



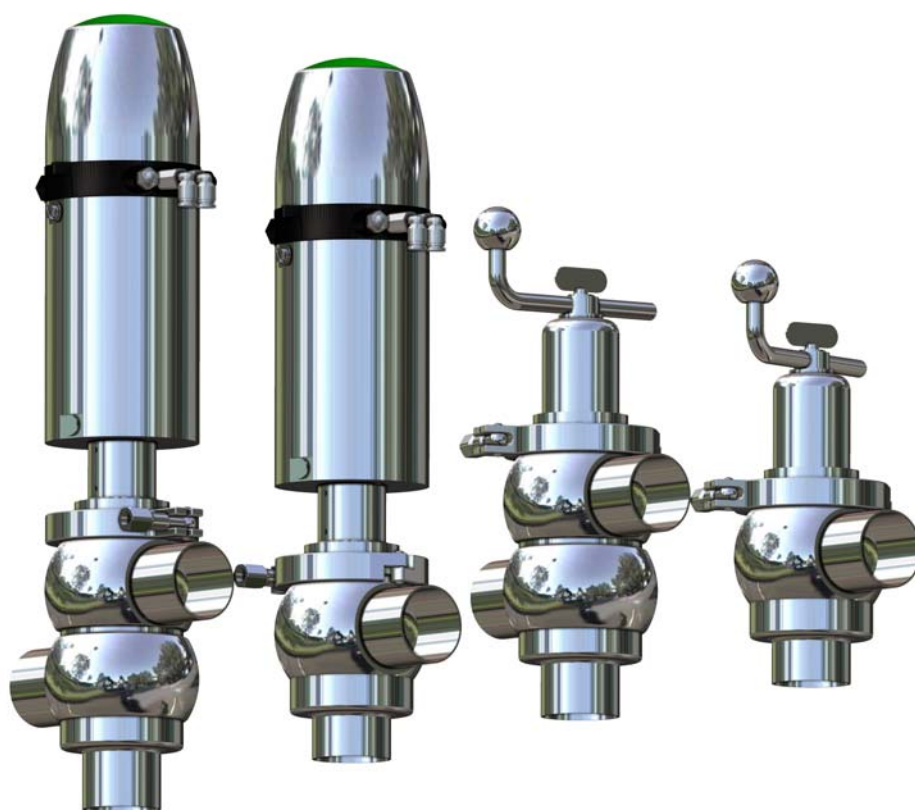
KIESELMANN
FLUID PROCESS GROUP

Operating instructions

- Translation of the original -

KI-DS - Seat valves Type: 55xx

pneumatic and manual operation



English **GBR**

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2. General safety instructions

2.1 Information for your safety

We are pleased that you have decided for a high-class KIESELMANN product. With correct application and adequate maintenance, our products provide long time and reliable operation.




Before installation and initiation, please carefully read this instruction manual and the security advices contained in it. This guarantees reliable and safe operation of this product and your plant respectively. Please note that an incorrect application of the process components may lead to great material damages and personal injury.

In case of damages caused by non observance of this instruction manual, incorrect initiation, handling or external interference, guarantee and warranty will lapse!

Our products are produced, mounted and tested with high diligence. However, if there is still a reason for complaint, we will naturally try to give you entire satisfaction within the scope of our warranty. We will be at your disposal also after expiration of the warranty. In addition, you will also find all necessary instructions and spare part data for maintenance in this instruction manual. If you don't want to carry out the maintenance by yourself, our KIESELMANN service team will naturally be at your disposal.

2.2 Marking of security instructions in the operating manual

Hints are available in the chapter "safety instructions" or directly before the respective operation instruction. The hints are highlighted with a danger symbol and a signal word. Texts beside these symbols have to be read and adhered to by all means. Please continue with the text and with the handling at the valve only afterwards.

Symbol	Signal word	Meaning
	DANGER	Imminent danger which may cause severe personal injury or death.
	ATTENTION	Dangerous situation which may cause slight personal injury or material damages.
	NOTE	Marks application hints and other information which is particularly useful.

2.3 Designated use

The fitting is designed exclusively for the purposes described below. Using the fitting for purposes other than those mentioned is considered contrary to its designated use. KIESELMANN cannot be held liable for any damage resulting from such use. The risk of such misuse lies entirely with the user. The prerequisite for the reliable and safe operation of the fitting is proper transportation and storage as well as competent installation and assembly.

Operating the fitting within the limits of its designated use also involves observing the operating, inspection and maintenance instructions.

2.4 Personnel

Personnel entrusted with the operation and maintenance of the tank safety system must have the suitable qualification to carry out their tasks. They must be informed about possible dangers and must understand and observe the safety instructions given in the relevant manual. Only allow qualified personnel to make electrical connections.

2.5 Modifications, spare parts, accessories

Unauthorized modifications, additions or conversions which affect the safety of the fitting are not permitted. Safety devices must not be bypassed, removed or made inactive. Only use original spare parts and accessories recommended by the manufacturer.

2.6 General instructions

The user is obliged to operate the fitting only when it is in good working order. In addition to the instructions given in the operating manual, please observe the following:

- relevant accident prevention regulations
- generally accepted safety regulations
- regulations effective in the country of installation
- working and safety instructions effective in the user's plant.

3. Safety instructions

3.1 Field of application

Single seat valves are used in food and beverage as well as in pharmaceutical, biotechnological and chemical industries.

Angle valves, T-valves, cross valves and loop valves are used as manually or pneumatically controlled shut-off valves, change-over valves as multi-port valves in industrial installations.



ATTENTION

- To avoid danger and damage, the fitting must be used in accordance with the safety instructions and technical data contained in the operating instructions.

3.2 General safety instructions



DANGER

- Danger of crushing or amputating limbs.
Do not reach into the valve housing when in pneumatic mode.
- Dismantling the valve or valve assemblies from the plant can cause injuries from fluids or gases flowing out.
Dismantle the valve or valve assembly only when the plant has been rendered pressure-less and free of liquid and gas.
- The spring preloaded valve insert (air open - spring close) may incur serious injuries by jumping out of the housing.
Pneumatically open the valve before disassembling the clamp coupling, so that upstroke the piston in direction "X" (Fig. 1 / page 9).
- For valves or plants/installations that are operated in a ATEX area, must be considered the valid ATEX Guidelines EG and the Installation instructions (page 5).



ATTENTION

- To avoid air leaking, only use pneumatic connection parts that have an o-ring seal facing the even surface.
- When mounting the clamps, the max. torque must not be exceeded (see technical data).
- Steps should be taken to ensure that no external forces are exerted on the fitting.

3.3 General notes



NOTE

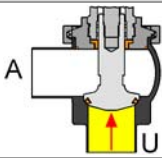
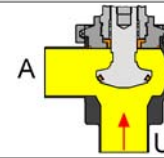
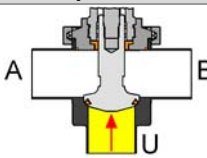
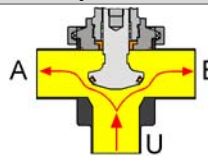
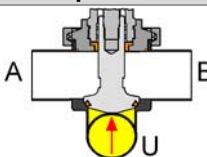
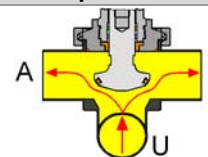
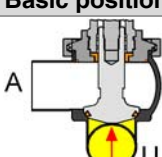
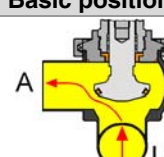
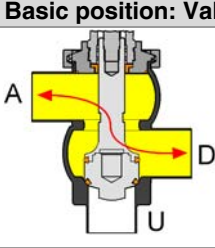
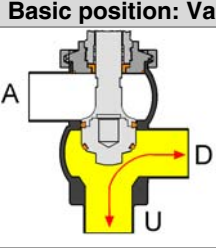
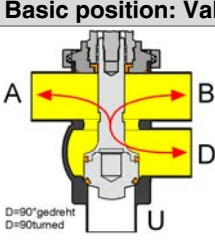
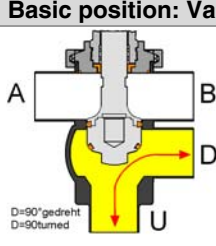
- All data are in line with the current state of development. Subject to change as a result of technical progress.

