

Relief valve VSBV 25

OPERATING INSTRUCTIONS

· Edition 12.25 · EN · 34420300



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1 SAFETY

1.1 Read the operating instructions before use



Please read through these instructions carefully before installing or operating. Following the installation, pass the instructions on to the operator. This unit must be installed and commissioned in accordance with the regulations and standards in force. These instructions can also be found at www.docuthek.com.

1.2 Explanation of symbols

1, 2, 3, a, b, c = Action

→ = Instruction

1.3 Liability

We will not be held liable for damage resulting from non-observance of the instructions and non-compliant use.

1.4 Safety instructions

Information that is relevant for safety is indicated in the instructions as follows:

DANGER

Indicates potentially fatal situations.

WARNING

Indicates possible danger to life and limb.

CAUTION

Indicates possible material damage.

All interventions may only be carried out by qualified gas technicians. Electrical interventions may only be carried out by qualified electricians.

1.5 Conversion, spare parts

All technical changes are prohibited. Only use OEM spare parts.

2 CHECKING THE USAGE

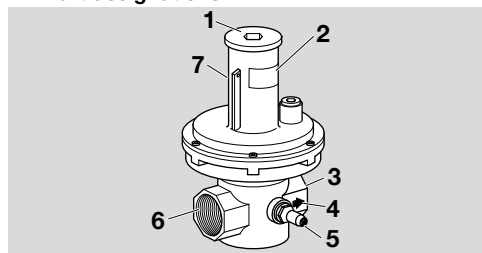
The safety relief valve VSBV 25 is intended for eliminating short-term pressure surges in control systems thus preventing the safety shut-off valve JSAV from being activated unintentionally. This function is only guaranteed when used within the specified limits – see page 3 (8 Technical data).

Any other use is considered as non-compliant.

2.1 Type code

VSBV	Relief valve
25	Nominal size
R	Rp internal thread
TN	NPT internal thread
40	p_U max. 4 bar
-0	No pressure test point
-4	Pressure test point at the inlet
Z	Special adjusting range

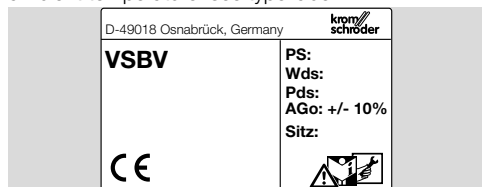
2.2 Part designations



- 1 Cover cap and adjusting screw
- 2 Type label
- 3 Output
- 4 Arrow of direction of flow
- 5 Inlet p_U measuring connection
- 6 Input
- 7 Spring dome

2.3 Type label

Inlet pressure p_U , set opening pressure p_{so} and ambient temperature: see type label.



3 INSTALLATION

⚠ CAUTION

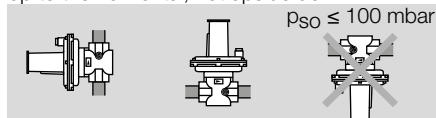
Incorrect installation

Please observe the following to ensure that the VSBV 25 is not damaged during installation and operation:

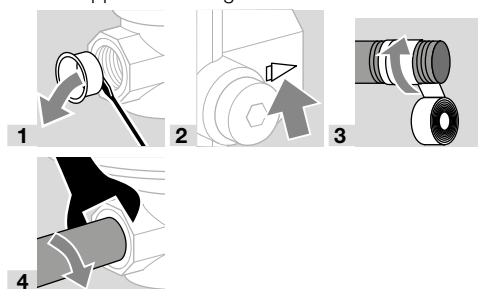
- Install the unit in the pipe free of mechanical stress.

- Do not clamp the unit in a vice or use it as a lever. Risk of external leakage.
- Sealing material, thread cuttings and other impurities must not be allowed to get into the regulator housing.
- The installation location must be dry. Do not store or install the unit in the open air.
- Dropping the device can cause permanent damage. In this event, replace the entire device and associated modules before use.
- The housing must not be in contact with masonry. Minimum clearance 20 mm. Ensure that there is sufficient space for installation and adjustment.

