5
30	M5	95	M8	23,0
35	M5	130	M8	23,0
45	M5	246	M10	46,0
55	M5	334	M10	46,0

Data concerning air consumption is approximate.

Technical modifications reserved.