4. Function

4.1 Functional description

- Function of valve: Angle valve, T-valve, Cross valve, Loop valve: Shut off fluid media in pipelines. (see Fig.A and B)
Changeover valve: Control fluid media in pipelines. (see 5.2 Fig.A and B)
- Operation:
 - pneumatic operation by a lift drive (air/spring; air/air)
 - manual operation by a crank-handle (open ↺ / close ↻)
- Activation: Pneumatically over a 3/2-way solenoid valve. (see "Pneumatic valve actuation" on page 7.)
 - **air open - spring close (NC) Basic position: Valve close (see 5.2 Fig.A.1 - A.6)**
 - ▶ pneum. operated ⇒ opens the valve
 - ▶ not pneum. operated ⇒ spring force closes the valve
 - **spring open - air close (NO) Basic position: Valve open (see 5.2 Fig.B.1 - B.6)**
 - ▶ pneum. operated ⇒ closes the valve
 - ▶ not pneum. operated ⇒ spring force opens the valve
 - **air open - air close (DA) Basic position: Valve close (see 5.2 Fig.A.1 - A.6)**
 - ▶ pneum. operated ⇒ opens the valve
 - ▶ pneum. operated ⇒ closes the valve

4.2 Basic position for pneum. operation valves

<p>S-S Angle valve</p> <p>Type: 5506</p>	<p>air open - spring close (NC) air open - air close (DA) Basic position: Valve close</p>  <p>Fig. A.1</p>	<p>spring open - air close (NO) Basic position: Valve open</p>  <p>Fig. B.1</p>
<p>SS-S T-valve</p> <p>Type: 5508</p>	<p>air open - spring close (NC) air open - air close (DA) Basic position: Valve close</p>  <p>Fig. A.2</p>	<p>spring open - air close (NO) Basic position: Valve open</p>  <p>Fig. B.2</p>
<p>SS-SS Cross valve</p> <p>Type: 5512</p>	<p>air open - spring close (NC) air open - air close (DA) Basic position: Valve close</p>  <p>Fig. A.3</p>	<p>spring open - air close (NO) Basic position: Valve open</p>  <p>Fig. B.3</p>
<p>S-SS Loop valve</p> <p>Type: 5518</p>	<p>air open - spring close (NC) air open - air close (DA) Basic position: Valve close</p>  <p>Fig. A.4</p>	<p>spring open - air close (NO) Basic position: Valve open</p>  <p>Fig. B.4</p>
<p>S-S-S Changeover valve</p> <p>Type: 5514</p>	<p>air open - spring close (NC) air open - air close (DA) Basic position: Valve close</p>  <p>Fig. A.5</p>	<p>spring open - air close (NO) Basic position: Valve open</p>  <p>Fig. B.5</p>
<p>SS-S-S Changeover valve</p> <p>Type: 5516</p>	<p>air open - spring close (NC) air open - air close (DA) Basic position: Valve close</p>  <p>Fig. A.6</p>	<p>spring open - air close (NO) Basic position: Valve open</p>  <p>Fig. B.6</p>

5. Installation informations

5.1 Installation instructions

Preferably install the Single seat valve vertically. Install the connection lines in such a way as to permit the liquids to drain freely out of the housing.



NOTE

If installed horizontally, some minor residual liquids will remain in the ball-shape of the housing.

Valves with welded ends that serve as connecting members can be directly welded to the piping.

5.2 Welding guidelines

Sealing elements integrated in weld components must generally be removed prior to welding.

To prevent damage, welding should be undertaken by certified personnel (EN287). Use the TIG (Tungsten Inert Gas) welding process.



NOTE

Impurities can cause damage to the seals and seals area. Clean inside areas prior to assembly. To avoid a distortion of the components, all welding parts must be welded to stress-relieved.

5.3 ATEX guidelines

For valves or plants/installations that are operated in the ATEX area, sufficient bonding (grounding) must be ensured (see valid ATEX Guidelines EG).

6. Service and maintenance

6.1 Maintenance

The maintenance intervals depend on the operating conditions

- temperature, temperature-intervals
- medium and cleaning medium
- pressure and opening frequency

We recommend replacing the seals every 1 years. The user, however should establish appropriate maintenance intervals according to the condition of the seals.



NOTE

		<u>Lubricant recommendation</u>
EPDM; Viton; k-flex; NBR; HNBR	⇒	Klüber Paraliq GTE703*
Silicone	⇒	Klüber Sintheso pro AA2*
Thread	⇒	Interflon Food*

*) It is only permitted to use approved lubricants, if the respective fitting is used for the production of food or drink. Please observe the relevant safety data sheets of the manufacturers of lubricants.

➤ Actuator

The actuator is maintenance-free and non-removable.

6.2 Cleaning

Cleaning of the upper and lower valve chambers is performed with the pipe cleaning system.

7. Control system - and interrogation system

7.1 Control head-optional-

Optionally, modular valve control systems can be installed to the actuator for reading and actuating valve positions. The standard version is a closed system with twofold limit position messaging (standard), with SPS, Interbus or ASI bus switch-on electronics, and integrated 3/2-way solenoid valves. For tough operating conditions we recommend employing a stainless steel hood.

7.2 Sensor mounting set -optional-

For the acquisition of the valve positions over inductive initiators, a limit switch support is mounted on the actuation. The enquiry takes place over the position of the piston rod.

8. Technical data

<p>Model:</p> <p>Valve size:</p> <p>Connections:</p> <p>Temperature range:</p>
<p>Control air pressure:</p> <p>Pressure Nominal (bar):</p> <p>Quality of control air:</p>

Material:
Stainless steel:

Surfaces:
Seal:

Single seat valves - manual and pneumatic operation

NPS 25 - NPS 100

NPS 1" - NPS 4"

Welding end DIN EN10357

- Ambient temperature: +4° to +45°C
- Product temperature: +0° to +95°C medium dependent
- Sterilization temperature:
 - EPDM +140°C short-time (30 min.)
 - HNBR +130°C short-time (30 min.)

NPS 25 - NPS 65 / NPS 1" - NPS 2½" = min. 5,5 bar

NPS 80 - NPS 100 / NPS 3" - NPS 4" = min. 6,0 bar

PN10

ISO 8573-1 : 2001 quality class 3

in product contact	not in product contact
1.4404 / AISI316L	1.4301 / AISI304
	1.4305 / AISI303
RA ≤0,8µm	metallic bright, e-pol.
EPDM (FDA)	HNBR
HNBR (FDA)	

Tightening moment: (Clamp coupling)
Torque in Nm

max. operation pressure
- manual operation (bar):

Nominal pipe size						
DIN	25	40	50	65	80	100
Inch	1	1½	2	2½	3	4
	15	15	15	25	25	55

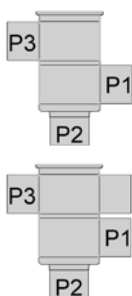
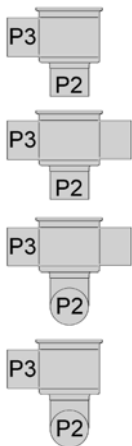
DIN	25	40	50	65	80	100
Inch	1"	1½	2	2½	3	4
	10	10	10	10	10	10

<p>max. operating pressure - pneum. operation (bar): <i>(6bar Control air pressure)</i></p>
<p>Single seat valve <i>air open / spring close</i> <i>spring open / air close</i> <i>air open / air close</i></p>
<p>Single seat valve <i>air open / spring close</i> <i>spring open / air close</i> <i>air open / air close</i></p>

Nominal pipe size						
DIN Inch	25 1		40 1½		50 2	
	P2	P3	P2	P3	P2	P3
	9,5	10,5	8	12	6	9
	9,5	11	7,5	12	6,5	8
	9,5	11	8	12	6,5	9
DIN Inch	65 2½		80 3		100 4	
	P2	P3	P2	P3	P2	P3
	6	8	7,5	8	5,2	6,5
	6	8	6	10	5,2	6,4
	6	8	7,5	10	5,2	6,5

