

Steam Trap

UBK 46



EN
English

Original Installation Instructions
810475-04

Contents

Foreword..... 3
Availability.....3
Formatting features in the document3

Safety..... 3
Use for the intended purpose3
Basic safety notes4
Information on property damage or malfunctions4
Qualification of personnel.....5
Protective gear5
Typographic features of warning notes.....5
Formatting features for warnings of property damage5

Description..... 6
Scope of supply and equipment specification6
Application of European Directives.....8
Task and function.....8

Storing and transporting the equipment..... 8
Storing the equipment8
Transporting the equipment9

Mounting and connecting the equipment 9
Preparing installation9
Connecting the equipment9

Operation..... 10

After operation..... 10
Changing the settings of the Thermovit regulator11
Maintaining the equipment.....13
Removing external dirt deposits.....13
Maintenance of the Thermovit regulator13
Strainer maintenance.....15
Servicing the equipment and installing spare parts16

Troubleshooting 17

Putting the equipment out of operation..... 18
Removing harmful substances.....18
Removing the equipment18
Re-using equipment after storage.....19
Returning the equipment.....19
Disposing of the equipment.....19

Technical data 20
Dimensions and weights20
Pressure & temperature ratings.....22

Declaration of Conformity – Standards and Directives 23

Foreword

This installation & operating manual will help you use the steam trap safely and efficiently for its intended purpose.

► UBK 46

These steam traps will be called equipment in this document.

This installation & operating manual is intended for anyone commissioning, using, operating, servicing, cleaning or disposing of this equipment and, in particular, for professional after-sales service technicians, qualified personnel and authorised and trained staff.

All of these persons must read and understand the content of this installation & operating manual.

Following the instructions given in this installation & operating manual helps avoiding danger and increases the reliability and service life of the equipment. Please note that in addition to the instructions given in this installation & operating manual you must also observe all locally applicable rules and regulations concerning the prevention of accidents as well as approved safety guidelines for good professional practice.

Availability

Keep this installation & operating manual together with the plant documentation for future reference. Make sure that this installation & operating manual is available to the operator.

The installation & operating manual is part of the equipment. Please hand over this installation & operating manual when selling the equipment or passing it on.

Formatting features in the document

Certain text elements of this installation & operating manual feature a specific typographic design. You can easily distinguish the following text elements:

Standard text

Cross-reference

► Listing

► Sub-items in listings

➤ Steps for action.



Here you will find additional useful information and tips serving to assist you in using the equipment to its fullest potential.

Safety

Use for the intended purpose

The UBK 46 equipment is used for discharging condensate from steam or for venting pipes.

The equipment must only be used within the allowable pressure and temperature limits and only if the chemical and corrosive influences on the equipment are taken into account.

Correct use includes compliance with the instructions given in this installation & operating manual, in particular obedience to all safety instructions.

Any other use of the equipment is considered to be improper.

Note that the equipment is also used incorrectly if the materials of the equipment are not suitable for the fluid.

Basic safety notes

Risk of severe injuries

- The equipment is under pressure during operation and can be hot or very cold, depending on the fluid used. Only perform work on the equipment if the following conditions are satisfied:
 - The pipes must not be under pressure.
 - All fluid must be thoroughly removed from pipes and the equipment.
 - Before carrying out any work, the higher-level system must be switched off and secured so it cannot be switched back on by unauthorised persons.
 - Pipes and the equipment must have cooled to a lukewarm temperature, or around 20 °C.
- For equipment used in contaminated areas, there is a risk of serious or fatal injury from harmful substances on the equipment. Only perform work on the equipment after it has been thoroughly decontaminated. Wear the protective clothing specified for the contaminated zone during all work.
- The equipment may only be used with fluids that are not aggressive in contact with material and seals. Otherwise, leaks may occur and hot, cold or toxic fluid may escape.
- The equipment and its components may only be installed or removed by specialist personnel. Specialist personnel must have knowledge and experience in the following areas:
 - Producing pipe connections.
 - Selecting suitable lifting gear for the product and using it safely.
 - Working with hazardous (contaminated, hot, cold or pressurised) fluids.
- If the admissible pressure and temperature ratings are exceeded, the equipment may be destroyed and hot, cold or pressurised fluid may escape. Make sure that the equipment is always used within the admissible pressure and temperature ratings.

You can find information about the pressure and temperature ratings on the name plate and in the “*Technical data*” section.

- The equipment is under pressure during operation and can become hot or cold, depending on the fluid used. Only bring the equipment into service if contact with surfaces is prevented by insulation or other protection. Always wear protective clothing when working on the equipment and on pipes carrying fluid. You will find information on suitable protective clothing in the safety data sheet for the fluid used.

Risk of minor injuries

- Sharp edges on internals present the danger of cuts to hands. Always wear industrial gloves when servicing the equipment.
- If the equipment is inadequately supported during installation, there is a risk of getting crushed if it falls. Use the eyebolt to secure lifting gear, if available. Secure the equipment during installation so it cannot fall. Use the eyebolt to do this, if available. Wear sturdy safety boots.

