

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
- Improper pneumatic connections
- Malfunction of pneumatic supply caused by pressure fluctuations
- Loose pneumatic connection
- Loose attachment screws
- 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. The Model RBPS (with spring storage and Power Modul)

The clamping element of the model RBPS is preset to the appropriate piston rod gauge ex factory.  
The piston rod must have a hardness from min. 54 HRC and a tolerance from min. f8 / g8.

2.1. Operational area:

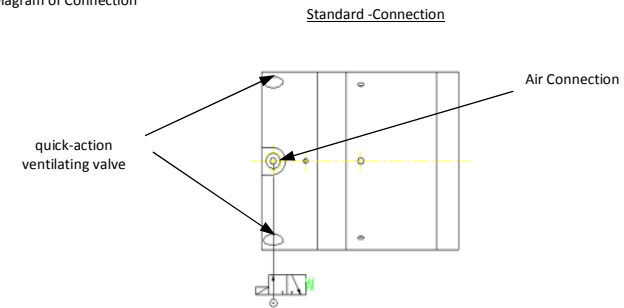
The BWPS and TKPS models are designed for static and dynamic clamping. The elements are licensed for 2.000 breaking processes. The use of specific friction lining prevents piston rod damage with dynamic usage. Short reaction rates are guaranteed by the implemented quick-action ventilating valves.

- max. surrounding temperature 70°C
- pneumatic operating pressure min 4 bar, max. 8 bar

3. RBPS

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

Fig. 1 Diagram of Connection



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 and Tab.2)



The accessibility of the elements has to be warranted, so that the abrasion parts can be changed without a major difficulty.

**Caution: The cap of the security clamp may not be removed, spring preload!**

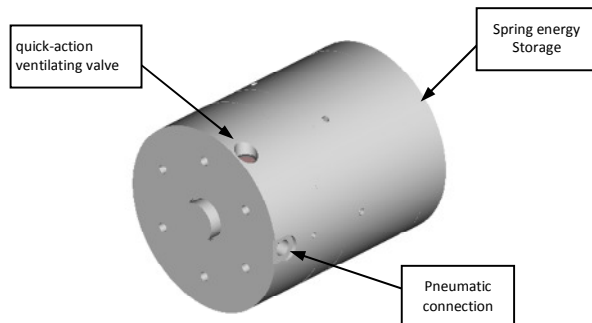
4.2. Installation / Uninstalling:

- Removal of the plastic blanking plug
- install G1/8" or G1/4" pneumatic connections
- Relieve pressure from model RBPS
- mount clamping element together with the piston rod
- turn the screws into the attachment threads and only apply the screws
- Clamp model RBPS by depressurizing
- Attachment screws have to be tightened with the required moment (Tab.1)
- For uninstalling perform in reverse order

Typ:  
RBPS 10/20/28/45

Version 08.05.2014

## Clamping Elements



### 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)

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

Non-observance of the installation and operating instruction causes the guarantee to expire.

### 6. Technical Data

Table 1

Size	Pneumatic connection	estimated Consumption per Cycle at 4bar [cm <sup>3</sup> ]	Attachment Screw Category of Solidity 8.8	tightening Torque [ Nm ]
Ø 10	M 5	86	M 5	5,5
Ø 20	1/8"	448	M 6	9,5
Ø 28	1/8"	830	M 8	23,0
Ø 45	1/4"	1454	M 10	46,0

Data concerning air consumption is approximate.  
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: RBPS

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.

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legally binding signature (business management)