Changeover valve
air open / spring close
spring open / air close
air open / air close

DIN Inch	25 1			40 1½			50 2		
	P1	P2	P3	P1	P2	P3	P1	P2	P3
	8	8,9	6,8	8	7,7	6,8	8	7	6,8
	8,3	8,6	7,1	7,8	7,4	7,1	7,4	6,6	7,1
	8,3	8,9	7,1	8	7,7	7,1	8	7	7,1
DIN Inch	65 2½			80 3			100 4		
	P1	P2	P3	P1	P2	P3	P1	P2	P3
	8,7	7,1	6,5	6,4	6,5	5,6	6,5	5,3	5,0
	8,8	7,2	6,6	7,1	7,3	5,5	6,8	5,4	5,0
	8,8	7,2	6,6	7,1	7,3	5,6	6,8	5,4	5,0



9. Pneumatic valve actuation

9.1 Actuator: air open - spring close

Valve function	pneumatic control with MV in control unit (Fig. 1 / page 7)	pneumatic control with external solenoid valve (MV) (Fig. 1 / page 7)
Valve "OPEN"	control air feed $P \Rightarrow MV1 \Rightarrow P1/LA2$ Valve is opening by control air	control air feed external MV $\Rightarrow LA2$ Valve is opening by control air
Valve "CLOSED"	de-aeration $LA2/P1 \Rightarrow MV1 \Rightarrow R$ Valve is closing by spring	de-aeration $LA \Rightarrow$ external MV Valve is closing by spring

9.2 Actuator: air close - spring open

Valve function	pneumatic control with MV in control unit (Fig. 1 / page 7)	pneumatic control with external solenoid valve (MV) (Fig. 1 / page 7)
Valve "CLOSED"	control air feed $P \Rightarrow MV1 \Rightarrow P1/LA1$ Valve is closing by control air	control air feed external MV $\Rightarrow LA1$ Valve is closing by control air
Valve "OPEN"	de-aeration $P1/LA1 \Rightarrow MV1 \Rightarrow R$ Valve is opening by spring	de-aeration $LA1 \Rightarrow$ external MV Valve is opening by spring

9.3 Actuator: air open - air close

Valve function	pneumatic control with MV in control unit (Fig. 1 / page 7)	pneumatic control with external solenoid valve (MV) (Fig. 1 / page 7)
Valve "OPEN"	control air feed $P \Rightarrow MV1 \Rightarrow P1/LA1$ Valve is opening by control air	control air feed external MV $\Rightarrow LA1$ Valve is opening by control air
Valve "CLOSED"	de-aeration $P \Rightarrow MV3 \Rightarrow P3/LA2$ Valve is closing by control air	de-aeration external MV $\Rightarrow LA2$ Valve is closing by control air

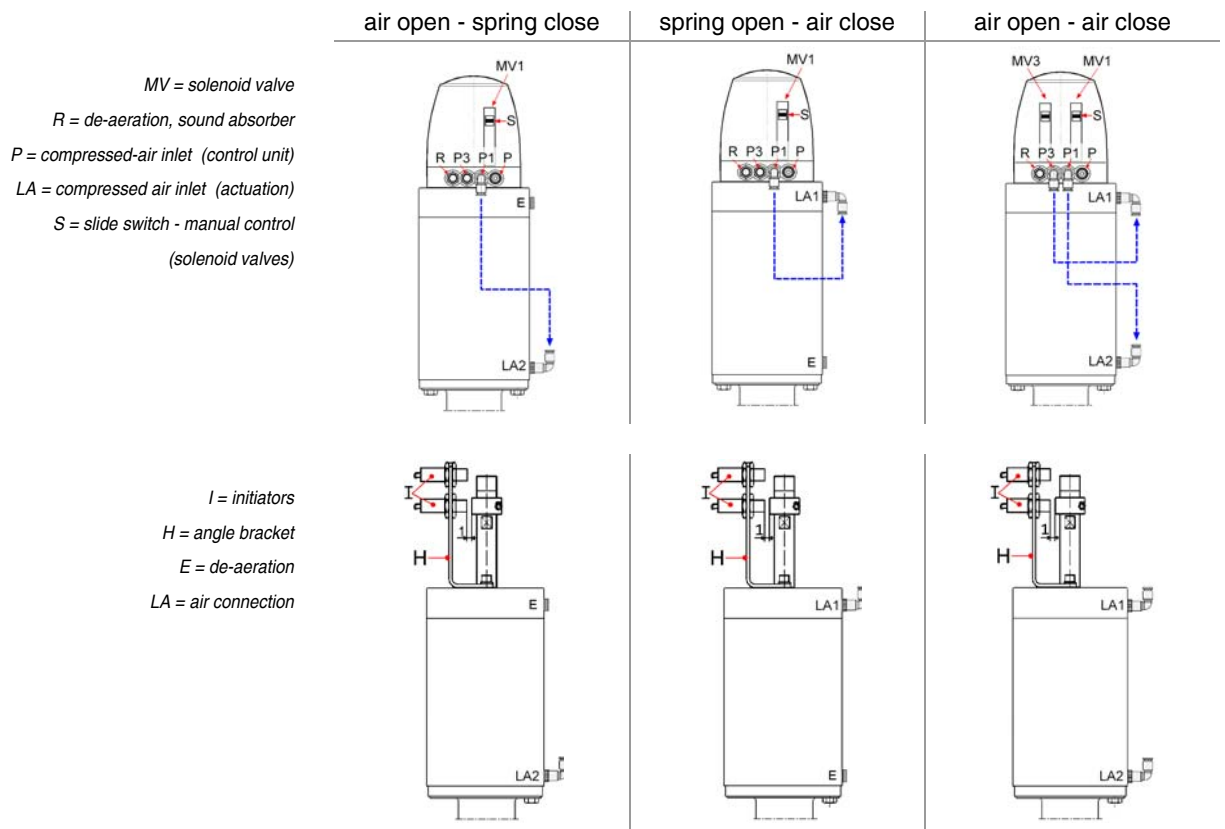


Fig. 1

10. Disassembly and assembly

10.1 Valve with manual operation



NOTE

All threaded joint have right-hand thread.

- A1 ⇒
- Unscrew the clamp coupling (VK).
Dismount the valve insert (VE) out of the housing (VG).

10.2 Disassembly

> Replacement of seals

- A2 ⇒
- Unscrew the thumb screw (19). Remove the crank handle (17), washer (15) and (16).
- A3 ⇒
- **Changeover valve Blue 5513 / 5515** ⇒ Unscrew the piston plate (9) from the piston (1b) via spanner flat (SW1/SW2). Remove O-Ring (D7) and seal (D6).
 - Unscrew piston (1a) resp. (1b) out of the spindle (11) via (SW2/SW5). Remove O-Ring (D1).



NOTE

Puncture the o-ring (D1) and (D7) at the centre with a pointed tool and remove them carefully from the groove.

- A4/5 ⇒
- Unscrew the insert (2) from the lantern (4) (use a hook wrench). Remove the O-Ring (D2) and seal (D3).



NOTE

Bearing bush (3) and the scraper ring (5) do not need to be removed for a seal change. The races are not included in the seal set. If they are worn, please order them with the seals (see wearing parts set).

