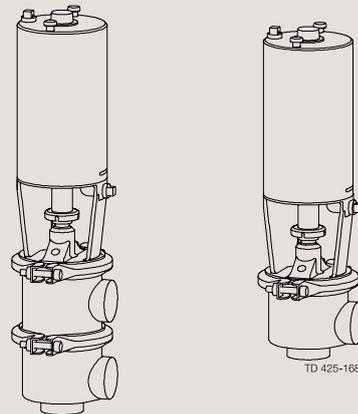




Instruction Manual

Unique Single Seat Valve (DN125-150)



ESE02590-EN5 2022-10

Original manual

Table of contents

The information herein is correct at the time of issue but may be subject to change without prior notice

1. Declarations of Conformity	4
2. Safety	6
2.1. Important information	6
2.2. Warning signs	6
2.3. Safety precautions	7
3. Installation	8
3.1. Unpacking/delivery/general installation	8
3.2. Recommended auxiliary equipment	9
3.3. General installation	10
3.4. Welding	12
4. Operation	14
4.1. Operation	14
4.2. Fault finding	16
4.3. Recommended cleaning	17
5. Maintenance	19
5.1. General maintenance	19
5.2. Dismantling of valve	21
5.3. Valve assembly	23
5.4. Dismantling of actuator	25
5.5. Assembly of actuator	26
6. Technical data	27
6.1. Technical data	27
7. Drawings	28
7.1. Drawings	28
8. Parts list and service kits	30
8.1. Shut-off valve	30
8.2. Change-over valve	32

1 Declarations of Conformity

EU Declaration of Conformity

The Designated Company

Alfa Laval Kolding A/S, Albuen 31, DK-6000 Kolding, Denmark, +45 79 32 22 00

Company name, address and phone number

Hereby declare that

Valve

Designation

Unique SSV PN10

Type

is in conformity with the following directives with amendments:

- Machinery Directive 2006/42/EC
- Pressure Equipment Directive 2014/68/EU category 1 and subjected to assessment procedure Module A.

The person authorised to compile the technical file is the signer of this document.

Global Product Quality Manager

Title

Lars Kruse Andersen

Name

Kolding, Denmark

Place

2022-10-01

Date (YYYY-MM-DD)



Signature

This Declaration of Conformity replaces Declaration of Conformity dated 2013-12-03



1 Declarations of Conformity

UK Declaration of Conformity

The Designated Company

Alfa Laval Kolding A/S, Albuen 31, DK-6000 Kolding, Denmark, +45 79 32 22 00

Company name, address and phone number

Hereby declare that

Valve

Designation

Unique SSV PN10

Type

is in conformity with the following directives with amendments:

- The Supply of Machinery (Safety) Regulations 2008
- The Pressure Equipment (Safety) Regulations 2016 category 1 and subjected to assessment procedure Module A

Signed on behalf of: Alfa Laval Kolding A/S

Global Product Quality Manager

Title

Lars Kruse Andersen

Name

Kolding, Denmark

Place

2022-10-01

Date (YYYY-MM-DD)



Signature

DoC Revison_01_102022

**UK
CA**



2 Safety

*Unsafe practices and other important information are emphasized in this manual.
Warnings are emphasized by means of special signs.*

2.1 Important information

Always read the manual before using the valve!

WARNING

Indicates that special procedures must be followed to avoid serious personal injury.

CAUTION

Indicates that special procedures must be followed to avoid damage to the valve.

NOTE

Indicates important information to simplify or clarify procedures.

2.2 Warning signs

General warning:



Caustic agents:



All warnings in the manual are summarized on this page.

Pay special attention to the instructions below so that severe personal injury and/or damage to the valve are avoided.

2.3 Safety precautions

Installation:

Always observe the technical data (see chapter 6 Technical data)

Always release compressed air after use.



Operation:

Always observe the technical data (see chapter 6 Technical data)

Never touch the valve or the pipelines when processing hot liquids or when sterilizing



Always handle lye and acid with great care



Maintenance:

- **Always** observe the technical data (see chapter 6 Technical data)

- **Always** release compressed air after use

- The valve must **Never** be hot when servicing it

- The valve/actuator and the pipelines must never be pressurised when servicing the valve/ actuator

- **Never** stick your fingers through the valve ports if the valve is supplied with compressed air.



Transportation:

Always secure that compressed air is released

Always secure that all connections is disconnected before attempt to remove the valve from the installation

Always drain liquid out of valves before transportation

Always used predesigned lifting points if defined

Always secure sufficient fixing of the valve during transportation - if special designed packaging material is available it must be used

3 Installation

The instruction manual is part of the delivery.

Study the instructions carefully.

The valve is supplied as separate parts as standard (for welding).

The valve is assembled before delivery, if it is supplied with fittings.

3.1 Unpacking/delivery/general installation

Unpacking/delivery

Step 1

CAUTION

Alfa Laval cannot be held responsible for incorrect unpacking.

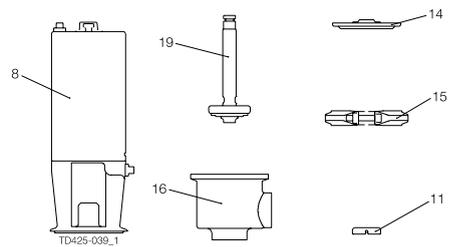
Check the delivery:

1. Complete valve, shut-off valve or change-over valve (see step 2 and 3)
2. Delivery note
3. Instruction Manual

Step 2

Shut-off valve:

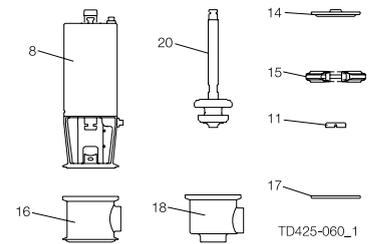
1. Complete actuator with bonnet (8)
2. Clip assembly (11)
3. Lip seal (14)
4. Clamp (15)
5. Valve plug (19)
6. Valve body (16)



Step 3

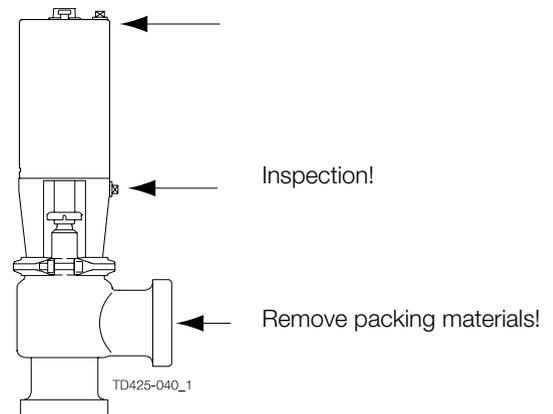
Change-over valve:

1. Complete actuator with bonnet (8)
2. Clip assembly (11)
3. Lip seal (14)
4. Two clamps (15)
5. Valve plug (20)
6. Two valve bodies (16, 18)
7. Valve body seal ring (17)



Step 4

- Remove possible packing materials from the valve/valve parts
- Inspect the valve/valve parts for visible transport damages
- Avoid damaging the valve/valve parts



The valve sizes DN125-150 are very heavy.

Therefore Alfa Laval recommends manufacturing and usage of auxiliary equipment. A proposal is given below.

Please note that the auxiliary equipment cannot be supplied by Alfa Laval.

The items refer to the parts list and service kits section.