Information on property damage or malfunctions

- Malfunctions will occur if the equipment is installed in a wrong position or with the flow arrow pointing in the opposite direction of the fluid flow. This may result in damage to the equipment or the installation. Make sure that the flow arrow on the equipment body matches the indicated direction of the fluid flow in the pipe.
- If the material is unsuitable for the fluid, increased wear may occur and fluid may escape. Make sure that the material is suitable for the fluid used in your installation.
- The equipment may be damaged if stored or transported incorrectly. Storage: Dry, clean room air at 5–40 °C (non-condensing, non-corrosive). Close all openings to make sure the equipment remains dry and is protected against corrosive atmospheres.
- Frost damage can occur when the system is not in operation. Drain the equipment if there is a risk of frost.

Qualification of personnel

Specialist personnel must have knowledge and experience in the following areas:

- ▶ Locally applicable explosion & fire protection and occupational health & safety provisions
- ▶ Work on pressure equipment
- ▶ Producing pipe connections
- ▶ Working with hazardous (hot, cold or pressurised) fluids
- ▶ Lifting and transporting loads
- ▶ All information in this Installation & Operating Manual and other applicable documentation

Protective gear

The operator must ensure that anyone working on the equipment must wear the required protective clothing and safety gear stipulated for the site of installation. The protective clothing must be suitable for the used media and must protect the wearer against safety and health hazards associated with a particular job to be carried out at the site of installation. Protective clothing & equipment must provide protection from potential hazards, in particular from injuries to:

- ▶ Head
- ▶ Eyes
- ▶ Body
- ▶ Hand
- ▶ Feet
- ▶ Hearing

Note that this list is not exhaustive. The operator must establish personal protective equipment guidelines and specify any additional protective gear that is required if the worker is exposed to a specific risk at the site of installation.

Typographic features of warning notes



DANGER

Notes with the heading DANGER warn against imminent dangerous situations that can lead to death or serious injuries.



WARNING

Notes with the heading WARNING warn against possibly dangerous situations that could lead to death or serious injuries.



CAUTION

Notes with the heading CAUTION warn against dangerous situations that could lead to minor or moderate injuries.

Formatting features for warnings of property damage

Attention!

This information warns of a situation leading to property damage.

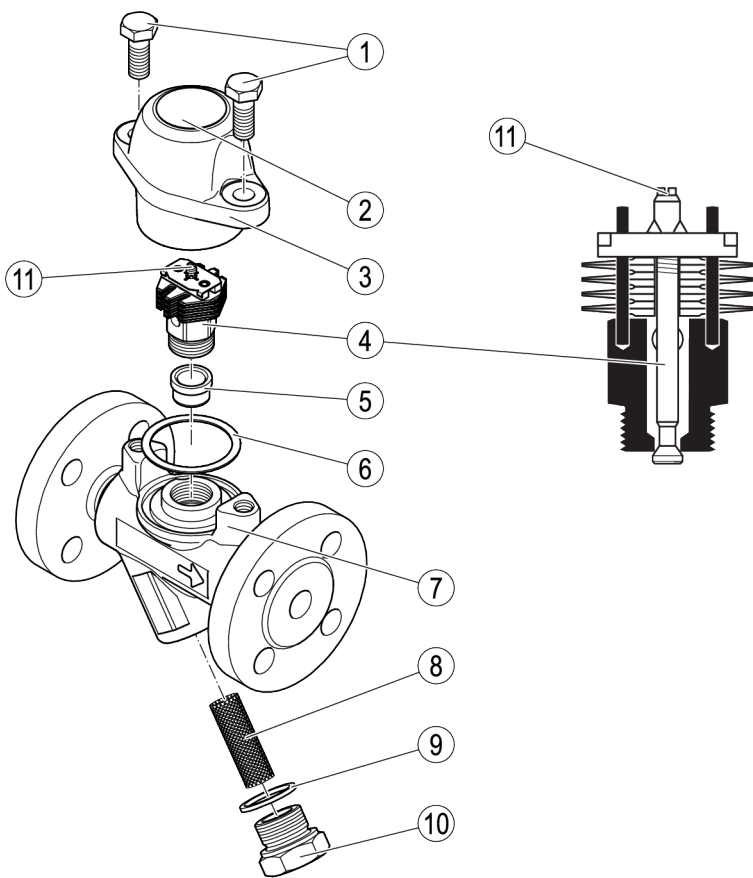
Description

Scope of supply and equipment specification

Scope of supply

Our equipment is delivered packed and ready for assembly.