10.3 Assembly

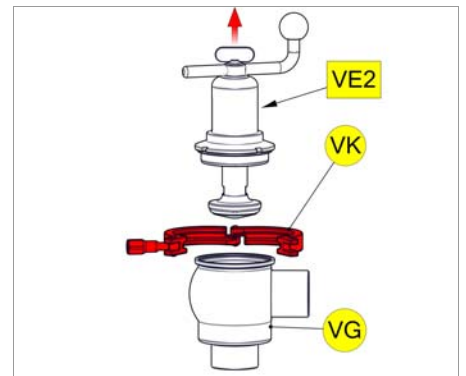
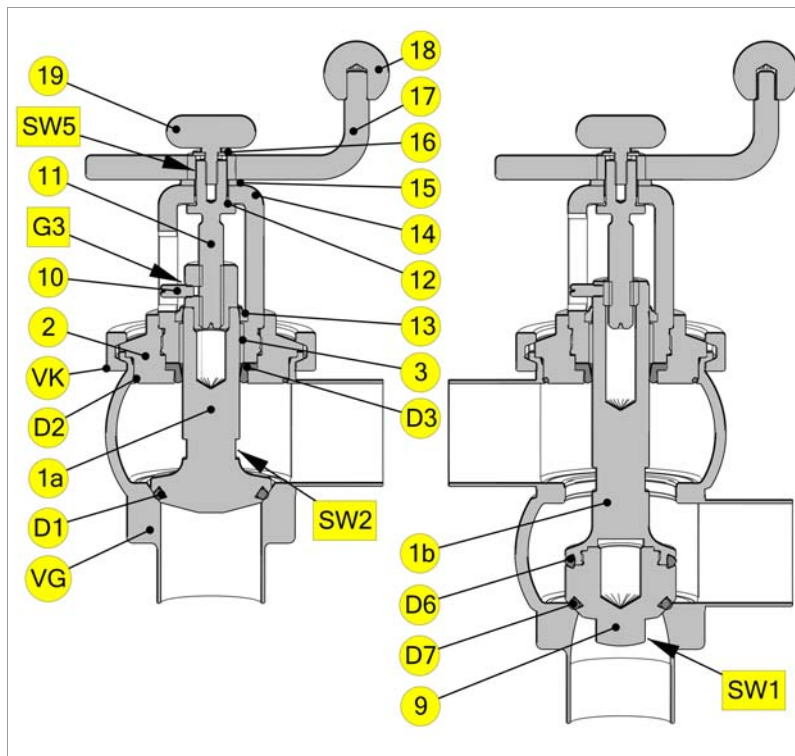
- Thoroughly clean and slightly lubricate mounting areas and running surfaces.



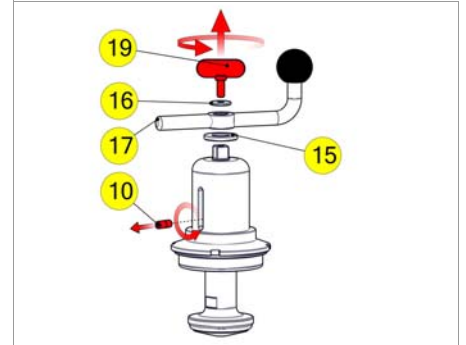
NOTE

Alternately press and roll the seal (D1) and (D7) into the groove with round body.

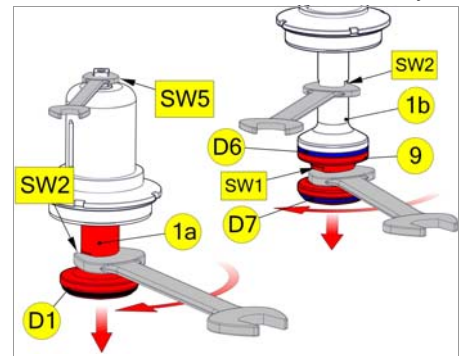
- Thread connection (G3) assembly with **removeable screw retention (e.g. Loctite 243)**
- Assemble in reverse order.
- Check the valve function.



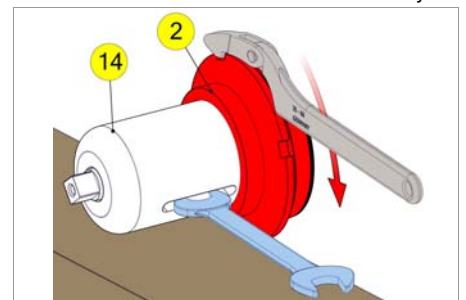
Disassembly A1



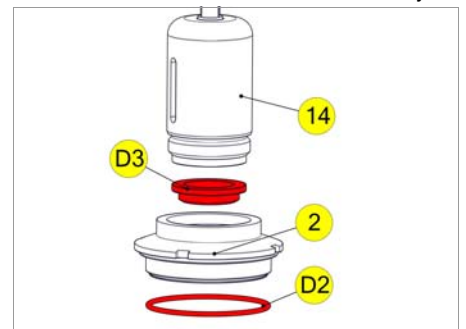
Disassembly A2



Disassembly A3



Disassembly A4



Disassembly A5

10.4 Valve with pneum. operation



NOTE

All threaded joint have right-hand thread.

Unscrew and remove control air, steam resp. cleaning lines and electrical lines, complete sensor mounting or control head.

➤ Remove pneum. valve insert (NC)

- B1 ⇒ • Charge the valve at connection LA2 with compressed air - the piston retracts.
B2 ⇒ • Unscrew the clamp coupling (VK). Dismount the valve insert (VE) out of the housing (VG).

➤ Remove pneum. valve insert (NO) (DA)

- B2 ⇒ • Unscrew the clamp coupling (VK). Dismount the valve insert (VE) out of the housing (VG).

10.5 Disassembly

➤ Replacement of seals

- B3 ⇒ • **Changeover valve Type 5514 / 5516** ⇒ Unscrew the piston plate (9) from the piston (1d) via spanner flat (SW1/SW2). Remove O-Ring (D7) and seal (D6). Unscrew piston (1c) resp. (1d) out of the spindle (6) via (SW2/SW4). Remove O-Ring (D1).



NOTE

Puncture the o-ring (D1) and (D7) at the centre with a pointed tool and remove them carefully from the groove.

- B4/7 ⇒ • Unscrew the insert (2) from the lantern (4) (use a hook wrench). Remove the O-Ring (D2) and seal (D3).



NOTE

Bearing bush (3) and (5) and O-Rings (D4) and (D5) do not need to be removed for a seal change. The races are not included in the seal set. If they are worn, please order them with the seals (see wearing parts set).

- B5/7 ⇒ • Unscrew the lantern (4) from the actuator (7) (use a pin wrench at hole B) and remove lantern from the spindle (6). Dismantle O-Rings (D4) and (D5).
B6/7 ⇒ • Unscrew insert (8) from the actuator (7) (use a pin type face wrench). Dismantle O-Rings (D4) and (D5).

10.6 Assembly

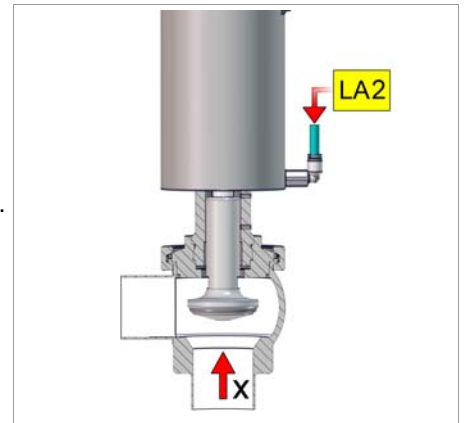
- Thoroughly clean and slightly lubricate mounting areas and running surfaces.



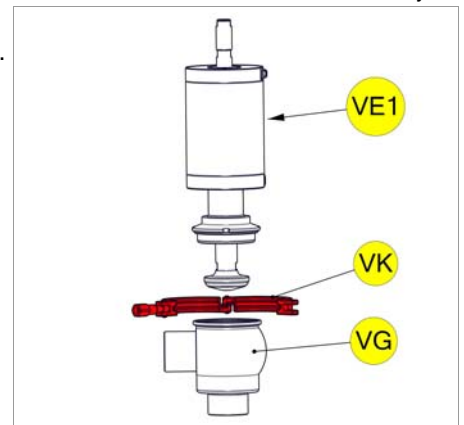
NOTE

Alternately press and roll the seal (D1) and (D7) into the groove with round body.