3.2 Recommended auxiliary equipment

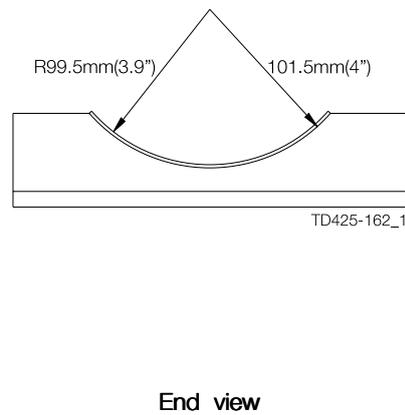
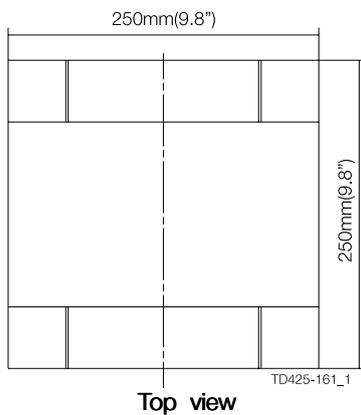
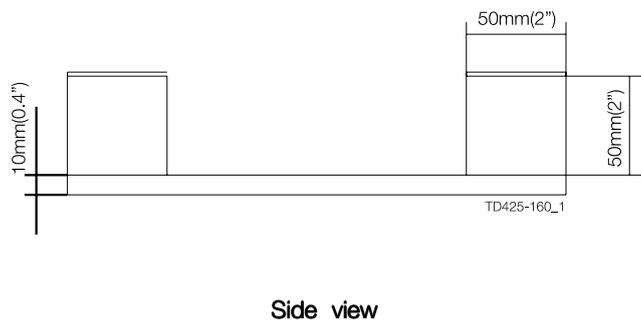
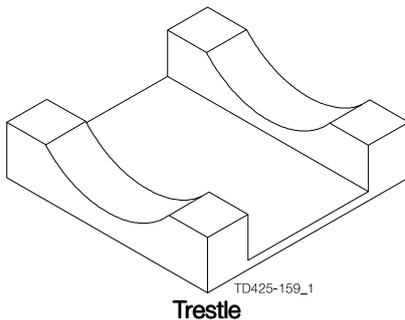
Step 1

For lifting the valve

Screw an eye bolt (6 mm) (1/4") into top pin (23). Using a small hook crane or similar, lift the valve by the eye bolt.

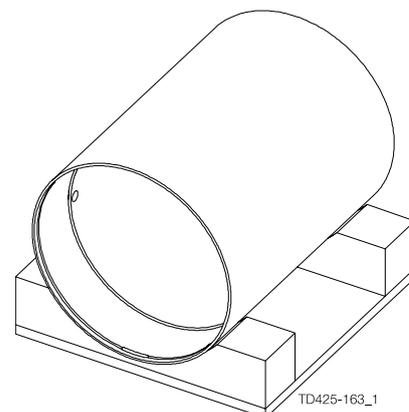
Trestle:

- The purpose of the trestle is to support the valve during dismantling and reassembly.
- The trestle is made of a base plate, two support plates, two rubber linings and four bolts.
- The rubber linings are attached to the support plates so that the valve/actuator will rest on these.
- To prevent the valve from turning during dismantling and assembly the trestle must be made with the correct measurements (see below). All measurements are in mm.



Step 2

1. Place the valve in the trestle.
2. Make sure that the actuator rests on the rubber linings on the trestle support plates.
3. Dismantle/assemble the valve.



3 Installation

Study the instructions carefully and pay special attention to the warnings!
The valve has welding ends as standard but can also be supplied with fittings.
NO = Normally open. NC = Normally closed. A/A = Air/air activated.

3.3 General installation

Step 1



Always read the technical data thoroughly.
See chapter 6 Technical data



Always release compressed air after use.

CAUTION

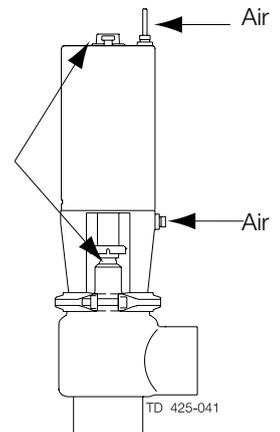
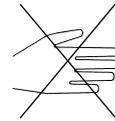
Alfa Laval cannot be held responsible for incorrect installation.

Step 2



Never touch the clip assembly or the actuator piston rod if the actuator is supplied with compressed air (see the warning label).

Moving parts!

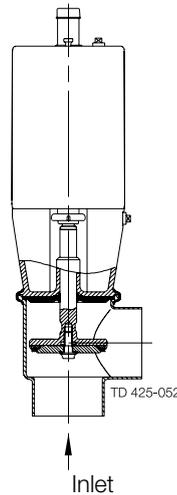


Step 3

It is recommended to install the valve so that:

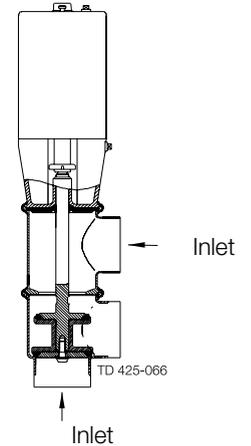
- The actuator is not turned downwards as the valve will then not be drained.
- The flow is against the closing direction to avoid water hammering

Shut-off valve



Change-over valve

Avoid water hammer!



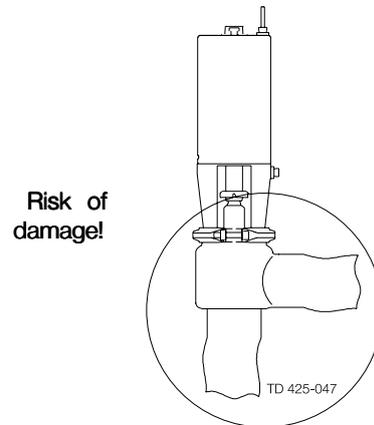
Study the instructions carefully and pay special attention to the warnings!
 The valve has welding ends as standard but can also be supplied with fittings.
 NO = Normally open. NC = Normally closed. A/A = Air/air activated.

Step 4

Avoid stressing the valve.

Pay special attention to:

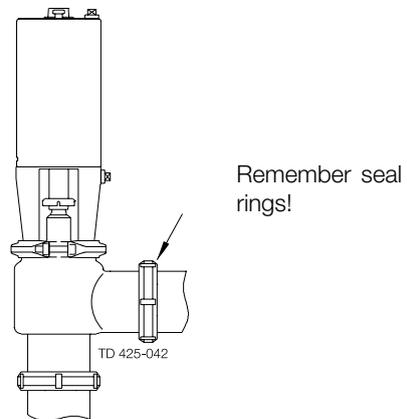
- Vibrations
- Thermal expansion of the tubes
- Excessive welding
- Overloading of the pipelines



Step 5

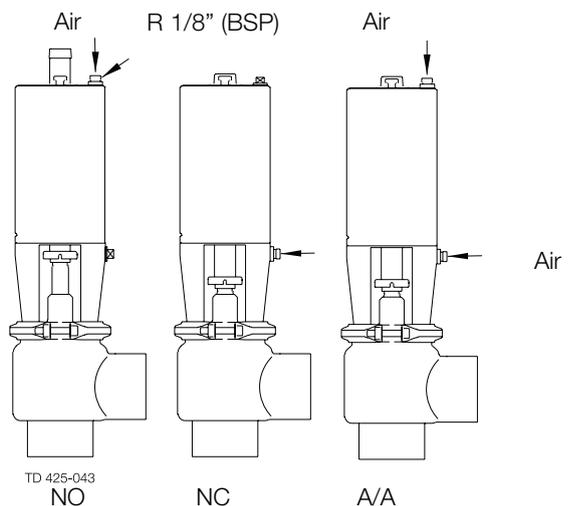
Fittings:

Ensure that the connections are tight.



Step 6

Air connection:



3 Installation

Study the instructions carefully.

The valve is supplied as separate parts to facilitate the welding.

The items refer to the parts list and service kits section. Check the valve for smooth operation after welding.

NO = Normally open. NC = Normally closed. A/A = Air/air activated.

