

Installation and operating instructions  
**VE**  
DDOC00304  
Index 0  
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## 1 Supporting documents

### NOTE:



The following documents are available for download on our homepage. Only the documents currently available on the website are valid.

- Catalogs, drawings, CAD data, performance data
- Detailed installation and operating instructions
- General Terms and Conditions of Business with specifications for the warranty entitlement

## 2 Safety notes

### CAUTION:



Non-compliance may result in severe injuries! Injuries/malfunctions can occur especially with:

1. Installation, commissioning, maintenance and repairs may only be performed by qualified experts in accordance with these installation and operating instructions.
2. The element is state-of-the-art. It is mounted on industrial machines.
3. The element may only be used in accordance with its intended use and technical data. ZIMMER GmbH shall accept no liability for any damage caused by improper use.
4. Any use other than the intended use requires written approval from Zimmer GmbH.
5. Do not reach into the operating range of the element.
6. Make sure that the transmission lines are disconnected before you install, retool, maintain or repair the element.
7. In the event of maintenance, conversion or expansion work, remove the element from the machine and carry out the work outside the danger zone.
8. When commissioning or testing, make sure that the element cannot be actuated by mistake.
9. Modifications to the element, such as adding drill holes or threads, may be made only with prior approval from ZIMMER GmbH.
10. The specified maintenance intervals and compressed air quality specifications are to be observed; also refer to the Maintenance section. Please contact our customer service for this purpose.
11. Use of the element under extreme conditions, such as aggressive liquids and abrasive dusts, is subject to prior approval from Zimmer GmbH.

## 3 Proper use

### NOTE:



The VE series element is only to be used in its original state with its original accessories, with no unauthorized changes and within the scope of its defined parameters for use. Zimmer GmbH shall accept no liability for any damage caused by improper use.

The element is designed for operation with compressed air only. It is not suited for operation with other media such as liquids or gases. The element is properly used in closed rooms to eject or expel workpieces.

Proper use of the element also includes the forces and torques that may be acting in addition to the gripping force (see technical data sheets at [www.zimmer-group.de](http://www.zimmer-group.de)).



## 4 Personnel qualification

Installation, commissioning and maintenance may only be performed by qualified personnel. These persons must have read and understood the installation instructions in full.

## 5 Product description

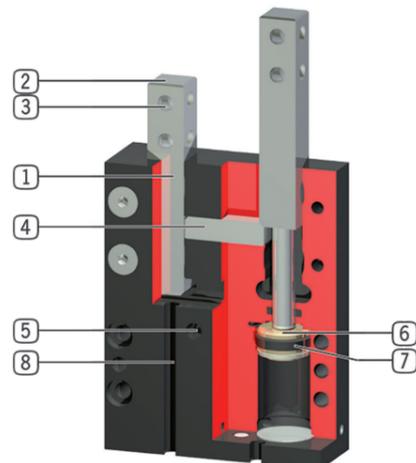
The VE series element is designed for ejecting, expelling and separating workpieces. Thanks to the robust, reliable and durable stainless steel guide, the element is perfectly suited for use with high repeatability. The element is equipped with a hardened plunger for ejecting, expelling and separating.

Fig. 1: VE separator

①	Square guide
②	Plunger
③	Bracket
④	Locking
⑤	Energy supply
⑥	Drive
⑦	Permanent magnet
⑧	Integrated slot



Fig. 2: VE separator cross-section



## 6 Installation

### WARNING:



- Risk of injury in case of unexpected movement of the machine or system into which the element is to be installed.
- ▶ Switch off the energy supply to the machine before all work.
  - ▶ Secure the machine against being switched on unintentionally.
  - ▶ Check the machine for any residual energy.

### CAUTION:



- Risk of injury in case of unexpected movement of the element when pneumatic energy is connected.
- ▶ Switch off the pneumatic energy before all work.
  - ▶ Secure the pneumatic circuit against being switched on unintentionally.
  - ▶ Check the pneumatic circuit for any existing residual energy; bleed if necessary.

The element can be fitted from several sides on a mounting surface with the necessary evenness. Position ① is available for this purpose.

Length < 100 mm → permitted unevenness < 0,02 mm  
Length > 100 mm → permitted unevenness < 0,05 mm

### 6.1 Installation positions

The dimensional drawing for the VE14 is shown as an example in the adjacent image. You will find the matching dimensional drawing of your element on our website: [www.zimmer-group.de](http://www.zimmer-group.de).