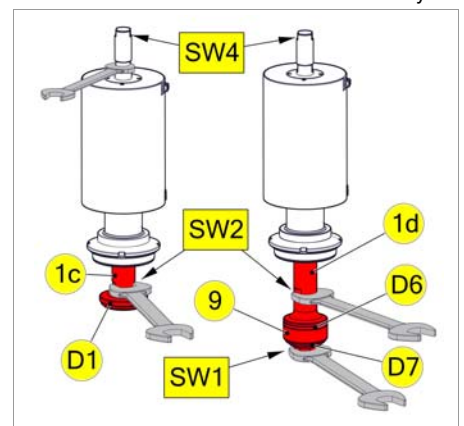
- Thread connection (G1) and (G2) assembly with **removeable screw retention (e.g. Loctite 243)**
- Assemble in reverse order.
- Check the valve function.



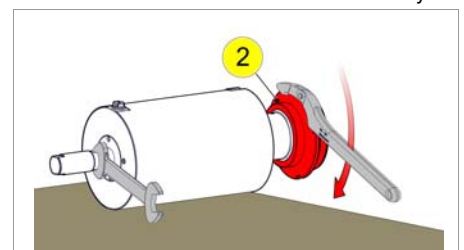
Disassembly B1



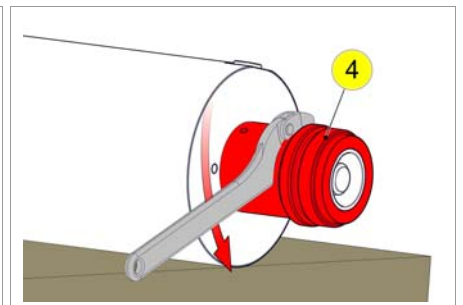
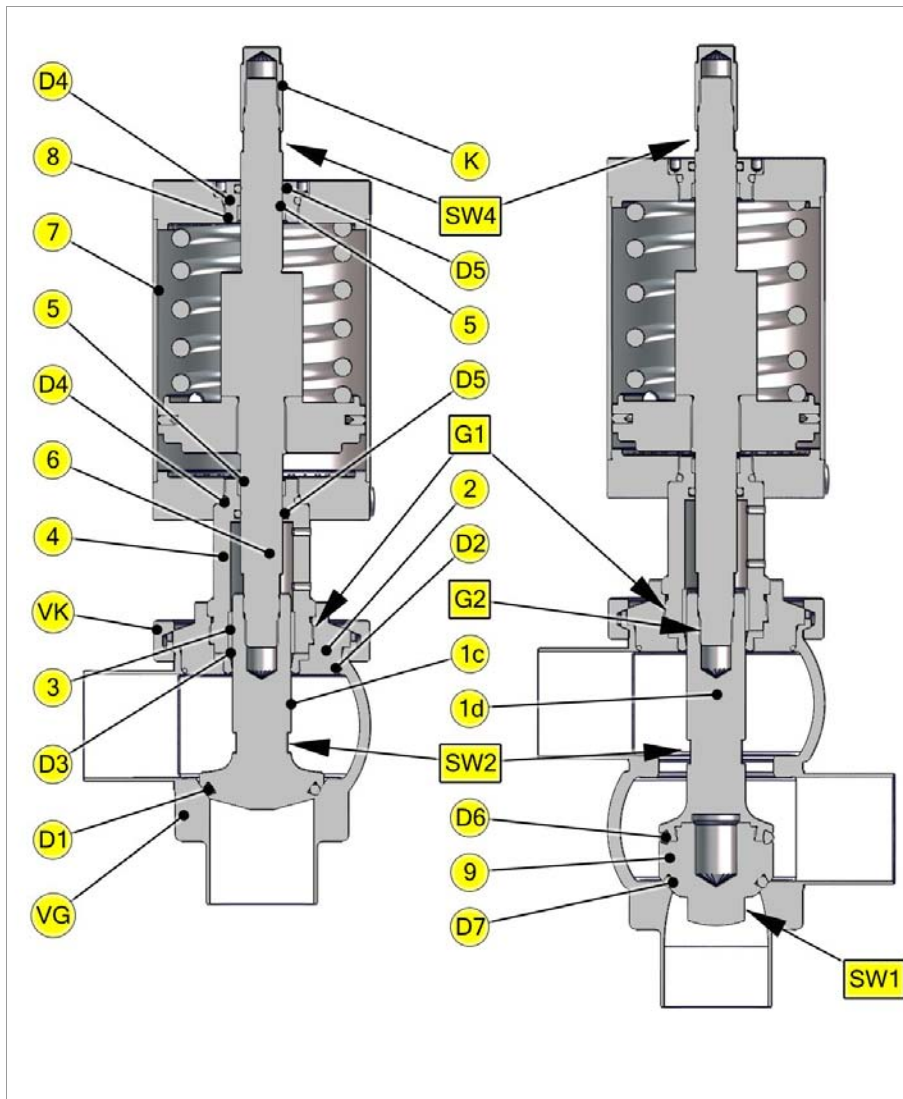
Disassembly B2



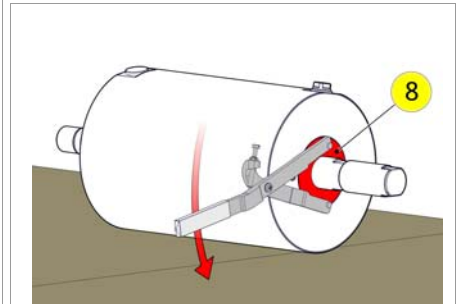
Disassembly B3



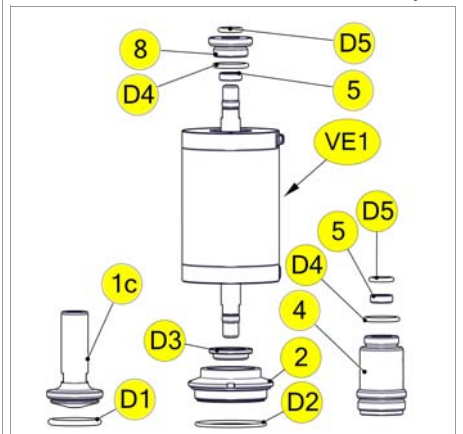
Disassembly B4



Disassembly B5



Disassembly B6



Disassembly B7

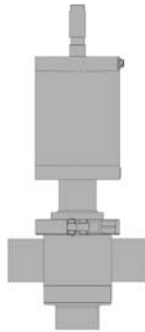
11. Valve type

pneumatic
operation

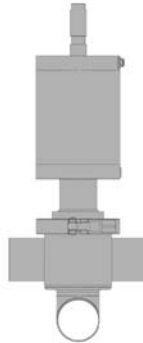
S-S
5506



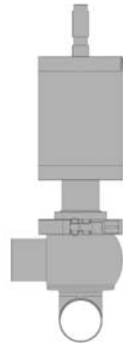
SS-S
5508



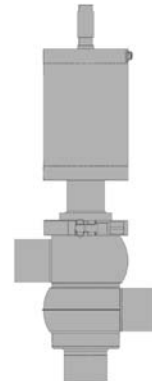
SS-SS
5512



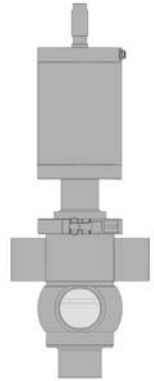
S-SS
5518



S-S-S
5514



SS-S-S
5516



manual
operation

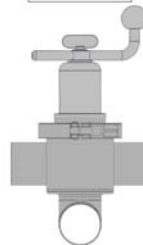
S-S
5505



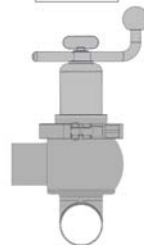
SS-S
5507



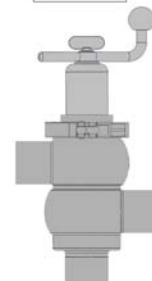
SS-SS
5511



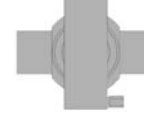
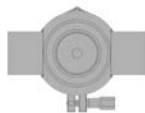
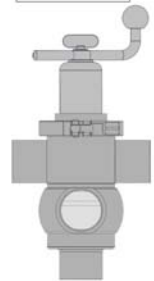
S-SS
5517



