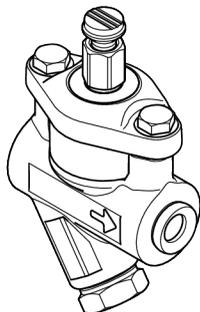


Condensation Drain Valve

**AK 45**



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## Foreword

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

### ► AK 45

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

AK 45 equipment is used to discharge condensate from steam in pipes during start-up.

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.

## 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.

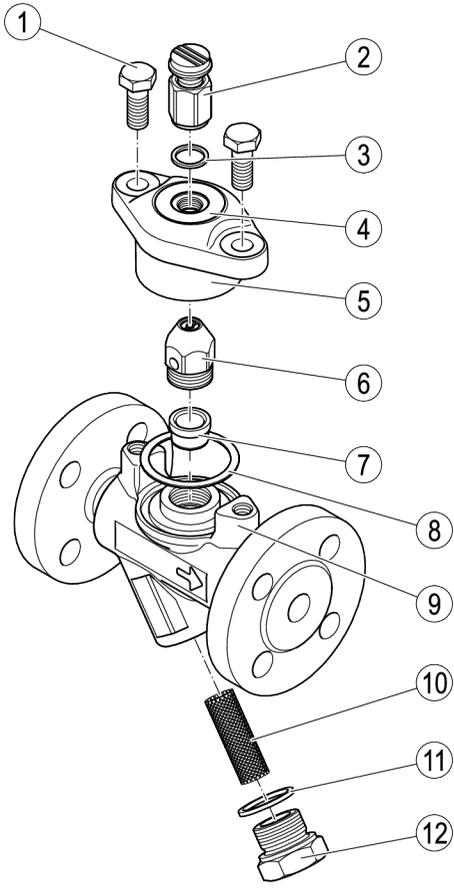
# Description

## Scope of supply and equipment specification

### Scope of supply

Our equipment is delivered packed and ready for assembly.

### Equipment specification



No.	Designation
1	Screw (M 10 × 25)
2	Hand purging knob
3	Sealing ring (A 14 × 18)
4	Name plate
5	Cover
6	Valve insert

No.	Designation
7	Bushing, interference fit
8	Body gasket (A 40 × 48 × 2)
9	Body
10	Strainer
11	Sealing ring (A 24 × 29)
12	Sealing plug

### Optional extras

The valve insert is factory-set to a closing pressure of 0.8 bar. For other closing pressures, please contact the manufacturer.

The following versions are available as options:

- ▶ Closing pressure  $\Delta p$  0.25 bar
- ▶ Closing pressure  $\Delta p$  0.5 bar
- ▶ Closing pressure  $\Delta p$  1.5 bar
- ▶ Closing pressure  $\Delta p$  2.0 bar
- ▶ Non-standard length 172 mm

### End connections

The equipment is available with the following end connections:

- ▶ Flanges
- ▶ Screwed sockets

### Name plate/identification

The following items are indicated on the name plate:

- ▶ Manufacturer
- ▶ Type designation
- ▶ Nominal size
- ▶ Pressure rating
- ▶ Max. admissible differential pressure

The following items are indicated on the equipment body:

- ▶ Material
- ▶ Direction of flow
- ▶ Date of manufacturing
- ▶ 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.

Do not use the hand purging knob in potentially explosive atmospheres.

## Task and function

The equipment is used to discharge condensate from steam when starting up steam systems.

After the steam system has started, the equipment valve remains open until the operating pressure has risen to the closing pressure set by the plant operator. The equipment then closes under spring pressure.

After the system has been powered down or if the pressure drops below closing pressure, the valve opens.

The built-in spring keeps the equipment open when the steam system is not under pressure.

The valve can be opened briefly during operation using the hand purging knob. This removes dirt deposits from the valve seal.

You can open the equipment briefly during operation to remove any dirt deposits.