3.4 Welding

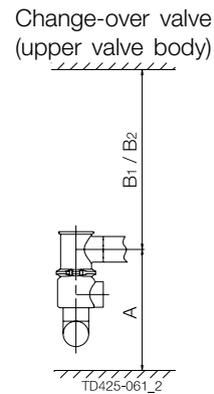
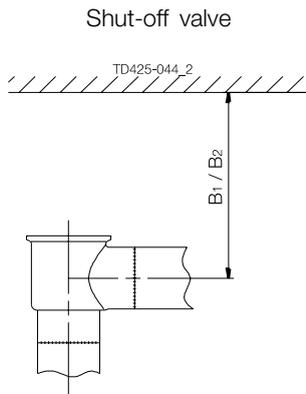
Step 1

Always install valves with more than one valve body so that the seals between the valve bodies can be replaced.

Do not weld more than one valve body into the system.

It is recommended to fit sufficient clamps/unions to be able to disassemble the valve for servicing.

Valve size	A (mm) (inch)	B ₁ (mm) (inch)	B ₂ (mm) (inch)
DN125	580 (22.8)	730 (28.7)	920 (36.2)
DN150	640 (25.1)	730 (28.7)	920 (36.2)



Step 2

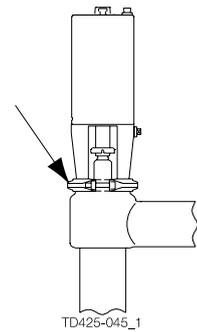
Shut-off valve

Assemble the valve in accordance with steps 1-5 in section 4.3

Recommended cleaning

Pay special attention to the warnings!

Fit seal ring (17) correctly!



Step 3

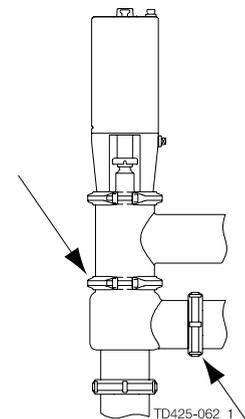
Change-over valve

Assemble the valve in accordance with step 1-6 in section 4.3

Recommended cleaning

Pay special attention to the warnings!

Fit seal ring (17) correctly!



Remember seal rings!

Study the instructions carefully.

The valve is supplied as separate parts to facilitate the welding.

The items refer to the parts list and service kits section. Check the valve for smooth operation after welding.

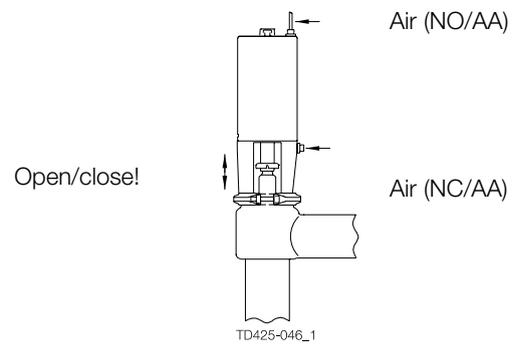
NO = Normally open. NC = Normally closed. A/A = Air/air activated.

Step 4

Pre-use check

1. Supply compressed air to the actuator.
2. Open and close the valve several times to ensure that it operates smoothly.

Pay special attention to the warnings!



4 Operation

Study the instructions carefully and pay special attention to the warnings!

Ensure that the valve operates smoothly. The items refer to the parts list and service kits section.

NO = Normally open. NC = Normally closed. A/A = Air/air activated.

4.1 Operation

Step 1

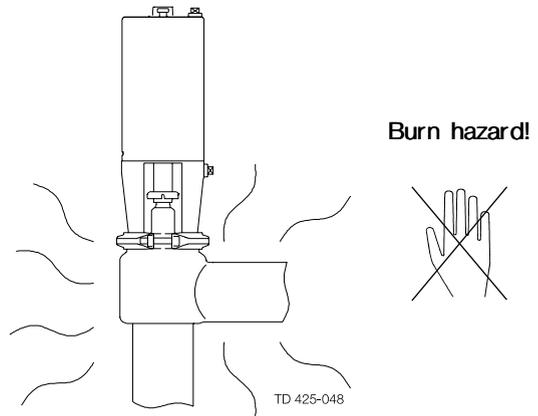
- Always read the technical data thoroughly (see chapter 6 Technical data)
- Always release compressed air after use.

CAUTION!

Alfa Laval cannot be held responsible for incorrect operation.

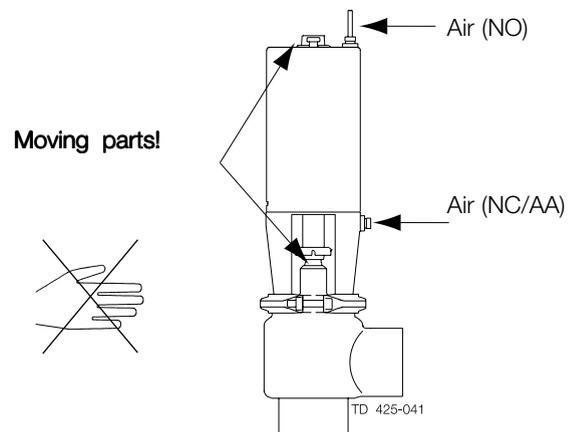
Step 2

Never touch the valve or the pipelines when processing hot liquids or when sterilizing.



Step 3

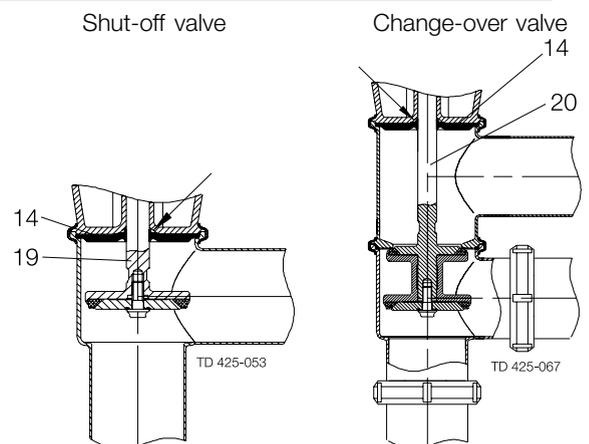
Never touch the clip assembly or the actuator piston rod if the actuator is supplied with compressed air.



Step 4

Lubrication of valve:

1. Ensure smooth movement between lip seal (14) and plug stem (19, 20).
2. Lubricate the lip seal with silicone oil/grease if necessary.



Lubricate if necessary!
(see section 5.1 General maintenance)

Study the instructions carefully and pay special attention to the warnings!

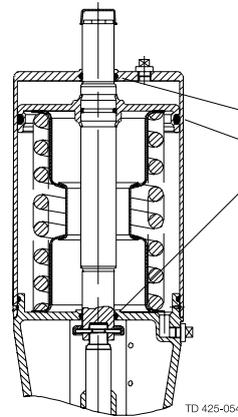
Ensure that the valve operates smoothly. The items refer to the parts list and service kits section.

NO = Normally open. NC = Normally closed. A/A = Air/air activated.

Step 5

Lubrication of actuator

1. Ensure smooth movement of the actuator (the actuator is lubricated before delivery).
2. Lubricate all seals with oil/grease if necessary.



Lubricate if necessary!
(see section 5.1 General maintenance)

4 Operation

Pay attention to possible faults.

Study the instructions carefully.