S-S-S
5513



SS-S-S
5515



12. Drawings

K = Cap

VE1 = Valve insert pneumatic operation

VE2 = Valve insert manual operation

VK = Clamp coupling

VG = Valve housing

6 = Spindle

A1.1 = Control head with stainless cap and 360° flashing light

A1.2 = Control head with plastic cap

IG = Position indication

IG1 = Threaded rod

IG2 = Disc

IG3 = Nut

IG4 = Spring

M = Magnet

SA = Sensor mounting

SA1 = Bracket

SA2 = Switch cam

SA3 = Setscrew

SA4 = Screw

SA5 = Disc

SA6 = Sleeve transparent

SA7 = Cover

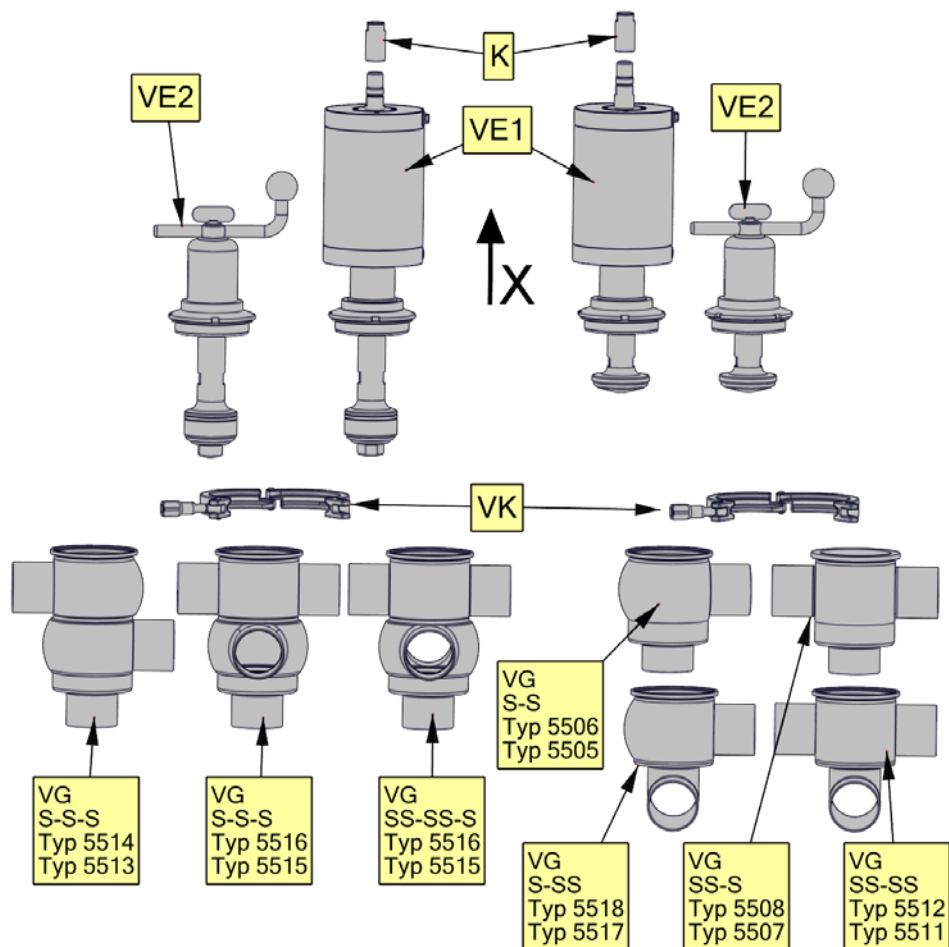


Fig. 2

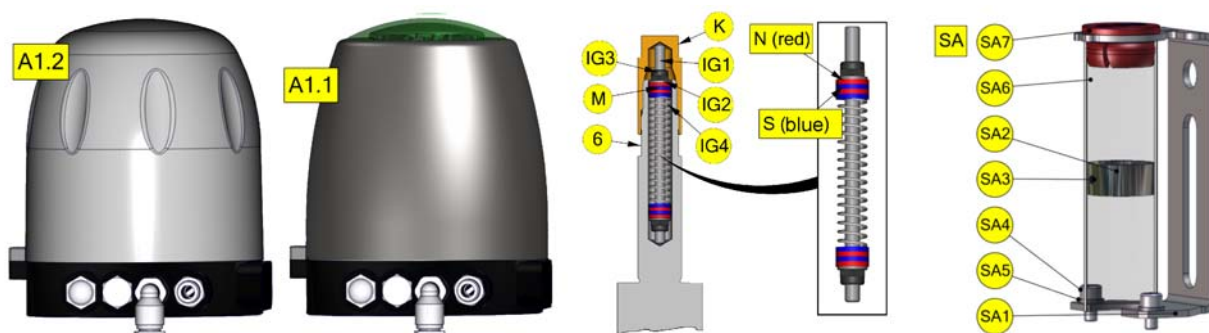


Fig. 3

12.1 Valve insert (VE)

Illustration: manual operation

- Angle valve insert 5505 050 020-041
- Change over valve insert 5513 050 020-041

pneumatic operation

(air open / spring close)

- Angle valve insert 5506 050 020-041
- Change over valve insert 5514 050 020-041

1a = Piston Angle valve - manual

1b = Piston Changeover valve - manual

1c = Piston Angle valve - pneumatic

1d = Piston Changeover valve - pneumatic

2 = Insert

3 = Bearing bush

4 = Lantern

5 = Bearing bush

6 = Spindle

7 = Actuator

8 = Insert- Lantern

9 = Piston rod

10 = Setscrew

11 = Spindle

12 = Bearing bush

13 = Scraper ring

14 = Housing cover

15 = Disc

16 = Disc

17 = Crank handle

18 = Spherical button

19 = Thumb screw

D1 = O-Ring

D2 = O-Ring

D3 = Seal

D4 = O-Ring

D5 = O-Ring

D6 = Seal

D7 = O-Ring

B = Bore

G1 - G3 = Thread connection locking with lock nut detachable (e.g. Loctite 243)

G4 = Thread connection locking with lock nut detachable (e.g. Loctite 603)