Component parts



No.	Designation
1	Screw (M 10 × 25)
2	Name plate
3	Cover
4	Thermovit regulator
5	Bushing (interference fit)
6	Body gasket (A 40 × 48 × 2)

Optional extras

The following add-on equipment is available:

- Blow-off valve
- Ultrasonic measurement device
- Steam trap monitor

End connections

The equipment is available with the following end connections:

- Flanges
- Butt-weld ends
- Socket-weld ends
- Screwed sockets

No.	Designation
7	Body
8	Strainer
9	Sealing ring (A 24 × 29)
10	Sealing plug
11	Setting screw

Name plate/identification

The following items are indicated on the name plate:

- Type designation
- Nominal size
- Pressure rating
- Design pressure
- Design temperature
- Max. service temperature at the corresponding service pressure
- Max. admissible differential pressure
- Manufacturer

The following items are indicated on the equipment body:

- Material
- Date of manufacturing
- Direction of flow
- Mark (if required), e.g. CE, UKCA, EAC

Application of European Directives

Fluids

The equipment is designed for the following fluids (in accordance with the EU Pressure Equipment Directive or Pressure Equipment (Safety) Regulations in the UK):

- Fluids of group 2

Due consideration must be given to chemical and corrosive influences.

Use in potentially explosive atmospheres

The equipment does not have its own potential source of ignition (as per ATEX Directive). Please pay attention to the following information:

When installed, static electricity may arise between the equipment and the connected system. When used in potentially explosive atmospheres, the plant manufacturer or plant operator is responsible for discharging or preventing possible static charge.

If it is possible for medium to escape, e.g. through actuating mechanisms or leaks in threaded joints, the plant manufacturer or plant operator must take this into consideration when dividing the area into zones.

Task and function

Purpose

This equipment is designed for discharging condensed water or air-venting steam lines.

Function of the Thermovit controller

The equipment is fitted with a Thermovit regulator that regulates the flow of the fluid. The Thermovit regulator is screwed into the body.

The Thermovit regulator consists of a stack of several bimetallic plates. As the fluid temperature rises the plates deflect, thereby moving the stage nozzle. The orifice is being closed.

When the installation is cold the Thermovit regulator is open.

Storing and transporting the equipment

Attention!

Equipment can be damaged if stored or transported improperly.

- Close all openings with the sealing plugs or covers supplied with the equipment or use similar sealing covers.
- Protect the equipment against moisture and corrosive atmospheres.
- Please contact the manufacturer if the specified transport and/or storage requirements cannot be met.

Storing the equipment

- Please observe the following items when storing the equipment:
 - Do not store the equipment for more than 12 months.
 - Use the supplied sealing plugs or other suitable seal caps in order to seal off all openings of the equipment.
 - Protect the sealing surfaces and contact areas against mechanical damage.
 - Protect the equipment and all components against hard shocks and impacts.
 - Store the equipment only in closed rooms that meet the following environmental conditions:
 - Air humidity below 50 %, not condensing
 - Indoor air: clean, salt-free and non-corrosive
 - Temperature 5–40 °C.
- Make sure that all these requirements are always met when storing the equipment.
- Please contact the manufacturer if you cannot comply with the recommended storage conditions.

Transporting the equipment

- Meet the requirements for storage also when transporting the equipment.
- Prior to transport seal off connections with sealing plugs.



If you do not have the sealing plugs supplied with the equipment use appropriate seal caps to seal off the connections.

- For short distances (only a few metres) you can transport the equipment unpacked.
- When transporting the equipment over larger distances use the original packaging.
- If you do not have the original packaging use a box that protects the equipment adequately against corrosion and physical damage.



For a short period of time the equipment may be transported even if the temperature is below 0 °C, provided that the equipment is completely empty and dry.

Mounting and connecting the equipment

Preparing installation

- Take the equipment out of the transport packaging.
- Check the equipment for transport damage.
- Contact the manufacturer if you detect any kind of shipping damage.

When supplied by the factory, the connections may be sealed off with sealing plugs.

- Remove sealing plugs before mounting the equipment.
- Keep the sealing plugs and the packing for further use.
- Have the following tools to hand:
 - ▶ Combination spanner size 16
 - ▶ Combination spanner size 22
 - ▶ Combination spanner size 30

- ▶ Torque wrench 20–120 Nm



DANGER

Risk of extremely severe injury or death due to burns, freezing or intoxication during work on pipes.

- Make sure that there is no hot or cold fluid in the equipment or pipes.
- Make sure that the equipment pipes are not under pressure.
- Make sure that the system is switched off and secured so it cannot be turned on by unauthorised persons.
- Make sure that the equipment and pipes are lukewarm.
- Wear protective clothing that is suitable for the fluid, and use suitable personal protective equipment if necessary.

Information on suitable protective clothing and PPE can be found in the safety data sheet of the fluid used.

- Drain pipes until they are empty.
- Switch the installation off and protect it against unauthorised or unintended re-activation.

Connecting the equipment



DANGER

Incorrectly connected equipment can result in accidents with extremely severe injuries or death.

- Make sure that only specialist personnel connect the equipment to the pipe.
- Make sure that the direction of flow in the pipe matches the flow direction arrow on the equipment.
- Make sure that the connected pipe does not subject the body to any stress (forces or torques) during installation and operation.

