

# RICHTER CHEMIE-TECHNIK

**The Answer to Corrosion**

**Series GUT**

## Operating Manual for Chemical Overflow and Pressure Relief Valves spring-loaded

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Total No. of pages: 8

### Local agent:

See order

Reprinting is generally permitted,  
indicating the source.  
However, our prior written consent must  
be obtained in all cases.

### Note:

This operating manual must be strictly observed before  
transport, installation and commissioning etc.!

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## 1 General

Richter overflow and pressure relief valves of the series GUT are direct acting bellows-sealed valves to DIN 3320 Part 1. They are spring-loaded and classified as standard valves in terms of their opening characteristics.

The valves comply with the general technical delivery conditions for valves to DIN 3230.

They are set at the works to the desired gauge pressure and tested.

### 1.1 Application

The purpose of Richter overflow and pressure relief valves of the series GUT is to prevent inadmissible excess pressures, e.g. in piping systems, pressure vessel plants and boilers in order to eliminate risks to people, the environment and the plants themselves. They are used in particular to protect pipes against thermal expansion.

The valves have a corrosion-resistant plastic lining and are therefore especially suitable for aggressive media.

The information on the nameplate is to be observed.

If the valve is to be used for operating data other than those intended, the customer must check carefully whether the design is suitable for the new application.

### 1.2 Details on the product

Type code

GUT : Overflow and pressure relief valve

Nom. size : 25

## 2 Safety



The notes on safety contained in this operating manual which, if not observed, can result in risks to people are identified with this general hazard symbol.

**CAUTION !** Non-observance of this safety warning may impair the valve and its operation.

It is imperative to observe warnings, e.g.

- information on the removal of the transport securing device prior to commissioning

attached directly to the valve and they are to be kept fully legible.

### 2.1 Staff qualifications and training

The staff for installation, operation and maintenance must have the appropriate qualifications for this work.

The area of responsibility, authority and supervision of the staff must be regulated precisely by the customer.

If the staff do not have the necessary know-how, they are to be trained and instructed.

This can, if necessary, be performed by the manufacturer / supplier on behalf of the valve customer.

Furthermore, the customer must ensure that the contents of the operating manual are fully understood by the staff.

### 2.2 Risks if safety notes are not observed

Non-observance of the notes on safety may result in the loss of any and all claims for damages.

For example, non-observance may involve the following hazards:

- Failure of important functions of the valve / plant.
- Risk to people from chemical effects.
- Risk to the environment through leaks of dangerous substances.

### 2.3 Safety-conscious working

The following are to be observed:

- The notes on safety in this operating manual.
- The national regulations on accident prevention.
- The work, operating and safety regulations of the customer.

### 2.4 Notes on safety for the customer / operator

If hot or cold valves result in hazards, the customer must protect these parts from being touched.

Leaks of hazardous media (e.g. explosive, toxic, hot) must be removed in such a way that there is no risk to people or the environment. Statutory provisions are to be observed.

### 2.5 Notes on safety for maintenance

Valves which are exposed to media which are a health hazard must be decontaminated.

In principle, dismantling work on overflow and pressure relief valves may only be performed in the depressurised state. It is imperative to observe the procedure for shutting down the valve described in the operating manual.

All safety and protective facilities must be installed or enabled again immediately after completion of the work.

The points listed in the section on initial commissioning must be followed prior to recommissioning.

### 2.6 Conversion work and production of spare parts by the customer

Conversion of or changes to the valve are only admissible after consultation with the manufacturer.

Original spare parts and accessories authorised by the manufacturer serve to enhance safety.

The use of other parts may annul the liability for any resultant consequences.

### 2.7 Inadmissible modes of operation

The operational safety of the valve is only guaranteed if it is used properly in accordance with **Section 1** of this operating manual.

The application limits specified on the nameplate must under no circumstances be exceeded.

### 3 Transport and storage



It is imperative for all transport work to observe generally accepted engineering practice and the accident prevention regulations.

#### 3.1 Unpacking

Directly after unpacking the consignment must be checked for completeness and any in-transit damage.

#### 3.2 Transport

The goods being transported must be handled with care to prevent damage.

Flange covers serve as protection during transport and must not be removed.

#### 3.3 Storage

If the valve is not installed immediately after delivery, it must be put into proper storage.

It should be stored in a dry room at as constant a temperature as possible.

In the case of **prolonged storage** packing with a desiccant may be necessary. A decision on this must be taken on the basis of the local conditions.

#### 3.4 Return consignments



The operator of valves which have been used for aggressive or toxic media must make sure that they are well rinsed and cleaned before being passed on to the maintenance staff. This applies in particular when the goods are returned to the manufacturer's works.

##### 3.4.1 GRAS certificate

A GRAS certificate according to EUROPUMP on the field of application is to be enclosed with the returned goods.

If necessary, safety precautions and decontamination measures are to be mentioned.

Pre-printed forms can be requested from Richter.

