

# Type: HK / HKR / miniHK

Version 30.06.07

## Clamping Elements



### 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
- Loose attachment screws
- Not turning off of the operating system
- 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. This clamping technology is not qualified to secure levitating loads!

##### 1.3. The application of the clamping technology - 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. The model **HK / HKR / miniHK**

The clamping technology of the model HK / HKR and miniHK 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 life-time of the track.

##### 2.1. Operational Area:

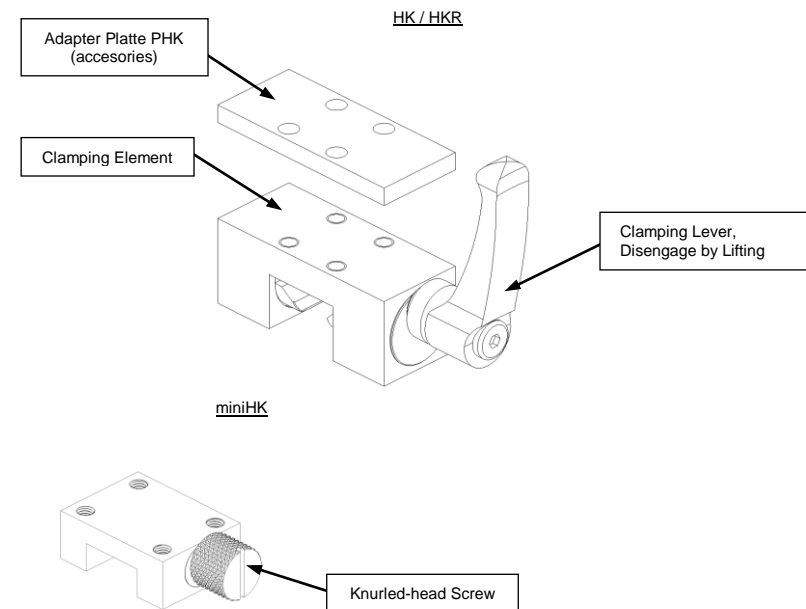
The models HK / HKR and miniHK are conceived for the process of static clamping. The HK-model is a manually operated clamping element. By operating the freely adjustable clamping lever the contact sections are synchronically pressed onto the non-attached areas of the track guide. The symmetrical force transmission onto the track guide is guaranteed by the floatingly stored contact sections. The position of the clamping lever can be changed by lifting.

- max. surrounding Temperature 70°C

##### Caution:

Clamping processes during motion can lead to damage of the clamping element as well as the linear guide.

#### 3. Schematic Illustration:



#### 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 hold strength is reached only by a rigid connection construction which must cover the complete connection surface of the clamping element.



**Notice:** The thread quality inspection made by plug thread gauge. Depth of thread is inspected by a common screw DIN EN ISO 4762

##### 4.2. Installation / Uninstalling:

- Put clamping element onto linear guide
- In case of using an adapter plate PHK, 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
- Tighten attachment screws with the required moment (Tab.1)
- For uninstalling perform in reverse order

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**5. Operational Test**

5.1. After the appropriate installation of the clamp 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.  
All attachment screws have to be checked for their required moment.

For further information please contact our technical service: 0049/7844/9138-0

**6. Technical Data**

Table 1

Attachment Screws Category of Solidity 8.8	Moment [Nm]
M 2	0,35
M 3	1,3
M 4	2,8
M 5	5,5
M 6	9,5
M 8	23,0
M10	46,0

Technical modifications reserved.

**Manufacturer's Statement**

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

Herewith we certify that the type of construction

Product's Name: Clamp Element

Part Number: HK / HKR / miniHK

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/EG.

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