Specialist personnel must have knowledge and experience of the type of pipe connection used.

Attention!

Equipment will be damaged if the end connections are undersized.

- Make sure that the connections are strong and rigid enough to support the weight of the equipment and to withstand the forces that occur during operation.

To allow easy access for routine servicing and exchanging components observe the indicated withdrawal distances and allow for clearances to adjacent installation parts.

For more information see page 20.

- Make sure that the pipe system of the plant is clean.
- Preferred installation of the equipment with the strainer insert hanging downwards.



Other installation orientations of the strainer are possible in exceptional cases.

Attention!

Any installation position where the strainer insert does not point downwards may impair the correct function of the equipment.

- Please consult the factory with installation details if the equipment cannot be installed in your installation with the strainer hanging downwards.
-
- Make sure that the equipment is free from foreign matter.
 - Install the equipment in the desired, permitted installation position.
 - Make sure that the equipment is safely mounted and that all connections are made correctly.

Attention!

Malfunctions may occur if the equipment or condensate line is insulated.

- Make sure that the heat generated by the equipment or the condensate line is dissipated.
-

Operation

You can check that the equipment is functioning perfectly during operation as needed using the GESTRA ultrasonic measurement device.

- For this, read the Installation & Operating Manual of the ultrasonic measurement device.

For critical applications, the equipment can be fitted with a steam trap monitor.

- For this, read the Installation & Operating Manual of the steam trap monitor.

Attention!

Frost damage may occur when the installation is shut down.

- Drain the equipment if ambient temperatures below 0 °C (frost) are to be expected.
-

After operation

Attention!

Frost damage may occur when the installation is shut down.

- Drain the equipment if ambient temperatures below 0 °C (frost) are to be expected.
-

- Have the following tools to hand:

- Combination spanner size 16
- Combination spanner size 22
- Combination spanner size 30
- Torque wrench 20–120 Nm

Changing the settings of the Thermovit regulator

You can adjust the opening temperature on the Thermovit regulator. You can increase the factory-set temperature by 40° C or reduce it by 10° C.

The following opening temperatures are set as default:

Service pressure bar	1	2	4	8	12	16	20	26	32
Opening temperature °C	60	64	72	84	93	102	110	118	128



DANGER

Risk of extremely severe injury or death due to burns, freezing or intoxication during work on pipes.

- Make sure that there is no hot or cold fluid in the equipment or pipes.
- Make sure that the equipment pipes are not under pressure.
- Make sure that the system is switched off and secured so it cannot be turned on by unauthorised persons.
- Make sure that the equipment and pipes are lukewarm.
- Wear protective clothing that is suitable for the fluid, and use suitable personal protective equipment if necessary.

Information on suitable protective clothing and PPE can be found in the safety data sheet of the fluid used.

- Remove the screws (1) and cover (3) from the body (7).
- Insert a screwdriver in the slot of the setting screw (11).

Turning the setting screw one eighth of a turn changes the temperature by 5 °C.

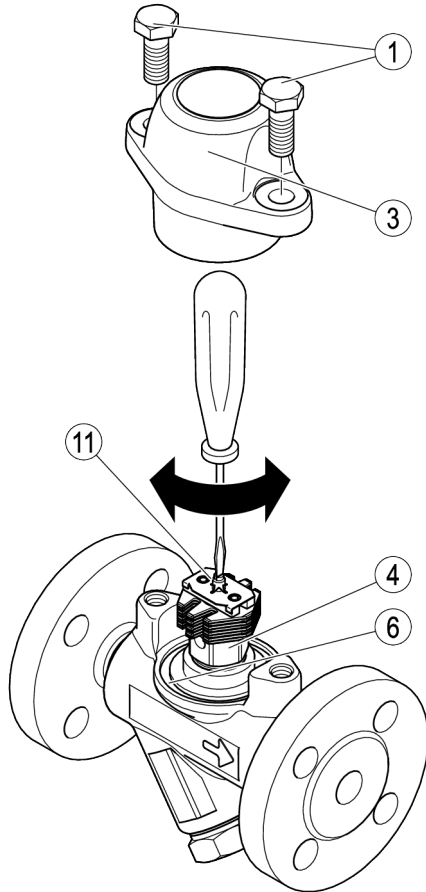
- Turn the setting screw clockwise to lower the opening temperature.

The setting screw can only be turned two eighths of a turn from the factory setting, as a maximum. This reduces the opening temperature by 10 °C.

- Turn the setting screw anti-clockwise to increase the opening temperature.

The setting screw can only be turned one turn from the factory setting, as a maximum. This increases the opening temperature by 40 °C.

- Set the desired opening temperature.
- If the body gasket (6) is damaged, use a new one.
- Insert the body gasket in the body.
- Place the cover (3) on the body (7).
- Tighten the screws (1) alternately and in several stages to the torque shown in the table.



Different equipment types require different torques for tightening the screws.