### 4 Product description

As already mentioned in **Section 1.1**, Richter overflow and pressure relief valves of the series GUT are valves with a highly corrosion-resistant, soft-sealing plastic lining. The valves are protected against an aggressive external atmosphere by an epoxy coating.

Richter GUT overflow and pressure relief valves consist of the following assemblies:

- Body
- Shut-off element
- Nameplate

### 4.1 Body

The valve body has a thick plastic lining in the flow section.

The top of the body is equipped with a metallic centering for the upper valve section. The body has a thread for screwing in the valve seat.

### 4.2 Shut-off element

The shut-off assembly largely consists of the valve plug, valve seat with O-ring and bellows. The valve plug is centered in the valve body by means of a stem and cover flange.

The seat, plug, O-ring and bellows can be replaced individually and are made of resistant materials. The valve seat is screwed into the valve body. The valve plug is screwed onto the bellows.

The bellows protect the metal components of the upper section including the spring and stem guide against corrosion.

### 4.3 Identification

The body bears the following cast-in data in accordance with DIN EN 19:

- Nominal size
- Nominal pressure
- Body material
- Manufacturer's symbol
- Melt number / Foundry symbol
- Arrow for direction of flow

The nameplate bears the following details:

- Type, nominal pressure, material of the lining
- Admissible temperatures for various operating pressures
- Richter factory No.
- Any customer-specific data

Example of a factory No. : 983020/1/2

Please indicate this number on all correspondence.

### 5 Installation

#### 5.1 Installation conditions

The installation conditions to AD Data Sheet A2 or TRD721 (German technical regulations for steam boilers) are a precondition for the safe operation of the valve and must therefore be observed.

#### 5.2 Dimensioning of the inlet line



The admissible pressure loss in the inlet line to AD Data Sheet A2 must not be exceeded. Otherwise, valve vibrations could occur and a substantial reduction in the blow-off capacity could result in an inadmissible pressure rise in the system!

Lay as short inlet lines as possible. Best of all, install the valve directly on the vessel to be protected and at least chamfer the vessel nozzle at the inlet or, better still, provide a radius. An inlet nozzle of conical design has the best streamlined shape.

### 5.3 Dimensioning of the outlet line



Outlet lines are to be dimensioned so that the safe functioning of the valve is ensured under all expected operating conditions. The medium is to be discharged in such a way that neither people nor the environment are jeopardised. The statutory provisions (e.g. accident prevention regulations, Pollution Control Laws or Clean Air Acts) as well as local regulations (e.g. works standards) are to be observed.

#### 5.3.1 Admissible back pressure



The outlet line must never be designed smaller than the nominal size of the overflow and pressure relief valve. The admissible back pressure in the valve outlet must not be exceeded to prevent destruction of the bellows or a reduction in the blow-off capability.

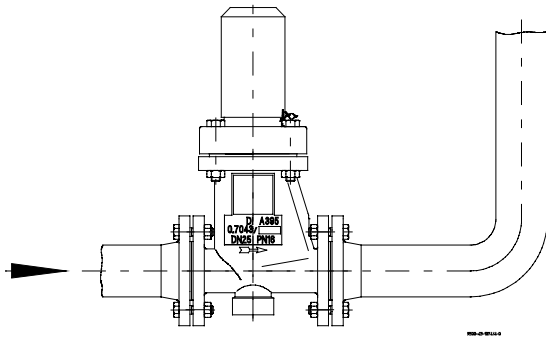
Admissible back pressure see [Section 9.5](#) or brochure for the overflow and pressure relief valve.

#### 5.3.2 Condensate drain

Lay horizontal pipes with a gradient away from the valve so that the liquid medium does not collect in the valve body and, in the event of gases, no condensate can collect in the valve body.

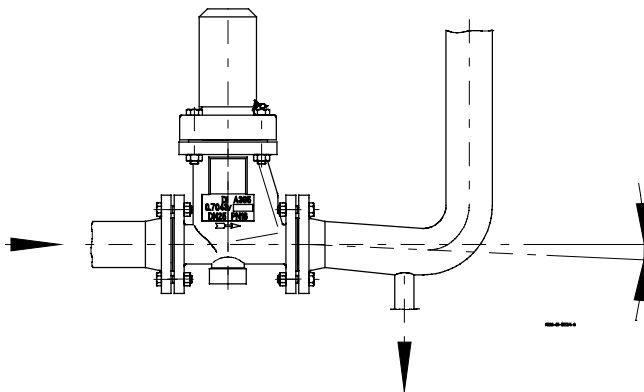
If outlet lines are laid with a geodetic level difference (e.g. for vapours or gases with a 90° elbow vertically upwards away from the valve), the pipe elbow must not be arranged directly downstream of the valve.

wrong!



A horizontal pipe section with a gradient must first be installed downstream of the valve and this pipe must have a draining facility at the lowest point in the pipe. This opening for condensate drainage must be lower than the flow chamber of the valve.

Correct!



Lines for draining the condensate must be dimensioned with adequate cross sections. They are to be laid with a gradient and must ensure risk-free discharge of the medium.