## 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.

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

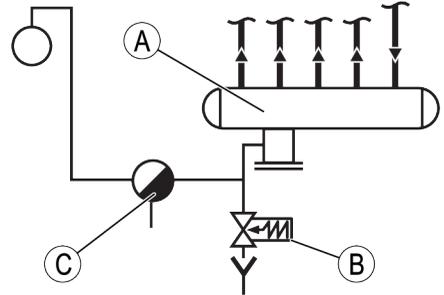
- For short distances (only a few metres) you can transport the equipment unpacked.
- When transporting the equipment over larger distances use the original packaging.
- If you do not have the original packaging use a box that protects the equipment adequately against corrosion and physical damage.

**i** 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.

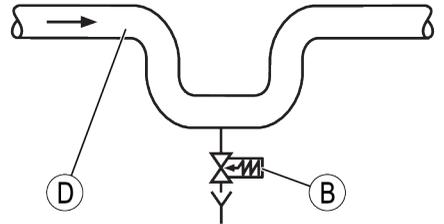
## Mounting and connecting the equipment

### Installation examples

The diagram below shows installation examples for draining a steam manifold (top) and a water pocket (bottom).



Draining a steam manifold



Draining a water pocket

Designation	Meaning
A	Steam manifold
B	AK
C	Steam trap
D	Steam

## 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 19
  - 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 19.

- 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**

Do not work on the equipment while it is operating.



### **DANGER**

Risk of explosion when fluid exits the equipment!

- Do not use the hand purging knob in potentially explosive atmospheres.



### **WARNING**

Risk of scalding from hot fluid when pressing the hand purging knob.

- Wear suitable protective clothing for the temperatures occurring in the system, or the required protective clothing.
- Make sure that there are no persons near the fluid outlet.

To remove dirt deposits with the hand purging knob, proceed as follows:

- Close the stop valve on the supply side.
- Close the stop valve on the condensate drain side.
- Place a sufficiently large container under the equipment to catch the escaping fluid.
- Using an open-ended spanner, carefully open the hand purging knob.

Fluid comes out.

- Close the hand purging knob.
- Open the stop valves.

---

## **After operation**



### **DANGER**

If the equipment is used in contaminated areas there is a risk of severe injuries or death caused by harmful substances in or on the equipment.

- Only qualified personnel are allowed to perform work on contaminated equipment.
- Always wear the protective clothing prescribed for contaminated areas when working on the equipment.
- Make sure that the equipment is completely decontaminated before carrying out any service work.
- Follow the pertinent instructions for handling the hazardous substances in question.



### **DANGER**

Risk of extremely severe injury or death due to burns, freezing or intoxication if fluid escapes.

- Make sure that connections and valves are tight after any work on the equipment.
- Make sure that equipment gaskets are intact.

---

### ***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 19
- Combination spanner size 22
- Combination spanner size 30
- Torque wrench 20–120 Nm

### **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.

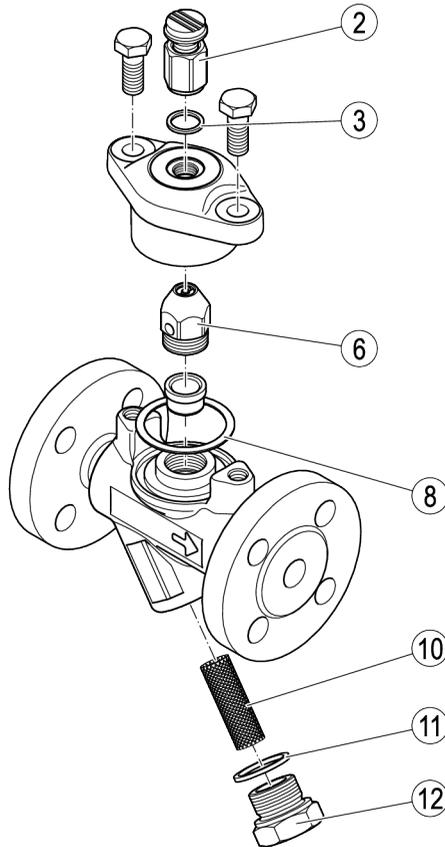
### **Maintaining the equipment**

The equipment does not require any particular maintenance.