- The following table gives the required tightening torques:

Component	Torque Nm
Thermovit regulator (4)	90
Screw (1)	25
Sealing plug (10)	75

To restore the factory-set opening temperature, proceed as follows:

- Turn the screwdriver clockwise as far as it will go.
- Then turn the screwdriver anti-clockwise by seven eighths of a turn.

Maintaining the equipment

The equipment does not require any particular maintenance.

Removing external dirt deposits

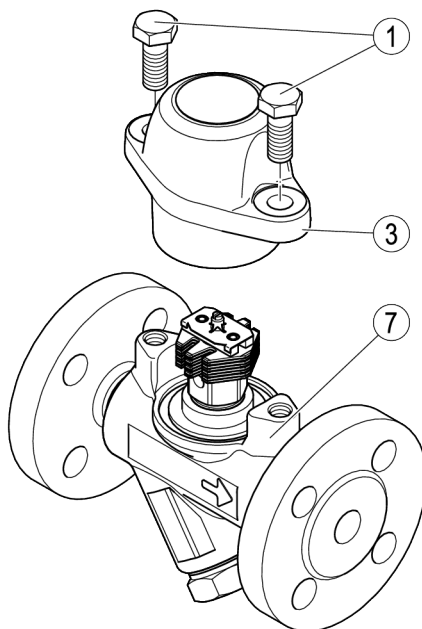
- To remove dirt deposits rinse the equipment with fresh water and wipe it with a clean, lint-free cloth.
- To remove any persistent residues use a cleaning agent that is suitable for the material and carefully wipe the equipment with a clean, lint-free cloth.

Maintenance of the Thermovit regulator

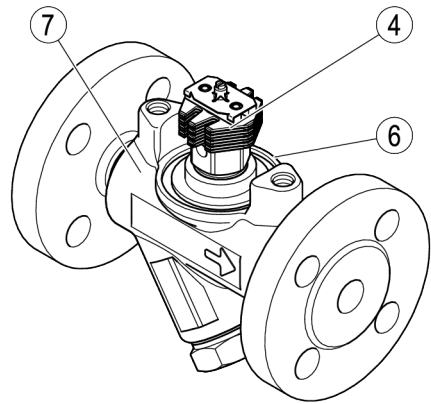
Removing Thermovit regulator

To clean the Thermovit regulator and, if necessary, replace it with a new one proceed as follows:

- Remove the screws (1) and cover (3) from the body (7).



- Unscrew the Thermovit regulator (4) from the body (7).
- Check the condition of the body gasket (6).



Cleaning Thermovit regulator

- Clean the Thermovit regulator with fresh water and a clean lint-free cloth.
- Clean gasket seating surfaces.

Checking the component parts for damage

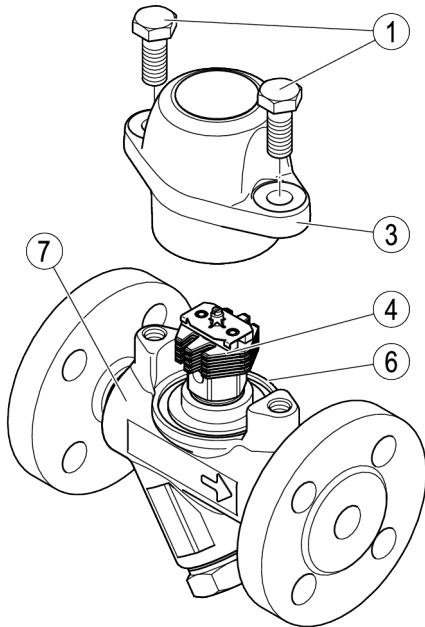
- Check the removed parts for visible signs of wear or damage.
- Discard and replace any damaged part.

Installing Thermovit regulator

To fit the Thermovit regulator proceed as follows:

- Apply heat-resistant lubricant to the following surfaces:
 - ▮ all threads
 - ▮ the seating surface of the nozzle insert
 - ▮ the seating surface of the cover

- Screw the Thermovit regulator (4) into the body (7) with the specified torque.
- If the body gasket (6) is damaged, use a new one.
- Insert the body gasket in the body.
- Place the cover (3) on the body (7).
- Tighten the screws (1) alternately and in several stages to the torque shown in the table.



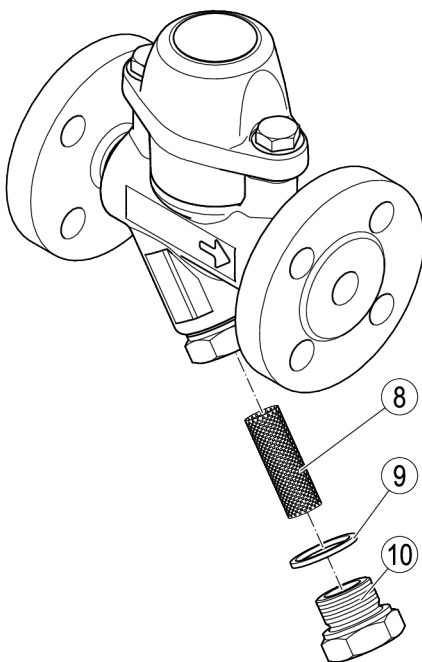
Component	Torque Nm
Thermovit regulator (4)	90
Screw (1)	25

Strainer maintenance

Removing and cleaning the strainer

To remove and clean the strainer and replace it if necessary, proceed as follows:

- Unscrew the sealing plug (10) from the body.
- Remove the sealing ring (9).
- Remove the strainer (8).
- Clean the sealing plug, sealing ring and strainer using clean water and a lint-free cloth.
- Clean the sealing surfaces.