#### 5.3.3 Blowing conditions at low temperatures



Outlet lines must be protected against freezing up. This applies in particular when cooling of the gas as a result of expansion is to be expected or the lines are laid outdoors.

#### 5.3.4 Blowing conditions with crystallising media



Appropriate action must be taken in the case of media which tend to crystallise, solidify or stick to ensure that the solidification process cannot occur in the inlet or outlet lines or in the overflow and pressure relief valve body (e.g. insulation, heating).

#### 5.3.5 Blowing conditions with gas-emitting media



Appropriately dimensioned pressure-relief devices must be arranged in the direct vicinity of the valve in the case of gas-emitting or vaporising liquids.

### 5.4 Valve installation dimensions

Richter GUT overflow and pressure relief valves have face-to-face lengths in accordance with DIN 3203 Part 1, series F1, and flanges to DIN 2532/33 (on request ANSI 150 lbs).

### 5.5 Preparations for installation

#### CAUTION !

The yellow protective caps of the flanges must only be removed directly prior to installation.

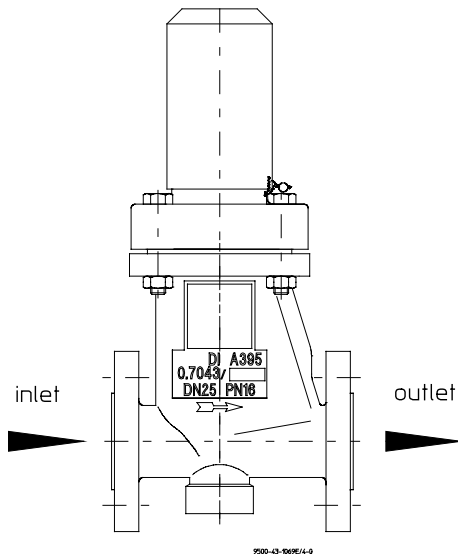
The use of additional PTFE-lined flange gaskets with a flat stainless steel inlay (available in the Richter range as an installation accessory) is recommended especially for mating flanges with rough surfaces or if the pipe has large radii at the connection  $\emptyset$ . This prevents leaks at the body lining as a result of damage to the plastic sealing surfaces of the valve.

## 5.6 Direction of flow and position



The direction of flow must be observed when installing the valve. The prescribed direction of flow is indicated by a direction arrow on the valve body. The valve is ineffective if the valve inlet and outlet are mixed up!

The installation position can be freely selected.



## 5.7 Installation

The plant components to be protected must be cleaned thoroughly prior to installation of the valve in the pipe. Solids in particular jeopardise the soft-sealing, high-precision plastic sealing surfaces of the seat and plug and can result in permanent leaks of the valves.

The overflow and pressure relief valve must be installed so that no inadmissible mechanical or thermal loading is transferred from the installed pipes to the valve body.

Changes in length of the piping caused by temperature are to be allowed for by appropriate measures, e.g. the installation of expansion joints.

Remove the flange covers and - if installed - the transport securing tape.

Position and align the overflow and pressure relief valve and any additional gaskets. Then tighten the pipe screws in diametrically opposite sequence (observe [Section 5.7.1!](#)).

If the valves are insulated, only the body may be covered. The cover flange must remain free to prevent any inadmissible temperature rise of the valve spring.

### 5.7.1 Screw tightening torques

The nuts should be tightened with a torque wrench. For recommended tightening torques, see [Section 9.2](#).

## 6 Operation

### 6.1 Initial commissioning



Normally, the valves are checked for leaks with water and air. Therefore, unless special agreements have been made, there could still be residual amounts of water in the flow section of the valve. This must be noted in view of a possible reaction with the operating medium.

After initial loading at operating pressure and operating temperature, the tightening torques of all connection screws must be checked. For tightening torques, see [Section 9.2](#).

### 6.2 Shutdown



If the valve is to be dismantled, the local regulations are to be observed. Always ensure that the pipe and the vessel have been depressurised and emptied.

Suitable protective action is to be taken to prevent any risk to people and the environment from leaks of aggressive or toxic media.

If the dismantled valve is to be returned to the company's own workshops or to the manufacturer, particularly thorough cleaning is to be performed. See also [Section 3.4](#).

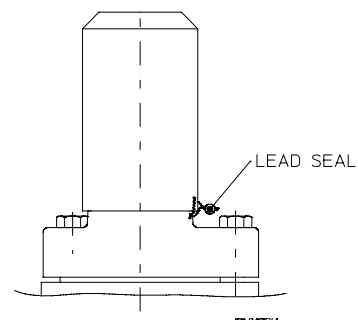
### 6.3 Recommissioning

When the valve is recommissioned, it must be ensured that, depending on the progress of shutdown, all appropriate steps as described in [Section 5](#) and [Section 6.1](#) are repeated.

### 6.4 Inadmissible modes of operation and their consequences

The GUT overflow and pressure relief valves are protected by the manufacturer against unauthorised adjustment of the set gauge pressure and unauthorised replacement of the spring by means of a lead seal.