The items refer to the parts list and service kits section

4.2 Fault finding

Problem	Cause/r esult	Repair
The valve plug jerks	The lealings seize	Lubricate: <ul style="list-style-type: none"> - O-rings (2) - O-ring (5) and the inside of cylinder (3) - Lip seal (14)
Product leakage at stem and/or clamp	<ul style="list-style-type: none"> - Worn/product affected lip seal (14) and/or seal ring (17) 	<ul style="list-style-type: none"> - Replace the seal - Replace with a seal of a different rubber grade
Product leakage (closed valve)	<ul style="list-style-type: none"> - Worn/product affected - Loose plug parts (vibrations) - Product deposits on the seat and/or plug 	<ul style="list-style-type: none"> - Replace the seal ring - Replace with a seal of a different rubber grade - Tighten the loose parts - Frequent cleaning
Product leakage (too high pressure or too small actuator)	<ul style="list-style-type: none"> - Worn actuator O-rings - Too small actuator or actuator spring 	<ul style="list-style-type: none"> - Replace the O-rings - Replace with a larger actuator (for valve sizes DN/OD38-63.5 mm/ DN40-65) - Fit a stronger spring (for valve sizes DN/OD38-63.5 mm/DN40-65) - Use auxiliary air on the spring side (NOT-element)
Water hammer	The flow direction is the same as the closing direction	<ul style="list-style-type: none"> - The flow direction should be against the closing direction - Fit a damper on the valve (optional extra) - Use auxiliary air on the spring side (NOT-element)
The valve does not open/close	<ul style="list-style-type: none"> - Faulty clip assembly (11) - The pressure on the plug plug is too high 	<ul style="list-style-type: none"> - Replace the clip assembly - Reduce the pressure plug is too high - Fit stronger spring/larger actuator (for valve sizes DN/OD38-63.5 mm/ DN40-65)

The valve is designed for cleaning in place (CIP). CIP = Cleaning In Place.
 Study the instructions carefully and pay special attention to the warnings!
 NaOH = Caustic Soda.
 HNO₃ = Nitric acid.

4.3 Recommended cleaning

Step 1



Always handle lye and acid with great care.

Caustic danger!



Always use rubber gloves!

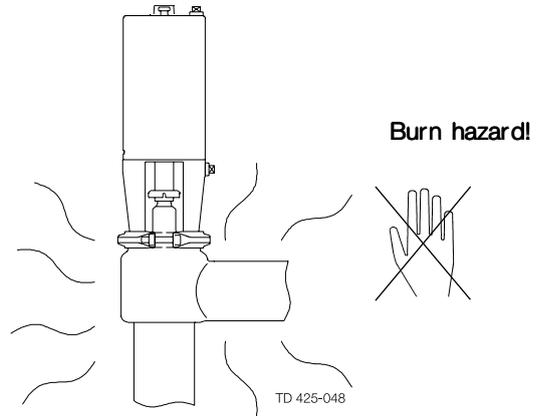


Always use protective goggles!

Step 2

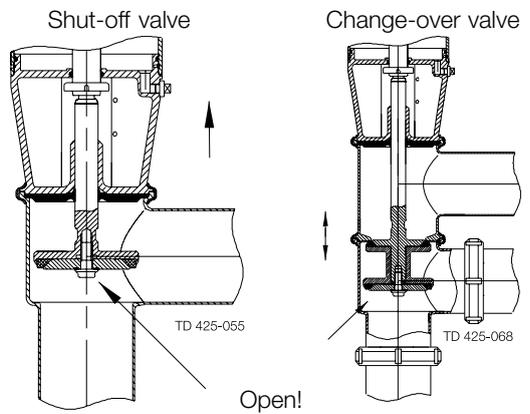


Never touch the valve or the pipelines when sterilising.



Step 3

Clean the plug and the seats correctly.
Pay special attention to the warnings!
 Lift and lower valve plug momentarily!



4 Operation

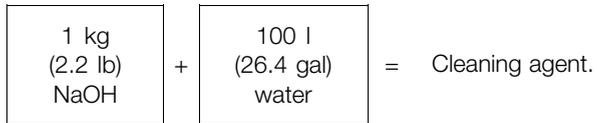
The valve is designed for cleaning in place (CIP). CIP = Cleaning In Place.
Study the instructions carefully and pay special attention to the warnings!
NaOH = Caustic Soda.
HNO₃ = Nitric acid.

Step 4

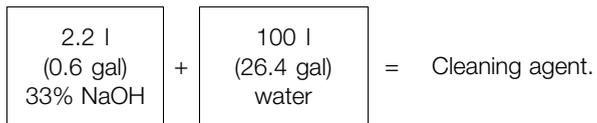
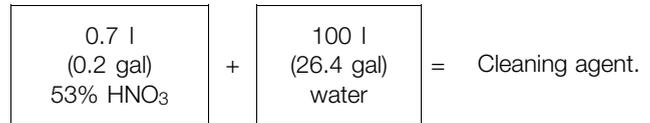
Examples of cleaning agents:

Use clean water, free from chlorides.

1. 1% by weight NaOH at 70° (158° F).



2. 0.5% by weight HNO₃ at 70° C



Step 5

1. Avoid excessive concentration of the cleaning agent.
 2. Adjust the cleaning flow to the process.
 3. **Always** rinse well with clean water after the cleaning.
-

Step 6

NOTE

The cleaning agents must be stored/disposed of in accordance with current regulations/directives.

Maintain the valve regularly.
 Study the instructions carefully and pay special attention to the warnings!
 Always keep spare rubber seals and lip seals in stock.

5.1 General maintenance

Step 1



Always read the technical data thoroughly.
 See chapter 6 Technical data



Always release compressed air after use.

Step 2



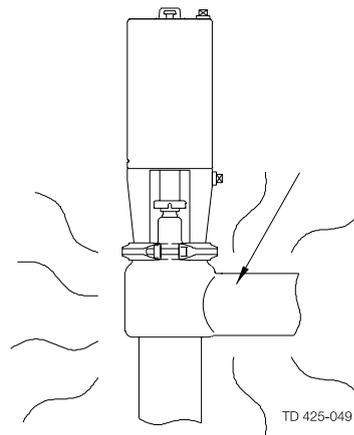
Never service the valve when it is hot.



Never service the valve with valve and pipelines under pressure.

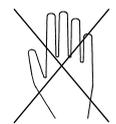
NOTE

All scrap must be stored/discharged in accordance with current rules/directives.



Atmospheric pressure required!

Burn hazard!



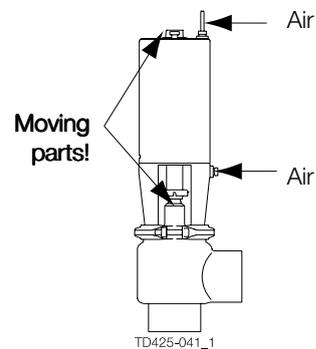
Step 3



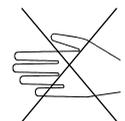
Never stick your fingers through the valve ports if the actuator is supplied with compressed air.



Never touch the moving parts if the actuator is supplied with compressed air.



Cutting hazard!



5 Maintenance

Maintain the valve regularly.

Study the instructions carefully and pay special attention to the warnings!

Always keep spare rubber seals and lip seals in stock.

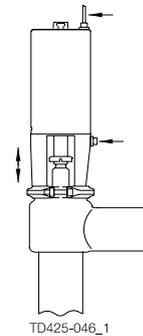
	Product rubber seals	Valve lip seal	Actuator rubber seals
Preventive maintenance	Replace after 12 months depending on working conditions	Replace when replacing the rubber seals	Replace after 5 years
Maintenance after leakage (leakage normally starts slowly)	Replace at the end of the day	Replace when replacing the rubber seals	Replace when possible
Planned maintenance	<ul style="list-style-type: none"> - Regular inspection for leakage and smooth operation - Keep a record of the actuator - Use the statistics for planning of inspections Replace after leakage		<ul style="list-style-type: none"> - Regular inspection for leakage and smooth operation - Keep a record of the actuator - Use the statistics for planning of inspections Replace after leakage
Lubrication (USDA H1 approved oil/grease)	Before fitting Silicone oil or silicone grease	Before fitting Silicone oil or silicone grease	Before fitting Oil or grease

Pre-use check:

1. Supply compressed air to the actuator.
2. Open and close the valve several times to ensure that it operates smoothly.

Pay special attention to the warnings!

Open/close!



Air (NO/AA)

Air (NC/AA)

Ordering spare parts

Recommended spare: Service kits (see chapter 6 Technical data).

Study the instructions carefully.

The items refer to the parts list and service kits section.

Handle scrap correctly.

NC = Normally closed. NO = Normally open. A/A = Air/air activated.