Checking the component parts for damage

- Check the removed parts for visible signs of wear or damage.
- Discard and replace any damaged part.

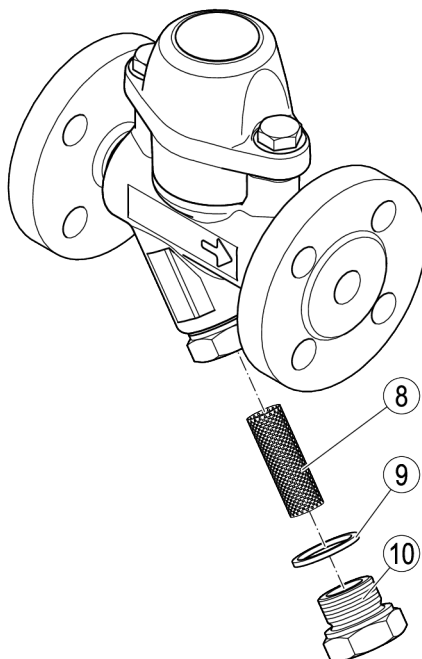
Mounting the strainer

To install the strainer, proceed as follows:

- Coat the thread of the sealing plug with temperature-resistant lubricant.

The lubricant must have the same properties as OKS® 217.

- If the sealing ring is damaged, use a new one.
- Place the sealing ring (9) over the sealing plug (10).
- Connect the strainer (8) to the sealing plug.
- Screw the strainer and sealing plug into the body.
- Tighten the sealing plug to the torque specified in the table below.



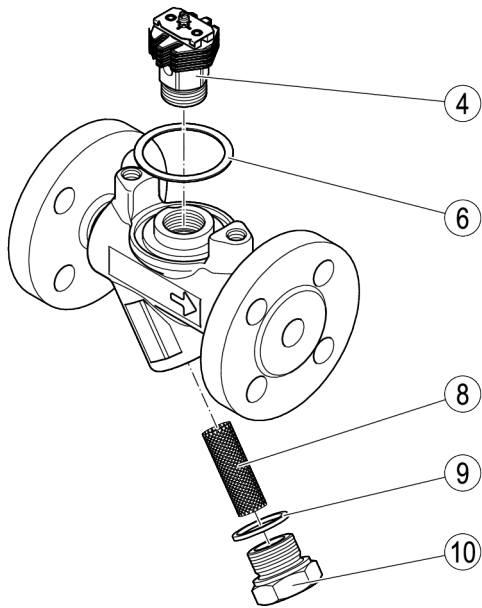
Component	Torque Nm
Sealing plug (10)	75

Servicing the equipment and installing spare parts

You may exchange the following component parts in case of wear or damage:

- ▶ Thermovit regulator
 - ▶ Strainer
 - ▶ Body gasket
 - ▶ Sealing ring
- Replace components only with genuine spare parts from the manufacturer.

Spare Parts



No.	Designation	Stock code
4, 6	Thermovit regulator with body gasket	375324
8, 9, 10	Strainer, complete with sealing plug and sealing ring	375113
6	Body gasket ¹ (A 40 × 48 × 2)	375159
9	Sealing ring ¹ (A 24 × 29)	375162

1 Minimum order quantity 50 items. Please purchase smaller quantities from your specialist retailer.

Replacing the Thermovit regulator

- Remove the Thermovit regulator from the body as described on page 13 ff.
- Make sure that all components used are clean and in perfect condition.
- Install the new Thermovit regulator in the body as described on page 14 ff.

Replacing the strainer

- Remove the strainer from the body as described on page 15 ff.
- Make sure that all components used are clean and in perfect condition.
- Install the new strainer in the body as described on page 15 ff.

Troubleshooting

Problem	Cause	Remedy
Fluid escapes (equipment is leaking).	The body has been damaged by corrosion or erosion.	Replace the equipment with a new one. Use equipment made of material that is suitable for the application.
The discharge capacity is too low. Insufficient thermal output of the user.	The pipes do not have a continuous fall in flow direction.	Make sure that the lines run with a continuous fall in flow direction.
Fluid escapes (equipment is leaking).	The equipment has been damaged by frost.	Replace the equipment with a new one. When shutting down the installation make sure that all lines and the equipment are completely drained.
The discharge capacity is too low. The equipment is cold or only warm to the touch.	The shut-off valves for fluid flow are closed.	Fully open the shut-off valves.
The equipment is cold or only warm to the touch.	The sealing plugs are still attached to the connections.	Remove the equipment. Remove the sealing plugs. Mount the equipment.
Fluid escapes (equipment is leaking).	The equipment or the body is damaged.	Replace the equipment with a new one.