SW = Wrench size

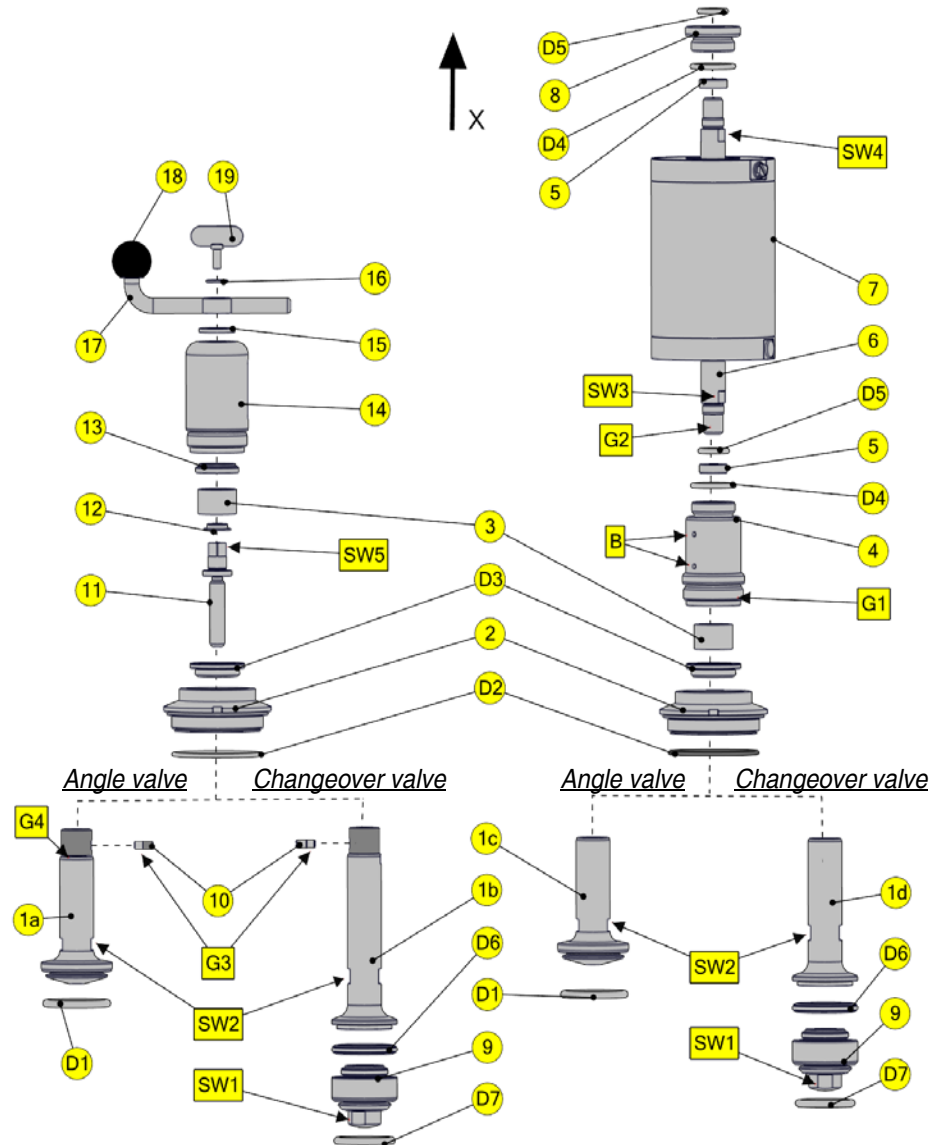


Fig. 4

NPS = Nominal pipe size
SW = Wrench size

SW1	SW2	SW3	SW4	SW5	adjustable hook or pin wrench type A pin wrench type B hook wrench	adjustable pin type face wrench D40-80mm pin ø5
-----	-----	-----	-----	-----	---	--

NPS 25 / 1"	19					
NPS 40 / 1½"	24					
NPS 50 / 2"	24	24	17	17	11	
NPS 65 / 2½"	36					
NPS 80 / 3"	27					
NPS 100 / 4"	27					

type B ø4 8027 000 060-000
type B ø6 8027 000 065-000
type A 8028 025 100-020

8028 340 085-000

13. Dimensions

13.1 Size measurement table

NPS	d1	d2	d3	L1	L2	L3		L4		L5	L6	L7	M1	M2	M3	H1 stroke	H2 stroke
						NC	NC	NO	NO				Installation dimension				
25 1“	26 22,1	29 25,4	104	75	36 32	330 333	342 340	81 86	93	57	100	184	440	485	240	12 7	14 10
40 1½“	38 34,8	41 38,1	104	85	48 45	324 326	348 352,5	64 73	93	66	120	190	460	520	255	24 19,5	26 22,5
50 2“	50 47,5	53 50,8	104	85	60 57,5	330 322	354 353,5	64 61,5	93	74,5	140	196	480	545	280	24 31,5	26 23,5
65 2½“	66 60,2	70 63,5	129	105	76 70	338 341	362 359	64 75	93	96	160	204	515	580	310	24,5 18	26,5 20
80 3“	81 72,8	85 76,1	167	115	91 83	341 337	369,5 366	59,5 64,5	93	122	180	211	535	625	310	28,5 28,5	30,5 21,5
100 4“	100 97,4	104 101,6	167	130	110 108	350,5 357	379 378	59,5 67	93	144	200	221	565	670	370	28,5 26	30,5 28

*Valves that do not meet the catalogue standards, can lead to dimensional deviations.
air open - spring closed = NC; air closed - spring open = NO*