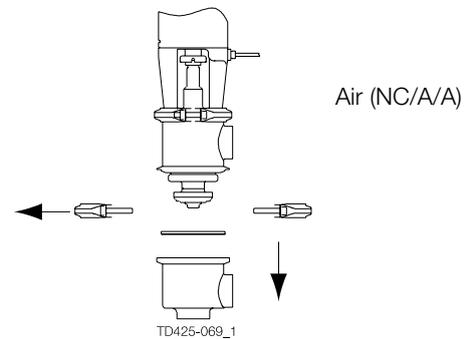
5.2 Dismantling of valve

Step 1

Change-over valve:

1. Supply compressed air to the actuator (only NC)
2. Loosen and remove lower clamp (15)
3. Release compressed air (18)
4. Pull out seal ring (17)
5. Release compressed air

Pay special attention to the warnings!

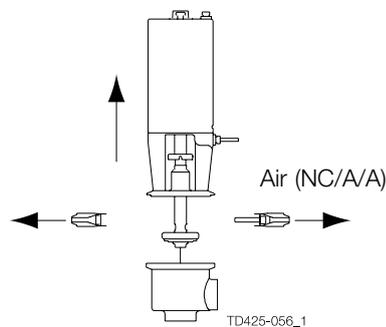


Step 2

Shut-off valve:

1. Supply compressed air to the actuator (only NC)
2. Loosen and remove clamp (15)
3. Lift out the actuator
4. Release compressed air

Pay special attention to the warnings!

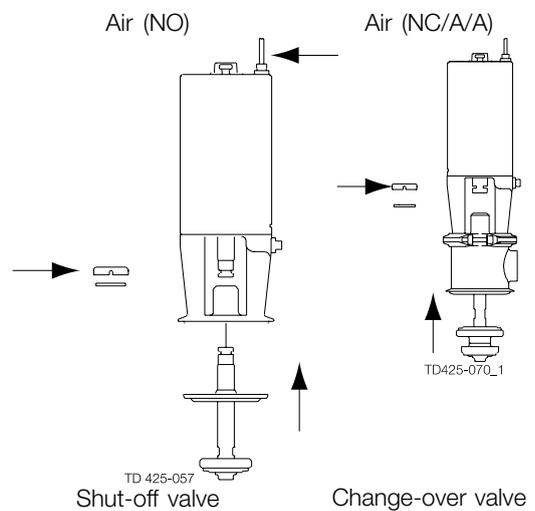


Step 3

Shut-off valve:

1. Supply compressed air to the actuator (only NC)
2. Remove clip assembly (11) by using plugs
(For sizes Dn125-150: Unscrew valve plug(19,20))
3. Remove valve plug (19,20)
4. Release compressed air

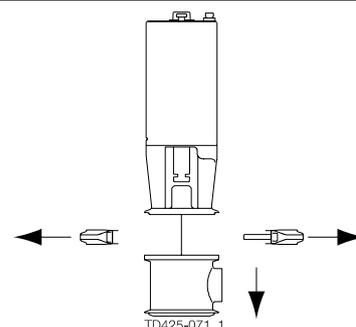
Pay special attention to the warnings!



Step 4

Change-over valve:

1. Remove upper clamp (15)
2. Remove upper valve body (16)



5 Maintenance

Study the instructions carefully.

The items refer to the parts list and service kits section.

Handle scrap correctly.

NC = Normally closed. NO = Normally open. A/A = Air/air activated.

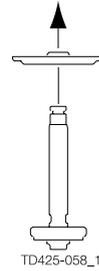
Step 5

Shut-off valve:

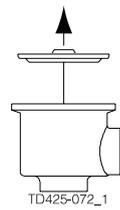
Remove lip seal (14)

(For sizes DN125-150: Remove lip seal (14) and guide ring (27)).

Shut-off valve



Change-over valve

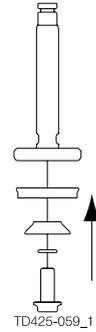


Step 6

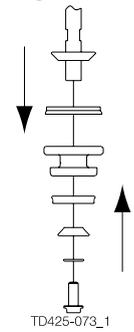
Shut-off valve:

1. Remove screw (19h, 20h)
2. Dismantle the complete valve plug

Shut-off valve



Change-over valve



Study the instructions carefully.

The items refer to the parts list and service kits section.

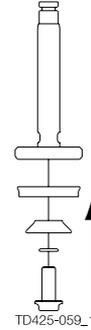
Lubricate the rubber seals and the lip seal before fitting them.

5.3 Valve assembly

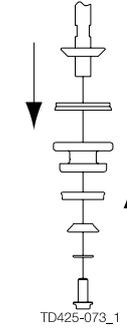
Step 1

1. Assemble the complete valve plug
2. Fix screw (19h, 20h) by using loctite or something similar

Shut-off valve



Change-over valve

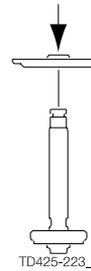


Step 2

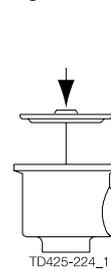
Fit lip seal (14)

(For sizes DN125-150: Fit guide ring (27) and lip seal (14))

Shut-off valve



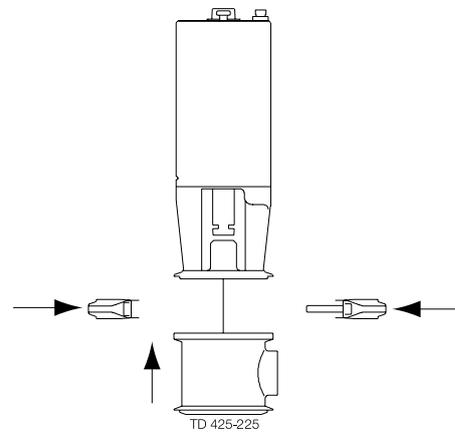
Change-over valve



Step 3

Change-over valve:

1. Assemble upper valve body (16) and the actuator
2. Fit and tighten upper clamp (15)



5 Maintenance

Study the instructions carefully.

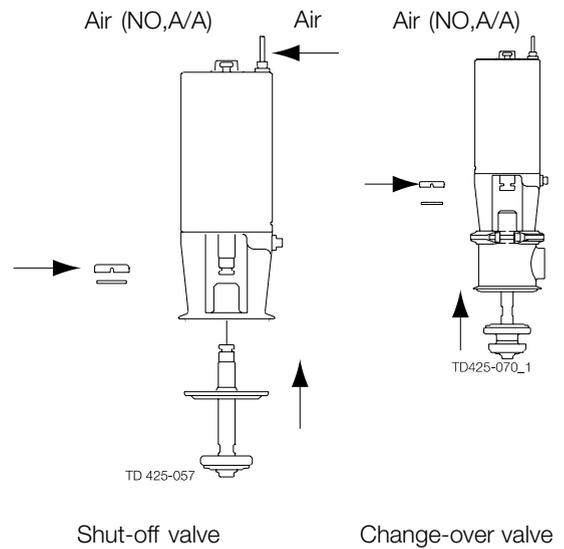
The items refer to the parts list and service kits section.

Lubricate the rubber seals and the lip seal before fitting them.

Step 4

1. Fit the plastic ring of clip assembly (11) on the actuator piston rod
2. Supply compressed air to the actuator (Only NO)
3. Fit valve plug (19, 20)
4. Fit and assemble clip assembly (11) by using pliers. (For sizes DN125-150: Screw together valve plug (20) and piston (6). Fix thread by using Loctite or something similar)
5. Release compressed air.

Pay special attention to the warnings!

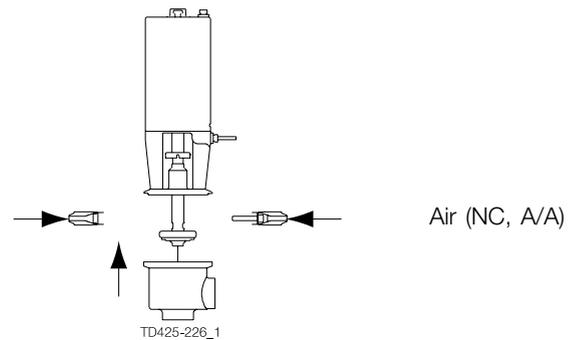


Step 5

Shut-off valve

1. Supply compressed air to the actuator (only NC)
2. Fit the actuator
3. Fit and tighten clamp (15)
4. Release compressed air.