If the lead seal is broken, it must be replaced without delay. This measure can be performed either through the German Technical Supervisory Agency (TÜV) responsible, any other acceptance authority responsible or by the manufacturer.



It is expressly pointed out that, if the customer provides his own lead seal, he is responsible for the full operating risk and any damage resulting therefrom.

The lift set at the works ensures safe operation of the valve. It is not permitted to reduce this lift or block the valve.

**CAUTION !**

During operation of the valve there must be no hard foreign matter between the valve seat and the valve plug. If solids are deposited on the sealing surfaces when the valve is closed, the valve will probably start to leak. Damage may also occur to the sealing surfaces/O-ring.

## 7 Maintenance

Overflow and pressure relief valves must be checked for operability at regular intervals (accident prevention regulations for pressure vessels, VBG 17 Section 32 [Regulations of Employers' Liability Insurance Association] and TRD 601 Sheet 2, para. 3.4. [German technical regulations for steam boilers]).

All maintenance work is to be performed with suitable tools by qualified specialists. Generally accepted practice in mechanical engineering is to be observed.

### 7.1 Screw connections

Regularly check the tightening torques in line with the operational requirements at the following points:

- Cover nuts
- Pipe screws

For tightening torques, see [Section 9.2](#).

### 7.2 Cleaning



The valve is to be cleaned thoroughly before the start of repair work. Even if the valve has been properly drained and rinsed, there could still be residual amounts of medium in the valve, e.g. between the lining and the body or in the cover flange.

Moreover, the plastic components may have absorbed medium which emerges gradually from the material after cleaning.

Protective clothing should therefore always be worn.

### 7.3 Conversion of the overflow and pressure relief valve

If changes are required on the valve (e.g. conversion with different set gauge pressure or replacement of the spring), the manufacturer must always be consulted in such cases.

After the manufacturer has given his consent, the change can be performed either at the manufacturer's works or by the German Technical Supervisory Agency (TÜV) or any other acceptance authority responsible at the customer's works.

### 7.4 Adjusting the set gauge pressure

- Unscrew cap 18.1.
- Undo groove nut 17.2.
- Adjust spring tension using the adjusting screw 17.1 to the specified set pressure.
- Lock adjusting screw 17.1 with groove nut 17.2.
- Check set pressure.
- Screw on cap 18.1 and tighten.
- Have the valve lead-sealed.

The data specified in the test certificates is to be observed.

### 7.5 Important notes on dismantling and assembly

**CAUTION !** Never simply undo the body screws/nuts 3.3/3.4 on the cover flange without relieving the load on the valve plug! Otherwise the valve seat and the valve plug will be destroyed. The following [Sections 7.6 and 7.7](#) contain detailed instructions.

## 7.6 Replacement of components

**CAUTION !** Always replace the valve seat with the O-ring and valve plug as a complete assembly.

Reworking the plug requires in-depth knowledge of the materials and their processibility as well as special lapping discs. It is therefore recommended to have this work carried out at the manufacturer's.

After dismantling, all individual components are to be checked for wear and damage. Only use original spare parts. See also [Section 2.6](#).

### 7.6.1 Dismantling of the valve plug

- Unscrew cap 18.1.
- Undo groove nut 17.2 and adjusting screw 17.1 until the pressure spring 14 is relieved.

**CAUTION !**

When undoing or tightening the adjusting screw 17.1, hold the valve stem 8.1 with pliers. If the entire stem 8.1 is turned, there is a risk that the insert sleeve 8.2 will be unscrewed from the bellows 10 or that the bellows are damaged!

- Undo the screw 3.3/3.4 from the valve body 3.1 and cover flange 12 and lift off the entire cover flange with internals.
- Grip the bellows 10 in the reinforced area just above the plug 6 with pliers, unscrew the plug from the bellows and remove.

### 7.6.2 Dismantling of the valve seat

- Remove the cover flange 9.1 from the valve body 3.1 as described in [Section 7.6.1](#).
- Unscrew seat 5 from the body 3.1. with the special wrench.
- If necessary, remove O-ring with a needle from the seat groove and insert a new O-ring.

### 7.6.3 Assembly of the valve seat

- Screw a new or reworked valve seat 5 with the special wrench into the body 3.1.
- Tighten the seat hand-tight. Do not tighten with force or use a lever extension.

### 7.6.4 Assembly of the valve plug

All components are to be thoroughly cleaned prior to assembly.

Assembly is performed as described in [Section 7.6.1](#) but in reverse sequence.

Then the set pressure is to be adjusted in accordance with [Section 7.4](#).

## 7.7 Tests

After assembly of the valve, the valve lift and the set pressure must be checked.

If the valve is dismantled from the plant, it should be checked prior to being installed again.

The check is performed in accordance with DIN 3230 Part 3, abbreviations BA and BO.

### 7.7.1 Valve lift



A check of the valve lift is performed with the pressure spring 14 relieved (adjusting screw 17.1 undone). The height dimension of the valve stem 8.1 up to the edge of the cover flange 9.1 is determined.