- Install a filter upstream of the unit, in order to protect it against impurities in the pipe.
- Install a manual valve upstream of the VSBV.
- Installation position as required, for opening pressure $p_{so} \leq 100$ mbar: spring dome in the vertical upright position or tilted up to the horizontal, not upside down.



- Deviation of the opening pressure p_{so} preset at the works: when installed in vertical pipelines - 4 mbar, when installed in horizontal pipelines with spring dome in the lower sector - 8 mbar.
- Use approved sealing material.



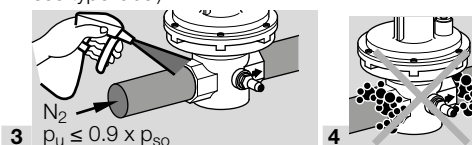
4 TIGHTNESS TEST

⚠ WARNING

Gas is leaking.

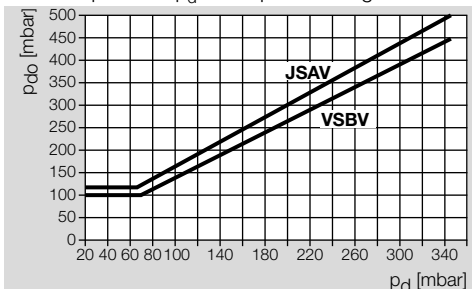
- If gas-filled spaces have been opened, check them for tightness.

- 1 Block the pipeline at the inlet.
- 2 Slowly apply inlet pressure p_U ($p_U \leq 0.9 \times p_{so}$, see type label).

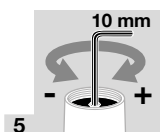
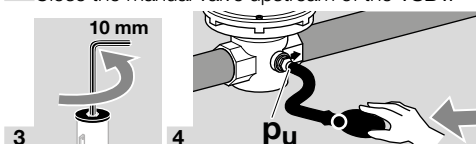


5 CHANGING THE OPENING PRESSURE P_{SO}

- 1 Select the opening pressure p_{so} according to the outlet pressure p_d of the pressure regulator.



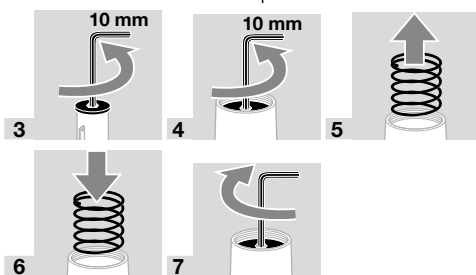
- 2 Close the manual valve upstream of the VSBV.



- 3
 - 4
 - 5
- Set the opening pressure, ensuring that the valve is just about impervious to the required opening pressure.
- 6 Replace the cover cap (with sealing ring) and tighten with an Allen key.
 - 7 Close off the test point.
 - 8 Open the manual valve.
- The manual valve must be open during operation.
- 9 Clearly mark the adjusted value of the opening pressure p_{so} on the type label.

6 REPLACING THE SPRING

- 1 Choose a spring according to the opening pressure range, see page 4 (12 Spring table).
- 2 Close the manual valve upstream of the VSBV.



- 8 Adjust the required opening pressure p_{so} , see page 3 (5 Changing the opening pressure p_{so}).

- 9 Take the respective label from the packaging and stick it below the type label on the VSBV.
- 10 Clearly mark the adjusted value of the opening pressure p_{so} on the type label.

⚠ WARNING

Gas is leaking.

The spring dome is connected to the outlet.

- The outlet must only be connected to a purge line.

7 MAINTENANCE

In order to ensure smooth operation: check the function and tightness of the relief valve every year, or every six months if operated with biogas, see page 2 (4 Tightness test).

→ Selecting spare parts: see www.partdetective.de.

→ If gas-filled space has been opened, check the function and tightness, see page 2 (4 Tightness test).

8 TECHNICAL DATA

8.1 Ambient conditions

Icing, condensation and dew in and on the unit are not permitted.

Avoid direct sunlight or radiation from red-hot surfaces on the unit. Note the maximum medium and ambient temperatures!

