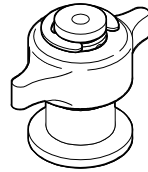




## Venting valve

manually actuated  
with screw cap  
DN 10 ISO-KF  
21320-KA01-000.  
21320-KE01-000.



Operating Manual

601462EA (2013-05)

## Validity

This document applies to products with part numbers  
21320-KA01-000. (aluminum housing)  
21320-KE01-000. (stainless steel housing)

We reserve the right to make technical changes without prior notice.

## Intended Use

The Venting valves are used for manual venting of small vacuum systems.

## Functional Principle

The Venting valve is opened by loosening and closed by tightening the screw cap.

## Safety

### Symbols Used

**DANGER**  
Information on preventing any kind of physical injury.

**WARNING**  
Information on preventing extensive equipment and environmental damage.

**Caution**  
Information on correct handling or use. Disregard can lead to malfunctions or minor equipment damage.

### Personnel Qualifications

**Skilled personnel**  
All work described in this document may only be carried out by persons who have suitable technical training and the necessary experience or who have been instructed by the end-user of the product.

### General Safety Instructions

- Adhere to the applicable regulations and take the necessary precautions for the process media used. Consider possible reactions between the materials and the process media.
- Adhere to the applicable regulations and take the necessary precautions for all work you are going to do and consider the safety instructions in this document.
- Before beginning to work, find out whether any vacuum components are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

Communicate the safety instructions to all other users.

### Liability and Warranty

VAT assumes no liability and the warranty becomes null and void if the end-user or third parties

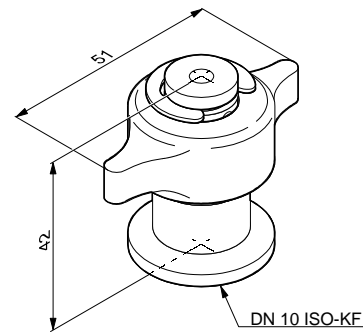
- disregard the information in this document
- use the product in a non-conforming manner
- make any kind of interventions (modifications, alterations etc.) on the product
- use the product with accessories not listed in the corresponding product documentation.

The end-user assumes the responsibility in conjunction with the process media used.

## Technical Data

	21320-KA01-000. aluminum	21320-KE01-000. stainless steel
Connection flange	DN 10 ISO-KF	
Installation angle	any	
Actuation	manual actuation via screw cap	
Valve completely opened	2 turns from idle stroke	
Venting time (50 l)	14 s	
Tightness	1x10 <sup>-9</sup> mbar l/s	
Pressure range	1x10 <sup>-8</sup> mbar ... 1 bar (absolute)	
Bursting pressure	5 bar (absolute)	
Temperatures ambience bakeout	0 °C ... 80 °C ≤80 °C	0 °C ... 120 °C ≤120 °C
Materials housing valve plate O-ring screw cap protective lid packing	3.0615 3.0615 brass (nickel-plated) PE carton box, foamed material	1.4305 1.4301 FPM
Weight	0.1 kg	0.15 kg

Dimensions [mm]



## Installation

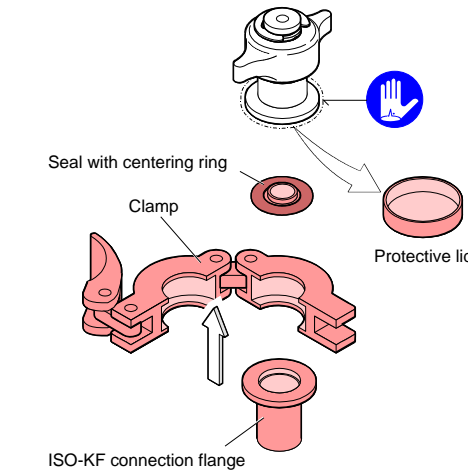
### Vacuum connection

**Caution**  
 Caution: vacuum component  
Dirt and damages impair the function of the vacuum component.  
When handling vacuum components, take appropriate measures to ensure cleanliness and prevent damages.

**Caution**  
 Caution: dirt sensitive area  
Touching the product or parts thereof with one's bare hands increases the desorption rate.  
Always wear clean, lint-free gloves and use clean tools when working in this area.

**Notice:**  
Keep the protective lid and put it in place again when removing the valve from the vacuum system.

Remove the protective lid and connect the valve to the vacuum system by means of the small flange fitting.



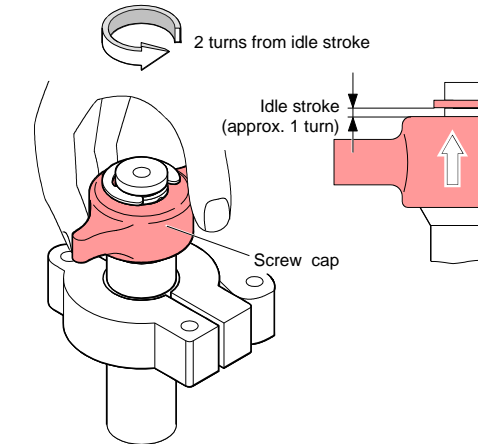
## Operation

The valve is ready for operation as soon as it has been installed.