This dimension is determined both in the closed and fully opened conditions (activate stem 8.1 by hand until the mechanical travel stop is felt).

The measurement can be taken, for example, with a caliper gauge with a depth gauge facility to DIN 862.

The valve lift is derived from the difference of the two heights. It must be at least 2 mm.

### 7.7.2 Test gauge pressure



This test should be conducted on a test stand with a neutral test medium, e.g. air or water.

The pressure gauges must satisfy the requirements of the applicable regulations, e.g. German Technical Supervisory Agency (TÜV) Data Sheet

on Safety Valve 100, in terms of suitability and accuracy.

During the test the admission pressure in the valve inlet is slowly increased until the valve starts to open.

## 8 Faults, causes and remedies

### • The overflow and pressure relief valve leaks

Is there foreign matter between the seat and plug?

Is there wear on the seat, O-ring and plug?

If so, it is necessary to rework the sealing surfaces of the seat and plug or to replace these components.

### • The valve lift is not reached

Are the bellows prevented from moving by external influences (e.g. foreign matter, solidified medium between the folds etc.)?

Is the insert sleeve (8.2) unscrewed from the bellows thread

### • Medium emerges at the cover flange

Are the screws (3.3/3.4) not tightened?

If the leak cannot be remedied by tightening the screws, then either the plastic lining or the bellows are damaged.

The cause of torn bellows could, for example, be an inadmissibly high back pressure during operation of the overflow and pressure relief valve.

Dismantle the overflow and pressure relief valve and have it repaired.

### • Flange connection leaks

Check tightening torques of the pipe screws with a torque wrench. If this does not remedy the leak, the recommended tightening torques may be exceeded by 10%.

If the leak has still not be remedied, this means the lining has been damaged. Dismantle the overflow and pressure relief valve and check it.

## 9. Tables, diagram, drawing

### 9.1 Connection dimensions

Face to face : see order

Flange pattern : see order

### 9.2 Tightening torques

Cover flange screws, lubricated

DN	No. x size	Nm	
25	4 x M12	50	tighten crosswise

Pipe screws, lubricated

DN	No. x size	Nm	
25	4 x M12	12	tighten crosswise

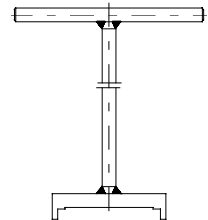
After the plant has been started up (especially after the first temperature load), the tightening torques must be checked and the correct value reset.

### 9.3 Pressure spring data

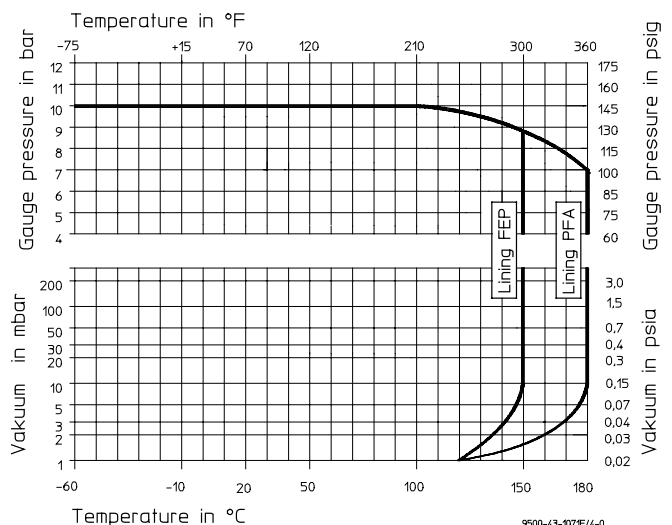
Art. No.	Pressure range from ...to (bar)	Wire Ø (mm)
3381-19-0008	1.0 - 2.0	2
3381-19-0007	2.0 - 4.0	2.5
3381-19-0005	4.0 - 8.0	3.2
3381-19-0006	8.0 - 16	4