13.2 Dimensioned drawing

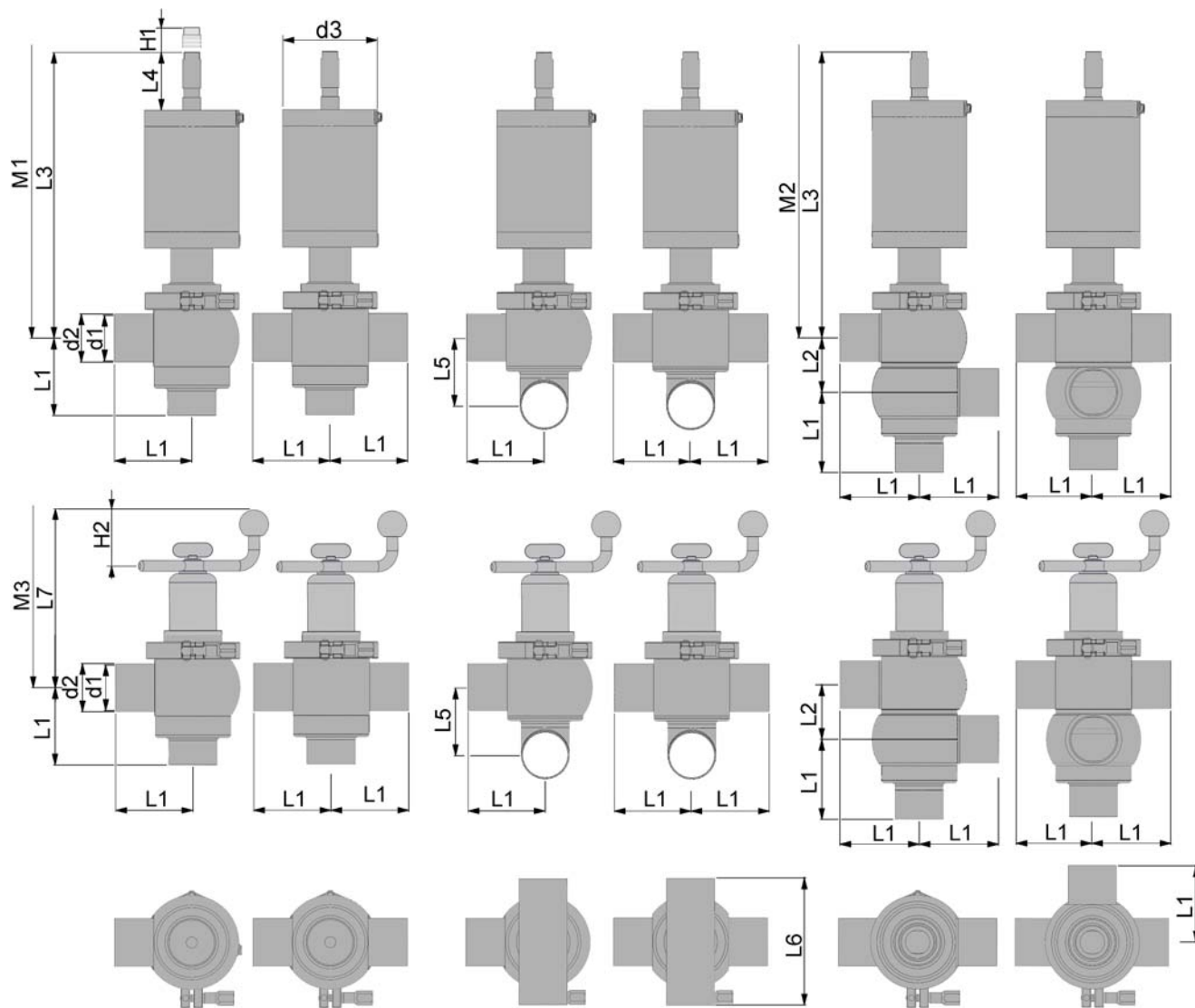


Fig. 5

14. Wearing parts

Item	Material	Pce.	NPS 25 / 1"	NPS 40 / 1½"	NPS 50 / 2"	NPS 65 / 2½"	NPS 80 / 3"	NPS 100 / 4"
3	XSM	1x	Bearing bush 8050 028 020-156					
5	XSM	2x	Bearing bush 8050 020 007-156					
13	NBR	1x	Scraper ring 2330 028 007-055					
D1	EPDM HNBR	1x	O-Ring 2304 041 035-159 2304 041 035-157	O-Ring 2304 041 035-159 2304 041 035-157	O-Ring 2304 044 053-159 2304 044 053-157	O-Ring 2304 053 053-159 2304 053 053-157	O-Ring 2304 069 053-159 2304 069 053-157	O-Ring 2304 088 053-159 2304 088 053-157
D2	EPDM HNBR	1x	O-Ring 2304 069 026-159 2304 069 028-050	O-Ring 2304 069 026-159 2304 069 028-050	O-Ring 2304 069 026-159 2304 069 028-050	O-Ring 2304 082 026-159 2304 082 026-050	O-Ring 2304 098 035-159 2304 098 035-050	O-Ring 2304 117 035-159 2304 117 035-050
D3	EPDM HNBR	1x	Seal 5506 050 009-054 Seal 5506 050 009-050					
D4	NBR	2x	O-Ring 2304 030 035-055					
D5	HNBR	2x	O-Ring 2304 019 035-171					
D6	EPDM HNBR	1x	Seal 5621 050 010-084 5621 050 010-157	Seal 5621 050 010-084 5621 050 010-157	Seal 5621 050 010-084 5621 050 010-157	Seal 5621 065 010-084 5621 065 010-157	Seal 5621 100 010-084 5621 100 010-157	Seal 5621 100 010-084 5621 100 010-157
D7	EPDM HNBR	1x	O-Ring 2304 038 053-159 2304 038 053-171	O-Ring 2304 038 053-159 2304 038 053-171	O-Ring 2304 038 053-159 2304 038 053-171	O-Ring 2304 047 053-170 2304 047 053-171	O-Ring 2304 069 053-159 2304 069 053-157	O-Ring 2304 083 050-069 2304 083 050-157

14.1 Seal kits

Angle valve Type: 5505, 5506, 5507, 5508, 5511, 5512

Seals (D1), (D2), (D3)

	NPS 25 / 1"	NPS 40 / 1½"	NPS 50 / 2"	NPS 65 / 2½"	NPS 80 / 3"	NPS 100 / 4"
HNBR	5506 025 990-050	5506 040 990-050	5506 050 990-050	5506 065 990-050	5506 080 990-050	5506 100 990-050
EPDM	5506 025 990-054	5506 040 990-054	5506 050 990-054	5506 065 990-054	5506 080 990-054	5506 100 990-054

14.2 Seal kits Changeover valve Type: 5513, 5514, 5515, 5516

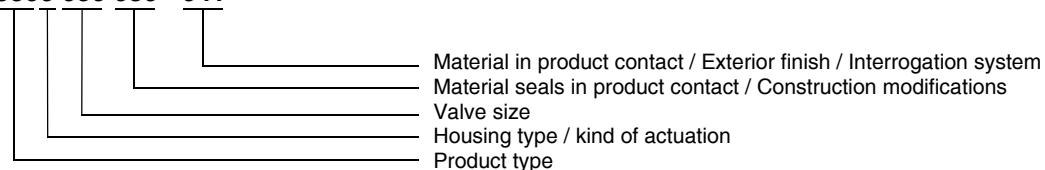
Seals (D2), (D3), (D6), (D7)

	NPS 25 / 1"	NPS 40 / 1½"	NPS 50 / 2"	NPS 65 / 2½"	NPS 80 / 3"	NPS 100 / 4"
HNBR	5514 025 990-050	5514 040 990-050	5514 050 990-050	5514 065 990-050	5514 080 990-050	5514 100 990-050
EPDM	5514 025 990-054	5514 040 990-054	5514 050 990-054	5514 065 990-054	5514 080 990-054	5514 100 990-054

15. Manufacturing

15.1 Structure of Article number

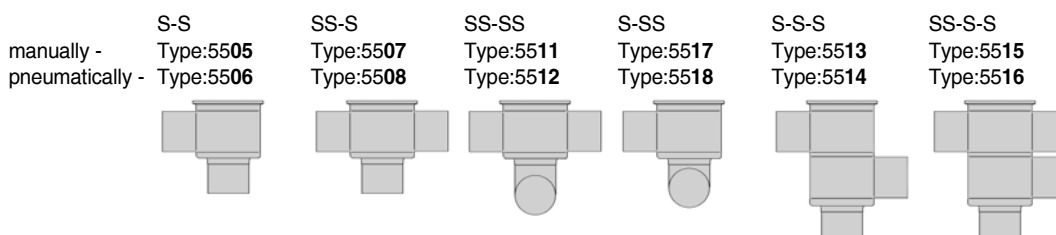
5506 050 030 - 041



► Product type

55xx = Single seat valve

► Housing type



► Valve size

NPS = Nominal pipe size

DIN	025 = NPS25	040 = NPS40	050 = NPS50	065 = NPS65	080 = NPS80	100 = NPS100
INCH	026 = NPS1	038 = NPS1½	051 = NPS2	064 = NPS2½	076 = NPS3	101 = NPS4

► Material seal / Construction modifications

Material seals in product contact:		- EPDM	- HNBR
Modifications:	Type of actuation:	- air open - spring close - spring open - air close - air open - air close	55xx NPS 030-xxx 55xx NPS 130-xxx 55xx NPS 330-xxx 55xx NPS 035-xxx 55xx NPS 135-xxx 55xx NPS 335-xxx

► Material in product contact / Exterior finish

020 - 1.4301 / AISI304	- bright turned	040 - 1.4404 / AISI316L	- bright turned
021 - 1.4301 / AISI304	- E-polished	041 - 1.4404 / AISI316L	- E-polished
022 - 1.4301 / AISI304	- unpolished, glass-bead blasted	042 - 1.4404 / AISI316L	- unpolished, glass-bead blasted

► Interrogation system

Article number	Control System or Interrogation System (A1, A2)
55xx NPS xxx -041	Valve without control- or interrogation system
55xx NPS xxx -750	Valve with Sensor mounting set (5630 005 000-020)
55xx NPS xxx -6xx	Control head ASi-Bus
55xx NPS xxx -K6xx	Control head KI-Top ASi-Bus
55xx NPS xxx -5xx	Control head SPS
55xx NPS xxx -K5xx	Control head KI-Top SPS

NPS - Nominal pipe size e.g. 55xx 050 030-041



KIESELMANN
FLUID PROCESS GROUP



Declaration of incorporation

Translation of the original

Manufacturer / authorised representative:

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Paul-Kieselmann-Str. 4-10
75438 Knittlingen
Germany

Authorised representative,
for compiling technical documents:

Achim Kauselmann
KIESELMANN GmbH
Paul-Kieselmann-Str. 4-10
75438 Knittlingen
Germany

Product name

pneum. Lift actuators
pneum. Rotary actuators
Ball valves
Butterfly valves
Single seat valves
Flow control valves
Throttle valve
Overflow valve
Double seat valve
Bellow valves
Sampling valves
Two way valves
Tankdome fitting

Function

Stroke movement
Rotary movement
Media cutoff
Media cutoff
Media cutoff
Control of liquefied media
Control of liquefied media
Definition of fluid pressure
Media separation
Sampling of liquids
Sampling of liquids
Media cutoff
Prevention of overpressure and vacuum, Tank cleaning

The manufacturer hereby states that the above product is considered as an incomplete machine in the sense defined in the Directive 2006/42/EC on Machinery. The above product is exclusively intended to be installed into a machine or an incomplete machine. The said product does not yet conform to all the relevant requirements defined in the Directive on Machinery referred to above for this reason.

The specific technical documents listed in Appendix VII, Part B, have been prepared. The Authorized Agent empowered to compile technical documents may submit the relevant documents if such a request has been properly justified.

Commissioning of an incomplete machine may only be carried out if it has been determined that the respective machine into which the incomplete machine is to be installed conforms to the regulations set out in the Directive on Machinery referred to above.

The above product conforms to the requirements of the directives and harmonized standards specified below:

- DIN EN ISO 12100 Safety of machinery

Knittlingen, 09. 04. 2015

Klaus Dohle
General Director