Avoid corrosive influences, e.g. salty ambient air or SO_2 .

The unit may only be stored/installed in enclosed rooms/buildings.

Medium and ambient temperatures: -15 to $+60^\circ\text{C}$ (5 to 140°F).

Long-term use in the upper ambient temperature range accelerates the ageing of the elastomer materials and reduces the service life (please contact manufacturer).

Storage and transport temperatures: -15 to $+40^\circ\text{C}$ (5 to 104°F).

This unit is not suitable for cleaning with a high-pressure cleaner and/or cleaning products.

8.2 Mechanical data

Gas types: natural gas, town gas, landfill gas, LPG (gaseous) (Fluid Group 1 pursuant to Directive 2014/68/EU), hydrogen and biogas (max. 0.02 %-by-vol. H_2S). The gas must be dry in all temperature conditions and must not contain condensate.

Inlet pressure p_i : up to 4 bar.

Accuracy group: AG 10.

Valve housing: aluminium, valve seat and stem: aluminium, diaphragm: Perbunan, valve plate: NBR.

Internal thread: Rp 1 to ISO 7-1.

Weight: 1.6 kg.

9 DESIGNED LIFETIME

This information on the designed lifetime is based on using the product in accordance with these operating instructions. Once the designed lifetime has been reached, safety-relevant products must be replaced.

Designed lifetime (based on date of manufacture) in accordance with DIN 33821 for VSBV 25: 15 years. You can find further explanations in the applicable rules and regulations and on the afecor website (www.afecor.org).

This procedure applies to heating systems. For thermoprocessing equipment, observe local regulations.

10 LOGISTICS

Transport

Protect the unit from external forces (blows, shocks, vibration).

Transport temperature: see page 3 (8 Technical data).

Transport is subject to the ambient conditions described.

Report any transport damage on the unit or packaging without delay.

Check that the delivery is complete.

Storage

Storage temperature: see page 3 (8 Technical data).

Storage is subject to the ambient conditions described.

Storage time: 6 months in the original packaging before using for the first time. If stored for longer than this, the overall service life will be reduced by the corresponding amount of extra storage time.

Packaging

The packaging material is to be disposed of in accordance with local regulations.

Disposal

Components are to be disposed of separately in accordance with local regulations.

11 CERTIFICATION

11.1 Certificate download

Certificates – see www.docuthek.com

11.2 Declaration of conformity



We, the manufacturer, hereby declare that the products VSBV 25 with product ID No. CE-0085AP0151 comply with the requirements of the listed Directives and Standards.

Directives:

- 2014/68/EU – PED
- 2011/65/EU – RoHS II

– 2015/863/EU – RoHS III

Regulation:

– (EU) 2016/426 – GAR

Standards:

– DIN 33821

The relevant product corresponds to the tested type sample.

The production is subject to the surveillance procedure pursuant to Regulation (EU) 2016/426 Annex III and Directive 2014/68/EU Annex III Module D1. This declaration of conformity is issued under the sole responsibility of the manufacturer.

Elster GmbH

11.3 UKCA certified



Gas Appliances (Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019)

DIN 33821

11.4 Eurasian Customs Union



The products VSBV 25 meet the technical specifications of the Eurasian Customs Union.

11.5 REACH Regulation

The device contains substances of very high concern which are listed in the Candidate List of the European REACH Regulation No. 1907/2006. See Reach list HTS at www.docuthek.com.

11.6 China RoHS

Directive on the restriction of the use of hazardous substances (RoHS) in China. Scan of the Disclosure Table China RoHS2, see certificates at www.docuthek.com.

12 SPRING TABLE

Opening pressure range [mbar]	Marking	Order No.
20 – 40	red	75441805
35 – 50	yellow	75441806
45 – 75	green	75441807
70 – 170*	blue	75441808
165 – 330	black	75441809
320 – 500	white	75441810

* Standard spring

FOR MORE INFORMATION

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Eclipse, Exothermics, Hauck, Kromschöder and Maxon. To learn more about our products, visit ThermalSolutions.honeywell.com or contact your Honeywell Sales Engineer.

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