Problem	Cause	Remedy
Fluid escapes (equipment is leaking).	A gasket is damaged.	Replace the gasket with a new one. Clean gasket seating surfaces.
The flow rate is too low.	The strainer is clogged.	Clean the strainer.
The flowrate is too low. The equipment is cold or only lukewarm. Insufficient heat output of consumers.	Contamination in the inflow, outflow or equipment.	Clean the pipe. Clean all inner parts. Replace inner parts or equipment if damaged.
The equipment is losing steam.	The equipment contains dirt, deposits or foreign bodies.	Clean the pipe. Clean all internal parts. Replace damaged internal parts.
The equipment is blowing off live steam.	The control unit is damaged or worn.	Replace the control unit.

- If faults occur that are not listed above or cannot be corrected, please contact our Technical Service or authorized agency in your country.

Putting the equipment out of operation

Removing harmful substances

Qualified personnel must have extensive experience with and a working knowledge of:

- pertinent rules and regulations concerning handling hazardous substances
- special regulations for handling the hazardous substances encountered on site
- using the required personal protective equipment (PPE) and clothing
- Remove all residues from the equipment.
- For the disposal of all residues observe the pertinent legal regulations concerning waste disposal.

Removing the equipment



DANGER

Risk of extremely severe injury or death due to burns, freezing or intoxication during work on pipes.

- Make sure that there is no hot or cold fluid in the equipment or pipes.
- Make sure that the equipment pipes are not under pressure.
- Make sure that the system is switched off and secured so it cannot be turned on by unauthorised persons.
- Make sure that the equipment and pipes are lukewarm.
- Wear protective clothing that is suitable for the fluid, and use suitable personal protective equipment if necessary.

Information on suitable protective clothing and PPE can be found in the safety data sheet of the fluid used.



CAUTION

Risk of injuries if the equipment falls down.

- When removing the equipment make sure the it is safely held in place and cannot fall down.

Suitable measures are for instance:

- ▶ Equipment that is not too heavy may be supported by a second person.
- ▶ For heavy equipment use suitable lifting equipment of sufficient strength.
- Detach the end connections of the equipment from the pipes.
- Put the equipment onto a suitable base.
- Store the equipment as described on page 8.

Re-using equipment after storage

Observe the following instructions if you want to remove the equipment and use it again somewhere else:

- ▶ Make sure that the equipment is free of any fluid residues.
- ▶ Make sure that all connections are in good condition and leak-free.
- ▶ If necessary re-work welded connections in order to ensure that they are in good working condition.
- Use the equipment only for its intended purpose and the service conditions for which it was specified.

Returning the equipment

You can return the valve to your contractual partner.

- Make sure that all harmful substances are removed from the valve.
- Insert the stoppers in the connections.
- Observe the instructions in section "Transporting the equipment" from page 9.
- Pack the valve in its original packaging or in a suitable transport packaging.

The transport packaging must protect the valve from damage in the same way as the original packaging.

- Add the completed and signed decontamination declaration to the valve. The decontamination declaration must be attached to the packaging so that it is accessible from outside.
- Register the return delivery with your contractual partner before returning the valve.

Disposing of the equipment

The equipment is made from the following materials:

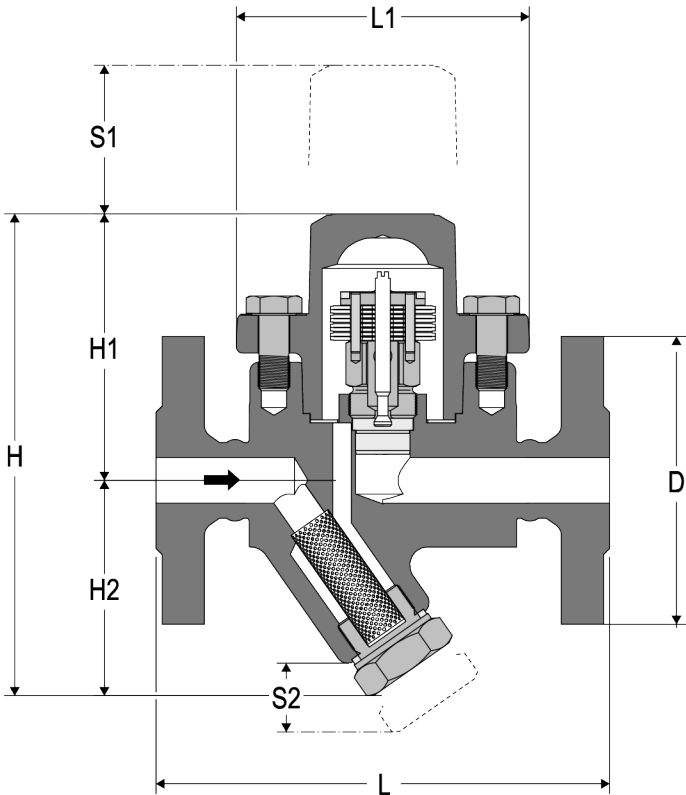
Component	EN	ASTM/ ASME
Body, cover and sealing plug	1.0460	SA105
Screws	1.7225	SA193 B7
Body gasket	Graphite/CrNi	
Thermovit regulator	Stainless steel	
Other internal parts	Stainless steel	