### **Servicing the equipment and installing spare parts**

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

- Strainer
  - Valve insert
  - Hand purging knob
  - Body gasket
  - Sealing ring
- Replace components only with genuine spare parts from the manufacturer.



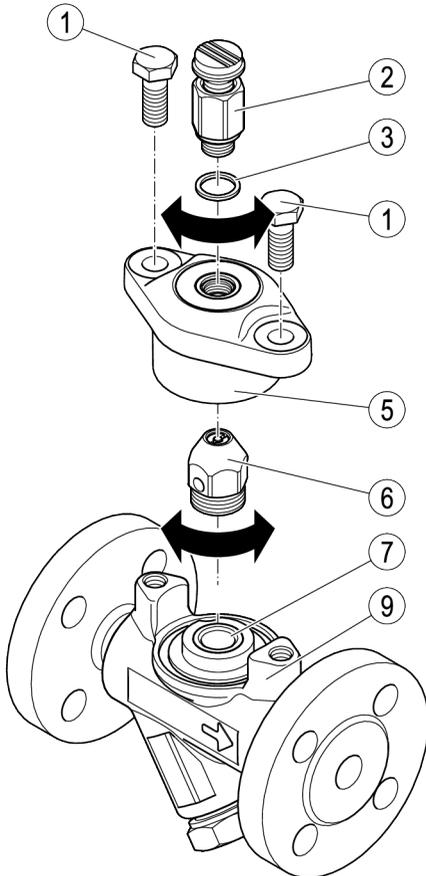
No.	Designation	Opening pressure	Stock code
2, 3	Hand purging knob with sealing ring		375435
6, 8	Valve insert with body gasket	0.25 bar	450544
		0.5 bar	451472
		0.8 bar	375434
		1.5 bar	450559
		2.0 bar	452285
10, 11, 12	Strainer with sealing plug and sealing ring		375113
3	Sealing ring for hand purging knob (A 14 × 18)*		375878
8	Body gasket*		375159
11	Sealing ring for strainer (A 24 × 29) *		375162

\* Pack size 50 units. Please purchase smaller quantities from your specialist retailer.

## Removing the hand purging knob and valve insert

To clean the hand purging knob and valve insert and replace them if necessary, remove them as follows:

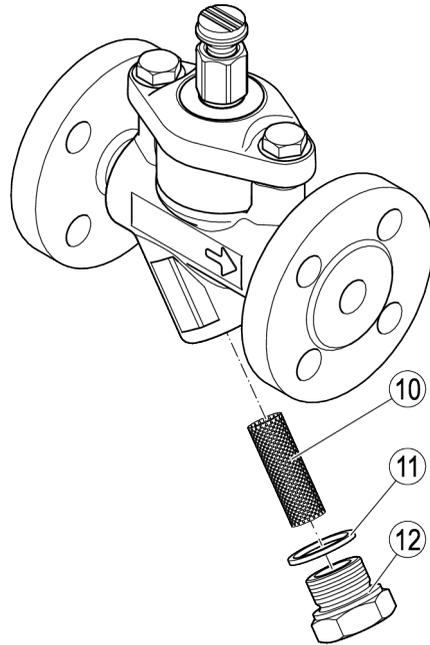
- Unscrew the two screws (1) from the body (9).
- Lift the cover (5) off the body.
- Remove the sealing ring (3) from the body.
- Unscrew the hand purging knob (2) from the cover (5).
- Unscrew the valve insert (6) from the interference-fit bushing (7) in the body.
- Remove the strainer, sealing plug and sealing ring as described on page 14 ff.



## Removing and cleaning the strainer

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

- Unscrew the sealing plug (12) from the body.
- Remove the sealing ring (11).
- Remove the strainer (10).
- Clean the sealing plug, sealing ring and strainer using clean water and a lint-free cloth.
- Clean the sealing surfaces.