### 9.4 Screwing tool for valve seat

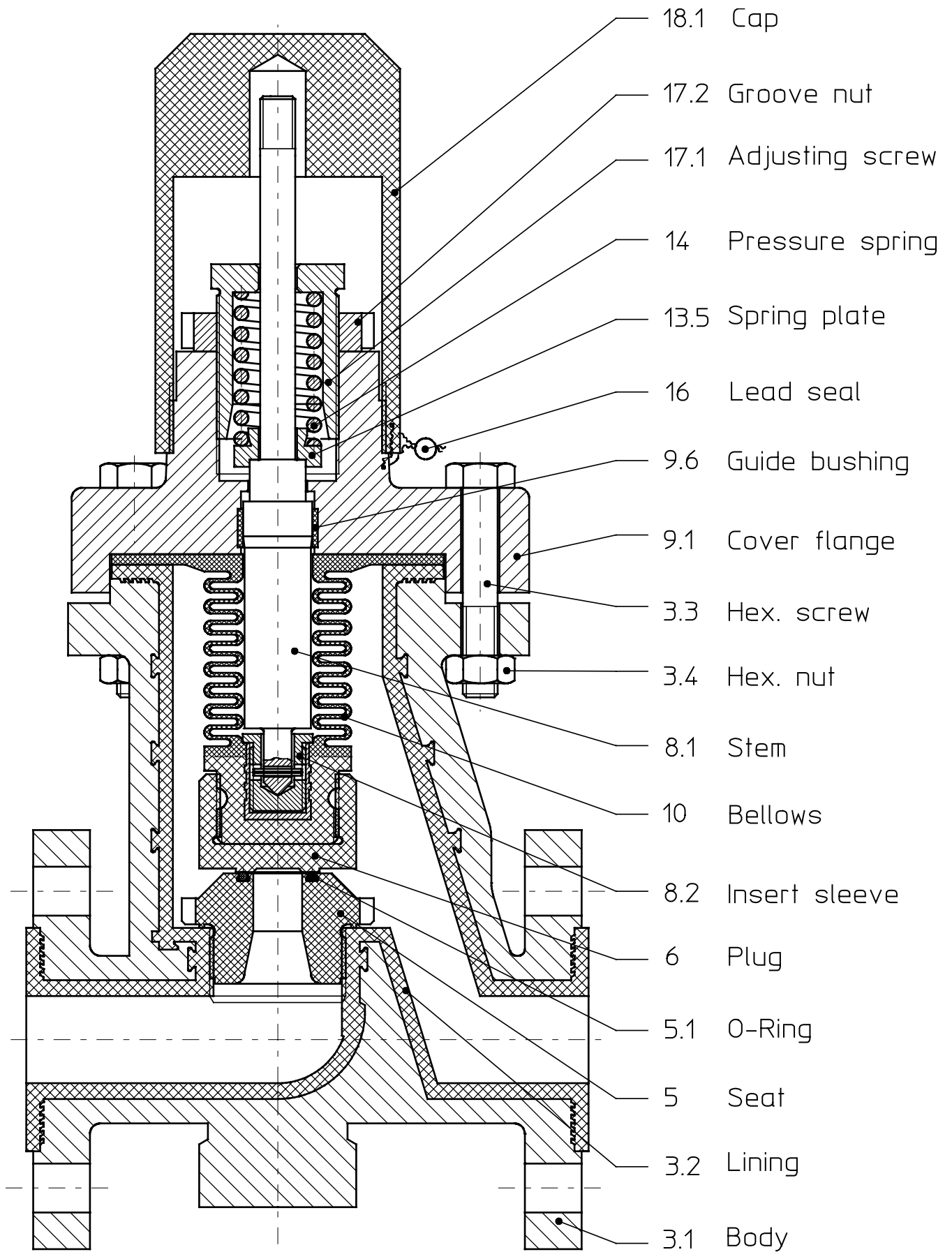
DN	Article No.
25	9568-96-1001



### 9.5 Downstream pressure/temperature diagram



9.6 Sectional drawing GUT



9500-43-1073E/4-0

# Safety notes for applications in potentially explosive areas based on the Directive 94/9/ EC (Atex 95)

The valves are intended for use in a potentially explosive area and are therefore subject to the conformity assessment procedure of the directive 94/9/EC (ATEX).

As part of this conformity assessment, an ignition hazard analysis to EN 13463-1 to satisfy the fundamental safety and health requirements was conducted with the following result:

- **The valves do not have any ignition source of their own and can be operated both manually as well as mechanically/electrically.**
- **The valves are not covered by the scope of application of the ATEX directive and therefore do not need to be identified accordingly.**
- **The valves may be used in a potentially explosive area.**

Supplementary notes:

- **Electric/mechanical actuators must be subjected to their own conformity assessment to ATEX.**

It is imperative to observe the individual points of intended use for application in a potentially explosive area.

## **1. Intended use:**

**Inadmissible modes of operation, even for brief periods, may result in serious damage to the unit.**

**In connection with explosion protection, potential sources of ignition (overheating, electrostatic and induced charges, mechanical and electric sparks) may result from these inadmissible modes of operation; their occurrence can only be prevented by adhering to the intended use.**

Furthermore, reference is made in this connection to the Directive 95/C332/06 (ATEX 118a) which contains the minimum regulations for improving the occupational health and safety of the workers who may be at risk from an explosive atmosphere.

- A difference is made between two cases for the use of chargeable liquids (conductivity  $< 10^{-8}$  S/m):
  1. Chargeable liquid and non-conductive lining  
Charges can occur on the lining surface. As long as the valve is completely filled with medium, no hazardous discharges can result from these charges.  
As a result, this can produce discharges inside the valve. However, these discharges cannot cause ignitions if the valve is completely filled with medium.  
If the valve is not completely filled with medium, e.g. during evacuation and filling, the formation of an explosive atmosphere must be prevented, e.g. by superimposing a layer of nitrogen. It is recommended to wait 1 hour before removing the valve from the plant in order to permit the elimination of static peak charges.  
This means that, to safely prevent ignitions, the valve must be completely filled with medium at all times or else a potentially explosive atmosphere must be excluded by superimposing a layer of inert gas.
  2. Chargeable liquid and conductive lining  
No hazardous charges can occur as charges are discharged direct via the lining and shell (surface resistance  $< 10^9$  Ohm, leakage resistance  $< 10^6$  Ohm)  
The following special feature applies to the series with bellows (HV, RSS, BAV, KSE, GU, GUT, PA):  
The bellows are not offered with a conductive lining, i.e. the restrictions under point 1 apply.