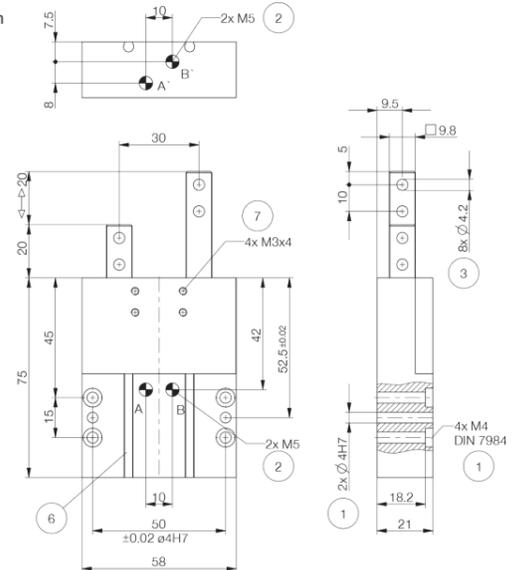
Two alternative options are available for the installation of the element.

- Fastening laterally on the housing ①.
- For more installation options, refer to your dimensional drawing.

The dimensions for the design of the mounting piece can be found on the respective data sheet on our homepage.

You can download any necessary CAD data in all formats from our homepage: [www.zimmer-group.de](http://www.zimmer-group.de)

Make the following selections:  
Handling Technology/separators/pneumatic/VE series



Depending on the size, mounting screws from M3 to M16 and of strength class 8.8 must be used.

The following tightening torques must be observed upon installation:

Screw size		M3	M4	M5	M6
Permitted tightening torque	[Nm]	1,3	2,9	6,0	10,2

### 6.2 Installing the energy supply

The energy supply ② is located on the outer edge of the housing.   
→ See the dimensional drawing in the image above.

### NOTE:



Close off the unused pneumatic connections with dummy plugs.

### 6.3 Installation of accessories

### NOTE:



Before installing the accessories, make sure it is suitable for the use of the selected variant. You can find more information on available accessories on our website [www.zimmer-group.de](http://www.zimmer-group.de).

## 7 Technical data

### INFORMATION:



Refer to our homepage [www.zimmer-group.de](http://www.zimmer-group.de) for technical data. This data varies within the series depending on the specific design. If you should have further questions about products or technical data, please contact ZIMMER GmbH customer service.

## 8 Maintenance

Maintenance-free operation of the element is guaranteed for up to **10 million cycles**.

The maintenance interval may shorten under the following circumstances:

- Operation with compressed air that does not comply with DIN ISO 8573-1 quality class 4.
- Dirty environment
- Improper use and use that does not comply with the performance data.
- Ambient temperature of more than 60°C; lubricants harden faster!

We recommend having maintenance and the replacement of seals performed by the customer service of ZIMMER GmbH. Dismantling and reassembling the element without authorization may result in complications, as special installation equipment is required in some cases.

## 9 Installer's declaration

In terms of the EU Machinery Directive 2006/42/EC (Annex II 1 B).

### Name and address of the manufacturer:

ZIMMER GmbH • Im Salmenkopf 5 • D-77866 Rheinau, Germany • Phone: +49 7844 9138 0 • Fax: +49 7844 9138 80  
Web: [www.zimmer-group.de](http://www.zimmer-group.de)

We hereby declare that the incomplete machine described below

**Product designation:** Pneumatic separator

**Type designation:** VE□□□

satisfies the following basic requirements of the Machinery Directive 2006/42/EC:

No. 1.1.2., No. 1.1.3., No. 1.1.5., No. 1.3.2., No. 1.3.4., No. 1.3.7., No. 1.5.3., No. 1.5.4., No. 1.5.8., No. 1.6.4., No. 1.7.1., No. 1.7.4.

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with electronic versions of special documents for the incomplete machine through our documentation department, should they have reason to request them.

**The incomplete machine may only be commissioned if it has been ascertained, if applicable, that the machine or system in which the incomplete machine is to be installed satisfies the requirements of Directive 2006/42/EC on Machinery and an EC declaration of conformity has been drawn up in accordance with Annex II 1 A.**

### Authorized representative for compiling relevant technical documents

Kurt Ross	See manufacturer's address	Rheinau, Germany, 2018-12-05	Martin Zimmer, Managing Director
First name, last name	Address	Place and date of issuance	Legally binding signature