Pay special attention to the warnings!

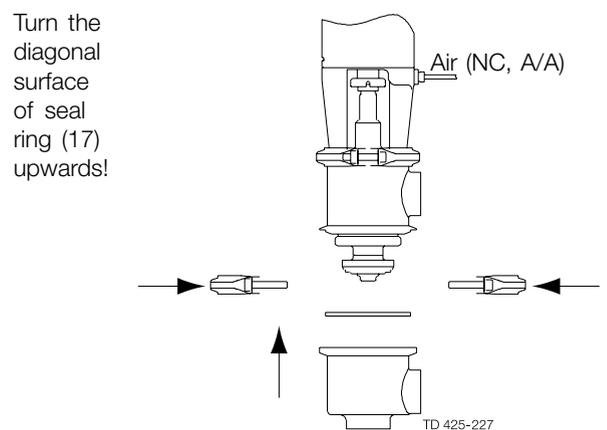


Step 6

Change-over valve:

1. Fit seal ring (17) correctly in lower valve body (18)
2. Supply compressed air to the actuator (only NC)
3. Assemble lower and upper valve bodies (16, 18)
4. Fit and tighten lower clamp (15)
5. Release compressed air

Pay special attention to the warnings!



Study the instructions carefully.

The items refer to the parts list and service kits section.

Handle scrap correctly. NO = Normally open. NC = Normally closed. A/A = Air/air activated.

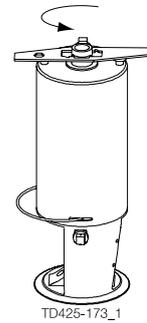
Service tool: See Spare Parts.

5.4 Dismantling of actuator

Step 1

1. Rotate cylinder (3)
2. Remove lock wire (4)

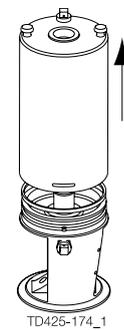
Rotate with the service tool!



Step 2

1. Remove cylinder (3)
2. Remove O-rings (2, 7) from bonnet (8) and cylinder (3)

(For sizes DN125-150 also remove O-ring (24) and guide rings (21, 25))

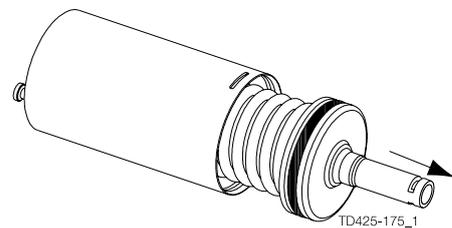


Step 3

1. Remove piston (6) and spring assembly (10)
2. Remove O-ring (5) from the piston. (For sizes DN125-150 also remove guide ring (22) and top pin (23))

NOTE!

The A/A actuator has no spring assembly.



5 Maintenance

Study the instructions carefully.

The items refer to the parts list and service kits section. Lubricate the rubber seals before fitting them.

A larger actuator is available for valve sizes DN/OD38-63.5 mm. The spring assembly can be replaced by a stronger one.

A/A = Air/air activated.

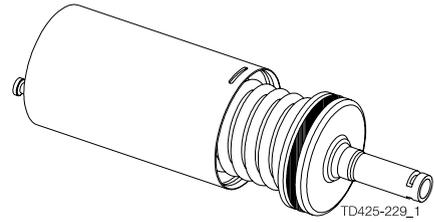
5.5 Assembly of actuator

Step 1

1. Remove piston (6) and spring assembly (10)
2. Remove O-ring (5) from the piston. (also remove guide ring (22) and top pin (23))

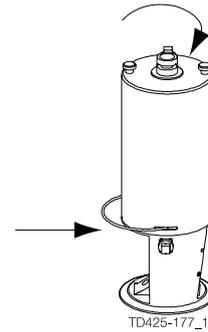
NOTE!

The A/A actuator has no spring assembly.



Step 2

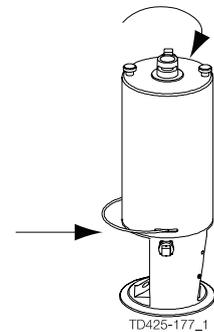
1. Fit O-rings (2, 7) in bonnet (8) and cylinder (3). (also fit O-ring (24) and guide rings (21, 25))
2. Fit the cylinder



Step 3

1. Fit lock wire (4) through the slot in cylinder (3) into the hole in bonnet (8)
2. Rotate the cylinder 360° (see step 4)

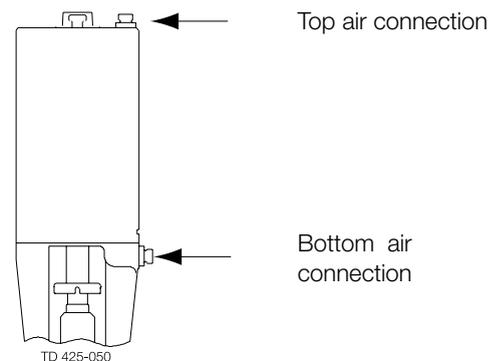
Rotate by hand or
with the service tool!



Step 4

NOTE!

It is recommended to rotate cylinder (3) further 180° in relation to bonnet (8) so that the top and bottom air connections are fixed on the same side.



*It is important to observe the technical data during installation, operation and maintenance.
Inform the personnel about the technical data.
NO = Normally open. NC = Normally closed.*

6.1 Technical data

The valve is remote-controlled by means of compressed air. It has few and simple moveable parts which results in a very reliable valve and low maintenance cost.

Standard Design The Unique Single Seat DN125 and DN150 Valves come in a one or two body configuration. The actuator is connected to the valve body by means of clamp rings.

Data - valve/actuator	
Max. product pressure	1000 kPa (10 bar) (145 psi)
Min. product pressure	Full vacuum
Temperature range, standard lip seal	-10°C to + 100°C (14° F to 212°F) (EPDM)
Temperature range, special lip seal	-10°C to + 140°C (14° F to 284°F) (EPDM)
Air pressure, actuator - sizes DN125-150	600 to 800 kPa (6 to 8 bar) (87 to 116 psi)
Materials - valve/actuator	
Product wetted steel parts	Acid-resistant steel AISI 316L
Finish	Semi bright
Other steel parts	Stainless steel AISI 304
Plug stem - sizes DN125-150	AISI 316L with hard chrome plated stem surface
Product wetted seals	EPDM (standard)
Other seals	Nitrile (NBR)
Alternative product wetted seals	Nitrile (NBR) and Fluorinated rubber (FPM), PTFE/FEP

Weight (kg)

Nominal Size	DIN/DN			
	125 NC	125 NO	150 NC	150 NO
Weight (kg) - Shut-off valve	40.3	40.3	40.9	40.9
Weight (kg) - Change-over valve	50	50	51.3	51.3