## Cleaning sealing surfaces

- Clean the hand purging knob and valve insert using clean water and a lint-free cloth.
- Clean the sealing surfaces of the cover and body.

## Checking the component parts for damage

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

## Installing the hand purging knob and valve insert

To install the hand purging knob and valve insert, proceed as follows:

- Coat the following surfaces with temperature-resistant lubricant:

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

- ▶ all threads
- ▶ the sealing surface of the valve insert
- ▶ the sealing surface of the cover
- Screw the valve insert into the body.
- Tighten the valve to the torque shown in the table below.
- Inspect the sealing ring.
- If the sealing ring is damaged, use a new one.
- Screw the hand purging knob into the cover.
- Tighten the hand purging knob to the torque shown in the table below.
- If the body gasket is damaged, use a new one.
- Insert the body gasket in the body.
- Place the cover on the body.
- Tighten the screws alternately and in several stages to the torque shown in the table.

Component	Torque Nm
Valve insert (6)	90
Hand purging knob (2)	40
Screw (1)	25

## 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 over the sealing plug.
- Connect the strainer to the sealing plug.
- Screw the sealing plug into the body using an open-ended spanner.
- Tighten the sealing plug to a torque of 70 Nm.

## Troubleshooting

<b>Problem</b>	<b>Cause</b>	<b>Remedy</b>
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 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.
Fluid escapes (equipment is leaking).	A gasket is damaged.	Replace the gasket with a new one. Clean gasket seating surfaces.
Fluid escapes (equipment is leaking).	The connections are not tight.	Provide the connections with leakproof seals.
The flow rate is too low.	The strainer is clogged.	Clean the strainer.
The equipment is losing steam.	The equipment contains dirt, deposits or foreign bodies.	Clean the pipe. Clean all internal parts. Replace damaged internal parts.

- 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

- For the disposal of all residues observe the pertinent legal regulations concerning waste disposal.

## Removing harmful substances



### DANGER

If the equipment is used in contaminated areas there is a risk of severe injuries or death caused by harmful substances in or on the equipment.

- Only qualified personnel are allowed to perform work on contaminated equipment.
- Always wear the protective clothing prescribed for contaminated areas when working on the equipment.
- Make sure that the equipment is completely decontaminated before carrying out any service work.
- Follow the pertinent instructions for handling the hazardous substances in question.

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



### CAUTION

Environmental damage may be caused by poisonous fluid residues.

- Before disposing of the equipment make sure that it is clean and free of fluid residues.
  - For the disposal of all materials observe the pertinent legal regulations concerning waste disposal.
- 
- Remove all residues from the equipment.

## 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



### CAUTION

Environmental damage may be caused by poisonous fluid residues.

- ▶ Before disposing of the equipment make sure that it is clean and free of fluid residues.
- ▶ For the disposal of all materials observe the pertinent legal regulations concerning waste disposal.

The equipment is made from the following materials:

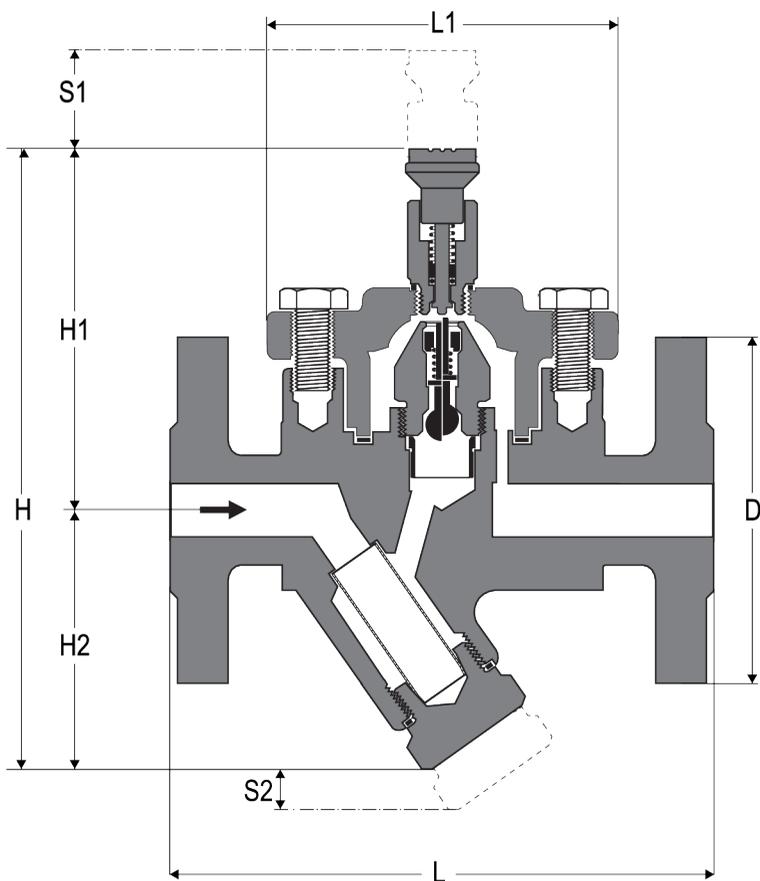
Component	EN	ASTM/ ASME
Body and cover	1.0460	SA105
Screws	1.7225	A193 B7
Body gasket	Graphite	
Sealing ring	1.4301	
Other internal parts	Stainless steel	

## Technical data

### Dimensions and weights

#### All equipment

	mm	in"
H	171	6.7"
H1	100	3.9"
H2	71	2.8"
L1	97	3.8"
S1 Cover service dimensions	40	1.6"
S2 Sealing plug service dimensions	30	1.2"



### AK 45 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 $\varnothing$	mm	95.0	105.0	115.0	89.0	99.0	108.0	95.0	117.0	124.0
	in"	3.7"	4.1"	4.5"	3.5"	3.9"	4.3"	3.7"	4.6"	4.9"
Weight	kg	3.6	4.2	4.8	3.6	4.2	4.8	3.7	4.3	4.9
	lb	7.9	9.3	10.6	7.9	9.3	10.6	8.2	9.5	10.8

### AK 45 screwed socket

<b>G: ISO 228-1, NPT: ASME B 16.11</b>							
Nominal size	DN	15		20		25	
		1/2"		3/4"		1"	
L Length	mm	95					
	in"	3.7"					
Weight	kg	2.1		2.0		2.0	
Weight	lb	4.6		4.4		4.4	

## Pressure & temperature ratings

### Flange PN40

p Pressure <sup>1</sup>	barg	40.0	33.3	27.6	25.7	23.8	17.1
T Temperature <sup>1</sup>	°C	-10 — 20	200	300	350	400	420

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

### Flange CL150

p Pressure <sup>1</sup>	barg	19.6	17.7	13.8	10.2	8.4	5.5
T Temperature <sup>1</sup>	°C	-29 — 38	100	200	300	400	425
p Pressure <sup>1</sup>	psig	285	260	200	140	110	80
T Temperature <sup>1</sup>	°F	-20 — 100	200	400	600	750	800

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

### Flange CL300, screwed socket G, screwed socket NPT

p Pressure <sup>1</sup>	barg	51.1	46.6	43.8	39.8	34.7	28.8
T Temperature <sup>1</sup>	°C	-29 — 38	100	200	300	400	425
p Pressure <sup>1</sup>	psig	740	680	635	570	505	410
T Temperature <sup>1</sup>	°F	-20 — 100	200	400	600	750	800

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

You can find precise information on the pressure and temperature ratings of your equipment on the name plate and in the data sheet.

## 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](http://www.gestra.com). You can request the relevant certificates by writing to the following address:

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Web	<a href="http://www.gestra.com">www.gestra.com</a>

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](http://www.gestra.com)

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