**Safety notes for applications in potentially explosive  
areas based on the  
Directive 94/9/ EC (Atex 95)**

**Static discharges of non-conductive linings are only produced through the interaction with a non-conductive medium and are therefore the responsibility of the plant operator. Static discharges are not sources of ignition which stem from the valves themselves!**

- The temperature of the medium must not exceed the temperature of the corresponding temperature class or the maximum admissible medium temperature as per the operating manual.
- If the valve is heated (e.g. heating jacket), it must be ensured that the temperature classes prescribed in the Annex are observed.
- To achieve safe and reliable operation, it must be ensured in inspections at regular intervals that the unit is properly serviced and kept in technically perfect order.  
Increased wear to the valve can be expected with the conveyance of liquids containing abrasive constituents. The inspection intervals are to be reduced compared with the usual times.
- Actuators and electric peripherals, such as temperature, pressure and flow sensors etc., must comply with the valid safety requirements and explosion protection provisions.
- The valve must be grounded.  
This can be achieved in the simplest way via the pipe screws using tooth lock washers.  
Otherwise grounding must be ensured by other action, e.g. cable bridges.
- Attachments such as actuators, position controllers, limit switches etc. must satisfy the relevant safety regulations as regards explosion protection and, if required, be designed in compliance with Atex.  
Special attention must be paid to the appropriate safety and explosion protection notes in the respective operating manuals.
- Plastic-lined valves must not be operated with carbon disulphide.

**CE Konformitätserklärung** nach EN ISO/IEC 17050  
**Declaration of Conformity** according to EN ISO/IEC 17050

Produkt <i>Product</i>	Kunststoffausgekleidete Sicherheitsventile <i>Plastic lined safety valves</i>
Bauart <i>Design</i>	Überstromventil, Sicherheitsventil, Niederdruck-Sicherheitsventil <i>Overflow and pressure relief valve, safety valve, low-pressure safety valves</i>
Baureihe <i>Serie</i>	GU, GUT, KSE, KSE-C, KSEA, LPV-A, LPV-D
Nennweite <i>Size</i>	DN 25 bis DN 150, 1" bis 6" <i>DN 25 to DN 150, 1" to 6"</i>
EU-Richtlinie <i>Directives UE</i>	97/23/EG Druckgeräterichtlinie <i>97/23/EC Pressure Equipment Directive</i>
Konformitätsbewertungs- verfahren <i>conformity assessment procedure</i>	Modul H
Angewandte Technische Spezifikation <i>Applied Technical Specification</i>	DIN 3840 AD 2000 Regelwerk DIN EN 1216
EG-Baumusterprüfung CE type-examination für/for GU DN25, KSE, KSE-C, LPV-A, LPV-D	Verband der TÜV e.V. Friedrichstr. 136 10117 Berlin
Name und Adresse der benannten Stelle <i>Name and adress of the notified body</i>	Zertifizierungsstelle für Druckgeräte der TÜV Nord Systems GmbH & Co. KG Meidericher Straße 14-16 D-47058 Duisburg
Kennzeichnung <i>Marking</i>	97/23/EG <sup>1)</sup> für Nennweiten $\geq$ DN 32, $\geq$ 1" <i>97/23/EC <sup>1)</sup> for sizes <math>\geq</math> DN 32, <math>\geq</math> 1"</i>

**CE** 0045


Das Unternehmen Richter Chemie-Technik GmbH bescheinigt hiermit, dass die o.a. Baureihen die grundsätzlichen Anforderungen der aufgeführten Richtlinien und Normen erfüllt.  
*Richter Chemie-Technik GmbH confirms that the basic requirements of the above specified directives and standards have been fulfilled.*

<sup>1)</sup> Für nicht aufgeführte Nennweiten ist eine Kennzeichnung nicht zulässig.  
*For sizes not listed a marking is not permissible.*

Kempen, 01.07.2010

  
\_\_\_\_\_

G. Kleining  
Leiter Forschung & Entwicklung  
Responsable Recherche & Développement

  
\_\_\_\_\_

A. Linges  
Leiter Qualitätsmanagement  
Responsable de la gestion de la qualité

## Safety Information / **Declaration of No Objection** Concerning the Contamination of Richter-Pumps, -Valves and Components

### 1 SCOPE AND PURPOSE

Each entrepreneur (operator) carries the responsibility for the health and safety of his employees. This extends also to the personnel, who implements repairs with the operator or with the contractor.