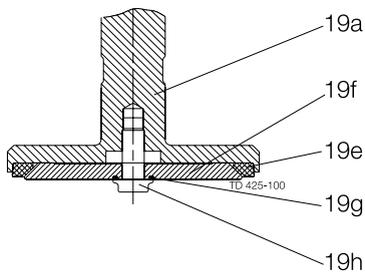
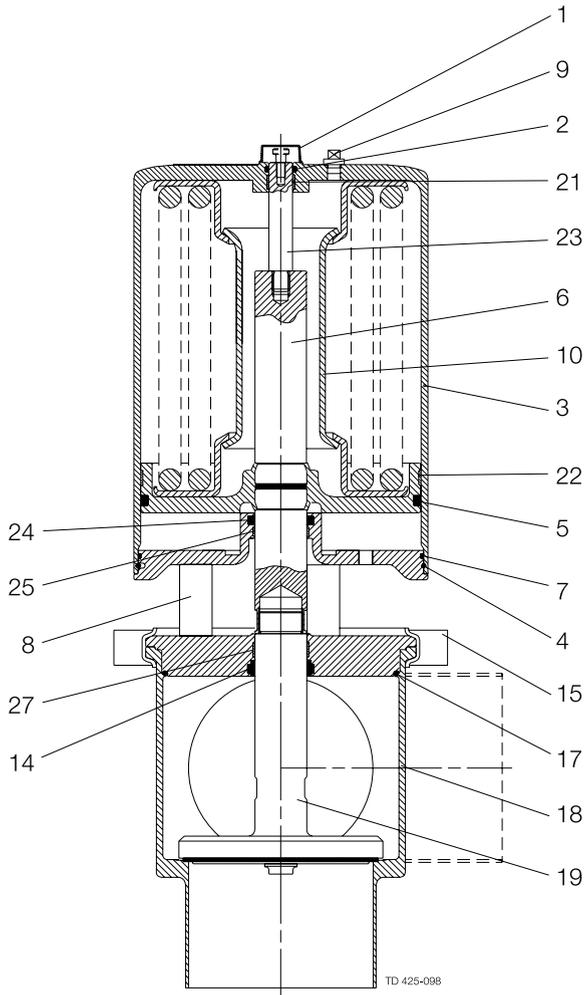
Noise

One meter away from - and 1.6 meter above the exhaust the noise level of a valve actuator will be approximately 77db(A) without noise damper and approximately 72 db(A) with damper - Measured at 7 bars air-pressure.

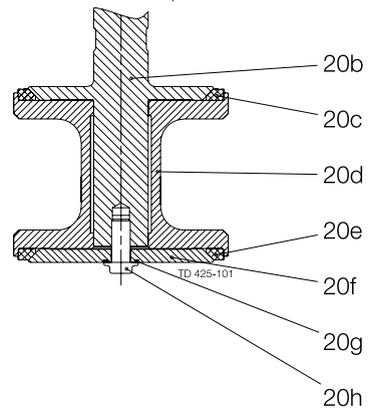
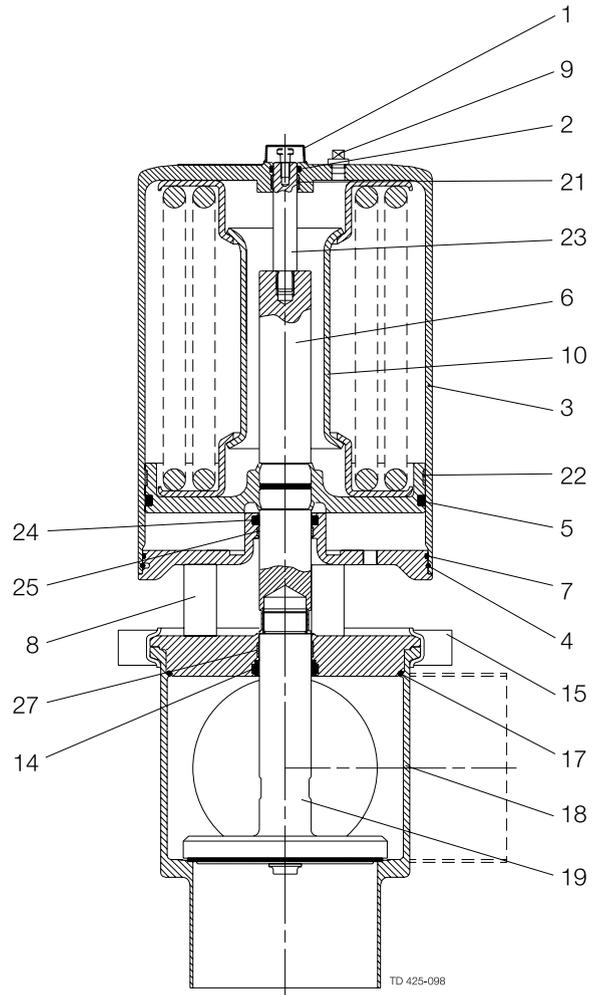
7 Drawings

*It is important to observe the technical data during installation, operation and maintenance.
 Inform the personnel about the technical data.
 NO = Normally open. NC = Normally closed.*

7.1 Drawings



DN125-150 shut-off valve,
 see section 6.6

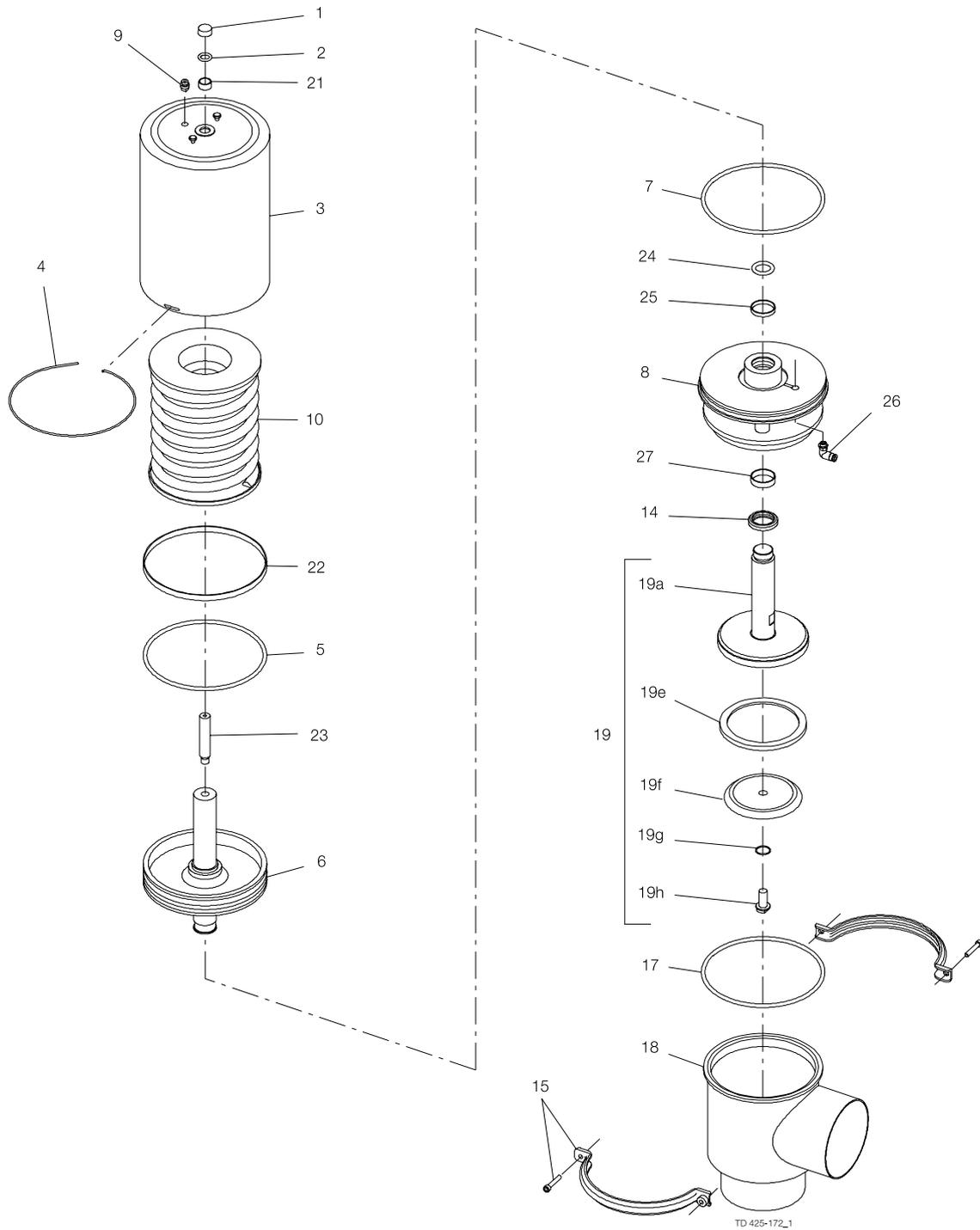


DN125-150 change-over valve,
 see section 6.7

8 Parts list and service kits

*It is important to observe the technical data during installation, operation and maintenance.
Inform the personnel about the technical data.
NO = Normally open. NC = Normally closed.*