Technical data

Dimensions and weights

All equipment

	mm	in"
H	158	6.2"
H1	88	3.5"
H2	70	2.8"
L1	96	3.8"
S1 Cover service dimensions	70	2.8"
S2 Sealing plug service dimensions	30	1.2"



UBK 46 flange

		PN40			CL150			CL300		
Nominal size	DN	15	20	25	15	20	25	15	20	25
	NPS	1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
L Length	mm	150		160	150		160	150		160
	in"	5.9"		6.3"	5.9"		6.3"	5.9"		6.3"
D Flange Ø	mm	95	105	115	88.9	98.4	107.9	95.2	117.5	123.8
	in"	3.7"	4.1"	4.5"	3.5"	3.9"	4.2"	3.7"	4.6"	4.9"
Weight	kg	3.7	4.3	4.8	3.7	4.3	4.8	3.7	4.3	4.8
	lb	8.2	9.5	10.6	8.2	9.5	10.6	8.2	9.5	10.6

UBK 46 screwed socket: G, NPT, socket-weld end: EN, ASME

Nominal size	DN	15	20	25
	NPS	1/2"	3/4"	1"
L Length	mm	95		
	in"	3/7"		
Weight	kg	2.2	2.1	2.0
	lb	4.9	4.6	4.4

UBK 46 butt-weld end

		EN			ASME		
Nominal size	DN	15	20	25	15	20	25
	NPS	1/2"	3/4"	1"	1/2"	3/4"	1"
For pipe	mm	21.3 × 2.0	26.9 × 2.3	33.7 × 2.6	21.3 × 2.8	26.7 × 2.9	33.4 × 3.4
L Length	mm	200					
	in"	7.9"					
Weight	kg	2.5					
	lb	5.5					

Pressure & temperature ratings

UBK 46 flange PN40

p Pressure ¹	barg	40.0	37.1	33.3	27.6	25.7	17.1
T Temperature ¹	°C	-10 — 20	100	200	300	350	420
Δ PMX Max. admissible differential pressure	bar	32					

¹ Ratings for strength of body/cover to EN 1092-1

UBK 46 flange CL150

p Pressure ¹	barg	19.6	17.7	13.8	10.2	8.4	5.5
T Temperature ¹	°C	-29 — 38	100	200	300	350	425
Δ PMX Max. admissible differential pressure	bar	19.6					
p Pressure ¹	psig	285	260	200	140	110	80
T Temperature ¹	°F	-20 — 100	200	400	600	700	800
Δ PMX Max. admissible differential pressure	psi	284					

¹ Ratings for strength of body/cover to ASME B16.5

UBK 46 flange CL300, screwed socket G, screwed socket NPT, socket-weld end EN/ASME CL 3000

p Pressure ¹	barg	51.1	46.6	43.8	39.8	37.6	28.8
T Temperature ¹	°C	-29 — 38	100	200	300	350	425
Δ PMX Max. admissible differential pressure	bar	32					
p Pressure ¹	psig	740	680	635	570	530	410
T Temperature ¹	°F	-20 — 100	200	400	600	700	800
Δ PMX Max. admissible differential pressure	psi	465					

¹ Ratings for strength of body/cover to ASME B16.5

Declaration of Conformity – Standards and Directives

You can find details on the conformity of the equipment and the applicable standards and directives in the Declaration of Conformity and the relevant certificates.

You can download the latest Declaration of Conformity at www.gestra.com. You can request the relevant certificates by writing to the following address:

GESTRA AG

Münchener Straße 77

28215 Bremen

Germany

Phone +49 421 3503-0

Fax +49 421 3503-393

e-mail info@de.gestra.com

Web www.gestra.com

Modifications to the equipment not approved by us will invalidate the Declaration of Conformity and the certificates.



You can find our authorized agents around the world at: www.gestra.com

GESTRA AG

Münchener Strasse 77
28215 Bremen
Germany

Phone +49 421 3503-0
Fax +49 421 3503-393
e-mail info@de.gestra.com
Web www.gestra.com

UK Importer

GESTRA UK Ltd

Unit 1 Sopwith Park, Royce Close,
West Portway Business Park, Andover,
Hampshire SP10 3TS
United Kingdom

810475-04/10-2023 (808497-04) kx_mm © GESTRA AG Bremen Printed in Germany