Enclosed declaration is for the information of the contractor concerning the possible contamination of the pumps, valves and component sent in for repair. On the basis of this information for the contractor is it possible to meet the necessary preventive action during the execution of the repair.

Note: The same regulations apply to repairs **on-site**.

### 2 PREPARATION OF DISPATCH

Before the dispatch of the aggregates the operator must fill in the following declaration completely and attach it to the shipping documents. The shipping instructions indicated in the respective manual are to be considered, for example:

- Discharge of operational liquids
- remove filter inserts
- lock all openings hermetically
- proper packing
- Dispatch in suitable transport container
- Declaration of the contamination fixed **outside!!** on the packing

# Declaration about the Contamination of Richter Pumps, -Valves and Components

The repair and/or maintenance of pumps, valves and components can only be implemented if a completely filled out declaration is available. If this is not the case, delay of the work will occur. If this declaration is not attached to the devices, which have to be repaired, the transmission can be rejected.

**Every aggregate has to have it's own declaration.**

This declaration may be filled out and signed only by authorized technical personnel of the operator.

Contractor/dep./institute : _____ Street : _____ Postcode, city: _____ Contact person: _____ Phone : _____ Fax : _____ End user : _____	Reason for transmitting <input checked="" type="checkbox"/> Please mark the applicable <b>Repair:</b> <input type="checkbox"/> subject to fee <input type="checkbox"/> Warranty <b>Exchange:</b> <input type="checkbox"/> subject to fee <input type="checkbox"/> Warranty <input type="checkbox"/> Exchange/ Replacement already initiated/received <b>Return:</b> <input type="checkbox"/> Leasing <input type="checkbox"/> Loan <input type="checkbox"/> for credit note																																												
<b>A. Details of Richter-product:</b>																																													
<b>Classification:</b> _____ <b>Article number:</b> _____ <b>Serial number:</b> _____	<b>Failure description:</b> _____ <b>Equipment:</b> _____ <b>Application tool:</b> _____ <b>Application process:</b> _____																																												
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If yes, with which cleaning agent: _____ and with which cleaning method: _____																																													
<sup>1)</sup> if "no", then forward to D.                      ← <sup>2)</sup> Aggregates, which are contaminated with microbiological or explosive substances, are only accepted with documented evidence of an approved cleaning. <sup>3)</sup> Aggregates, which are contaminated with radioactive substances, are not accepted in principle.																																													
<b>C. Details of the discharged materials (must be filled out imperatively)</b>																																													
<b>1. With which materials did the aggregate come into contact ?</b> Trade name and/or chemical designation of operational funds and discharged materials, material properties, e.g. as per safety data sheet (e.g. toxic, inflammable, caustic)																																													
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<b>2. Are the materials specified above harmful to health ?</b> no                      yes <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ←																																													
<b>3. Dangerous decomposition products during thermal load ?</b> no                      yes <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																													
<b>If yes, which ones ?</b> _____																																													

**D. Mandatory declaration:** We assure that the data in this explanation are truthful and complete and as a signatory I am able to form an opinion about this. We are aware that we are responsible towards the contractor for damages, which results from incomplete and incorrect data. We commit ourselves to exempt the contractor from claims for damages of thirds resulting from incomplete or incorrect data. We are aware that we are directly responsible towards thirds, irrespective of this declaration, which belongs in particularly to the employees of the contractor consigned with the handling repair of the product.

Name of the authorized person (in block letters): \_\_\_\_\_

\_\_\_\_\_ Date                      \_\_\_\_\_ Signature

Company stamp

**FAX****Fax No. ()****Pages (incl. cover sheet) ()****To:**

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Richter Chemie-Technik GmbH  
Otto-Schott-Straße 2  
D-47906 KempenTelefon +49 (0) 21 52/146-0  
Telefax +49 (0) 21 52/146-190richter-info@richter-ct.com  
www.richter-ct.comContact person:  
()Reference:  
()Extension:  
- ()E-Mail Address:  
()Date:  
()**Your order No.:** ()**Our Kom. No.:** ()**Serial No.:** ()

Dear Sirs,

The compliance with laws for the industrial safety obligates all commercial enterprises to protect their employees and/or humans and environment against harmful effects while handling dangerous materials.

The laws are such as: the Health and Safety at Work Act (ArbStättV), the Ordinance on Harzadous Substances (GefStoffV, BIOSTOFFV), the procedures for the prevention of accidents as well as regulations to environmental protection, e.g. the Waste Management Law (AbfG) and the Water Resources Act (WHG)

An inspection/repair of Richter products and parts will only take place, if the attached explanation is filled out correctly and completely by authorized and qualified technical personnel and is available.

In principle, radioactively loaded devices sent in, are not accepted.

Despite careful draining and cleaning of the devices, safety precautions should be necessary however, the essential information must be given.

The enclosed declaration of no objection is part of the inspection/repair order. Even if this certificate is available, we reserve the right to reject the acceptance of this order for other reasons.

Best regards  
RICHTER CHEMIE-TECHNIK GMBHEnclosures

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