8.1 Shut-off valve



8 Parts list and service kits

*It is important to observe the technical data during installation, operation and maintenance.
Inform the personnel about the technical data.
NO = Normally open. NC = Normally closed.*

Parts list

Pos.	Qty	Denomination
		Actuator, complete
1	1	Cap
2 □	1	O-ring
3	1	Cylinder
4 □	1	Lock wire
5 □	1	O-ring
6	1	Piston
7 □	1	O-ring
8	1	Bonnet
9	1	Plug
10	1	Spring packet
14 ♦	1	Lip seal
15	1	Clamp complete
17 ♦	1	Seal ring
18	1	Valve body
19	1	Plug
19a	1	Stem
	1	Stem
19e ♦	1	Plug seal
19f	1	Washer
	1	Washer
19g ♦	1	O-ring
19h	1	Screw
	1	Screw
21 □	1	Guide ring
22 □	1	Guide ring
23	1	Top pin
24 □	1	O-ring
25 □	1	Guide ring
26	1	Air fitting
27 □	1	Guide ring

Service kits

Denomination	NC	NO
Service kit for Actuator		
□ Service kit EPDM	9611-92-0296	9611-92-0296

Service kits

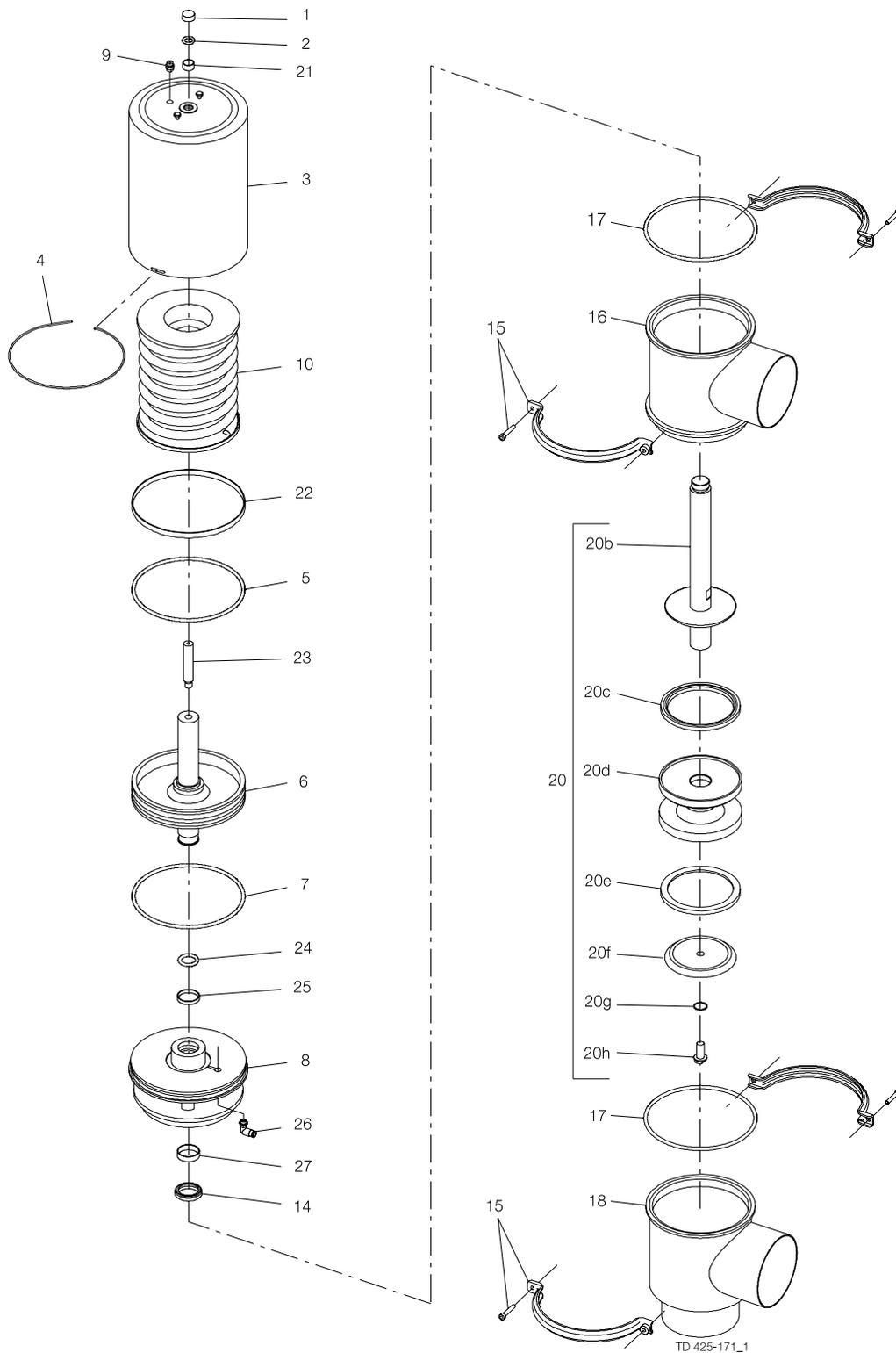
Denomination	DN 125	DN 150
Service kit for Product wetted parts, standard		
♦ Service kit EPDM	9611-92-0355	9611-92-0355
♦ Service kit NBR	9611-92-0356	9611-92-0356
♦ Service kit FPM	9611-92-0357	9611-92-0357

8 Parts list and service kits

*It is important to observe the technical data during installation, operation and maintenance.
Inform the personnel about the technical data.
NO = Normally open. NC = Normally closed.*

8.2 Change-over valve

Standard - change-over valve - DN125-150



TD 425-171_1

8 Parts list and service kits

*It is important to observe the technical data during installation, operation and maintenance.
Inform the personnel about the technical data.
NO = Normally open. NC = Normally closed.*

Parts list

Pos.	Qty	Denomination
		Actuator, complete
1	1	Cap
2	□	O-ring
3	1	Cylinder
4	□	Lock wire
5	□	O-ring
6	1	Piston
7	□	O-ring
8	1	Bonnet
9	1	Plug
10	1	Spring packet
14	◆	Lip seal
15	2	Clamp complete
16	1	Valve body
17	◆	Seal ring
18	1	Valve body
20	1	Plug
20b	1	Stem
20c	◆	Plug seal
20d	1	Middle piece
20e	◆	Plug seal
20f	1	Washer
20g	◆	O-ring
20h	1	Screw
21	□	Guide ring
22	□	Guide ring
23	1	Top pin
24	□	O-ring
25	□	Guide ring
26	1	Air fitting
27	□	Guide ring

Service kits

Denomination	NC	NO
Service kit for Actuator		
□ Service kit EPDM	9611-92-0296	9611-92-0296

Service kits

Denomination	DN 125	DN 150
Service kit for Product wetted parts		
◆ Service kit EPDM	9611-92-0358	9611-92-0358
◆ Service kit NBR	9611-92-0359	9611-92-0359
◆ Service kit FPM	9611-92-0360	9611-92-0360

Parts marked with □◆ are included in the service kits.
Recommended spare parts: Service kits.

900-093/2

How to contact Alfa Laval

Contact details for all countries are continually updated on our website.

Please visit www.alfalaval.com to access the information directly.

© Alfa Laval Corporate AB

This document and its contents is owned by Alfa Laval Corporate AB and protected by laws governing intellectual property and thereto related rights. It is the responsibility of the user of this document to comply with all applicable intellectual property laws. Without limiting any rights related to this document, no part of this document may be copied, reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the expressed permission of Alfa Laval Corporate AB. Alfa Laval Corporate AB will enforce its rights related to this document to the fullest extent of the law, including the seeking of criminal prosecution.