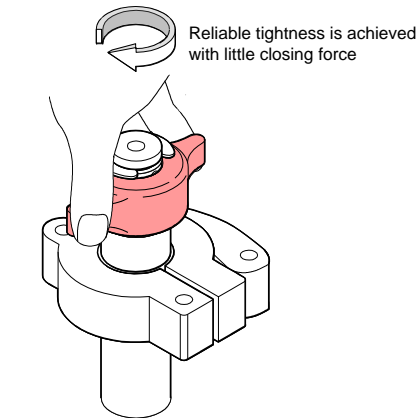
When the valve is delivered, it is slightly opened (i.e. not tight).

**DANGER**  
 Caution: hot surface  
Touching the hot surface (> 55 °C) can cause burns.  
Wear protective gloves.

Opening



Closing



## Deinstallation

**DANGER**  
 Caution: contaminated parts  
Contaminated parts can be detrimental to health and environment.  
Before beginning to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

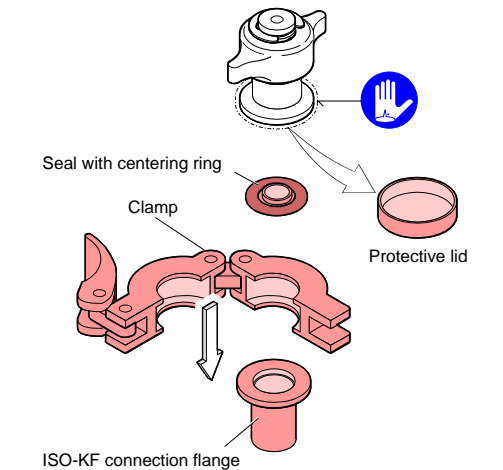
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**Caution**  
 Caution: dirt sensitive area  
Touching the product or parts thereof with one's bare hands increases the desorption rate.  
Always wear clean, lint-free gloves and use clean tools when working in this area.

Precondition

The vacuum system has been vented and the Venting valve has cooled down to < 55 °C.

Disassemble the small flange connection and place the protective lid.



## Maintenance/Repair

Under clean operating conditions, the product requires no maintenance.

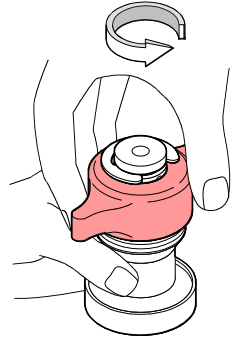
### Disassembling and Cleaning the Valve

#### Precondition

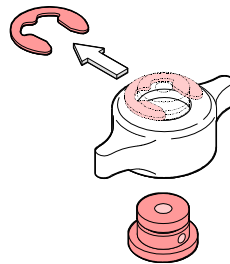
The Venting valve has been deinstalled according to section "Deinstallation".

#### Procedure

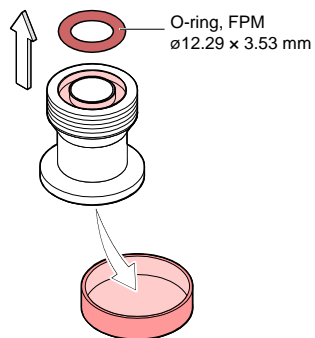
- 1 Completely unscrew the screw cap (approx. 3½ turns from idle stroke).



- 2 Remove the circlip.




- 3 Carefully remove the O-ring and take off the protective lid.



**Notice**  
When reassembling the valve, treat the O-ring with a lint-free cloth slightly moistened with vacuum oil. Be careful to insert the O-ring level into the groove without twisting it.

- 4 Clean the Venting valve.

**STOP DANGER**

 **Caution: cleaning agents**  
Cleaning agents can be detrimental to health and environment.  
Adhere to the relevant regulations and take the necessary precautions when handling and disposing of cleaning agents. Consider possible reactions with the product materials.


#### Procedure

- Carefully clean the parts with a grease solving, non-scouring cleaner.
- After cleaning the parts should preferably be rinsed with alcohol and subsequently heated to ≈ 50° C in an oven or with an industrial blower.
- Carefully clean the sealing surfaces with a lint-free cloth soaked with alcohol. Allow them to dry.

- 5 Perform the above steps in reverse order to re-assemble the valve.

## Returning the Product

**WARNING**


 **Caution: forwarding contaminated products**  
Contaminated products (e.g. radioactive, toxic, caustic or microbiological) can be detrimental to health and environment.  
Products returned to VAT should preferably be free of harmful substances. Adhere to the forwarding regulations of all involved countries and forwarding companies and enclose a duly completed declaration of contamination. The form can be downloaded from our website [www.vatvalve.com](http://www.vatvalve.com).

Products that are not clearly declared as "free of harmful substances" are decontaminated at the expense of the customer.


Products not accompanied by a duly completed declaration of contamination are returned to the sender at his own expense.

## Disposal

**STOP DANGER**

 **Caution: contaminated parts**  
Contaminated parts can be detrimental to health and environment.  
Before beginning to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

**WARNING**

 **Caution: substances detrimental to the environment**  
Products or parts thereof (mechanical and electric components, operating fluids etc.) can be detrimental to the environment.  
Dispose of such substances in accordance with the relevant local regulations.

#### Separating the components

After disassembling the product, separate its components according to the following criteria:

- **Contaminated components**  
Contaminated components (radioactive, toxic, caustic, microbiological hazard etc.) must be decontaminated in accordance with the relevant national regulations, separated according to their materials, and recycled.
- **Other components**  
Such components must be separated according to their materials and recycled.