



KIESELMANN
FLUID PROCESS GROUP

Operating instruction

- Translation of the original -

GEMBRA

Aseptic tank outlet-double seat valve

Type: 5859



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2. 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.

3. 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.

4. Safety instructions

4.1 Field of application

Based upon its functions, the valve is suitable for use as a leak-proof shut-off valve in the food and beverages, in pharmaceutical, biotechnological and chemical industries.

The valve is designed for media characteristics according to article 9 of DGRL 97/23/EG for group 2 (media condition gaseous or liquid).



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.

4.2 General safety instructions



DANGER

- Danger of crushing or amputating limbs.
Do not reach into the valve housing when in pneumatic mode.
- When removing the valve or valve components from the system, there is a danger of injury from escaping liquids or gases.
Only dismantle when you are absolutely sure that the system is depressurized and free of liquids and gases.
- Danger of scalding and burns to parts of your body from liquids escaping from the drain outlet fig. 1 /page 4 and the leakage drain fig. 4 /page 10.
The splash protection fixtures must always be attached to the leakage drain.
- The actuation can be dismantled. Danger of injury by prestressed pressure spring. Observe separate installation instructions. We recommend having the manufacturer do the maintenance work required for the actuation.



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.

4.3 General notes



NOTE

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

5. Function

5.1 Functional description

Due to the combined diaphragm sealing at a locking and leakage space respectively, safe separation of media is reliably guaranteed.

Cleaning and sterilisation of the locking and leakage area can be carried out inline via lifting/clocking of one the valve seats..

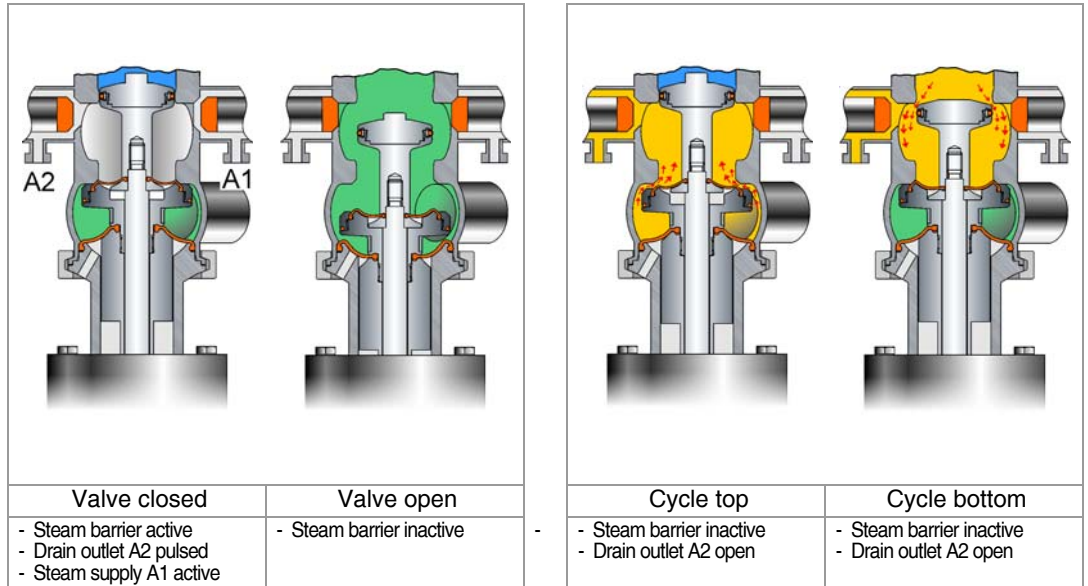


Fig. 1

6. Installation informations

6.1 Installation instructions

The valve must be installed vertically with the actuator at the upwards. Liquid must be able to flow freely from the valve housing. In order to obviate damages, the integration of the pipeline has to be carried out without stress.

6.2 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. Clean inside areas prior to assembly.

7. Maintenance

7.1 Maintenance

The maintenance intervals depend on the operating conditions

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

We recommend replacing the seals every 2 years. The user, however should establish appropriate maintenance intervals according to the condition of the seals.



NOTE

EPDM; Viton; K-flex; NBR; HNBR
Silicone
Thread



Lubricants recommendation

Klüber Paraliq GTE703*
Klüber Sintheso pro AA2*
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.

7.2 Cleaning

The process housing is cleaned via pipeline cleaning. At the same time the leakage area can be cleaned via pipeline cleaning by clocking of the upper valve plate.

During tank cleaning the leakage area can be cleaned by clocking of the lower valve plate, too.

A cleaning about the drain valve of the sterile barrier is not recommended.

8. Control system - and interrogation system

8.1 Special features valve control -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 SPS or ASI-bus switch-on electronics, and integrated 3/2-way solenoid valves. For tough operating conditions we recommend employing a high-grade steel cover.

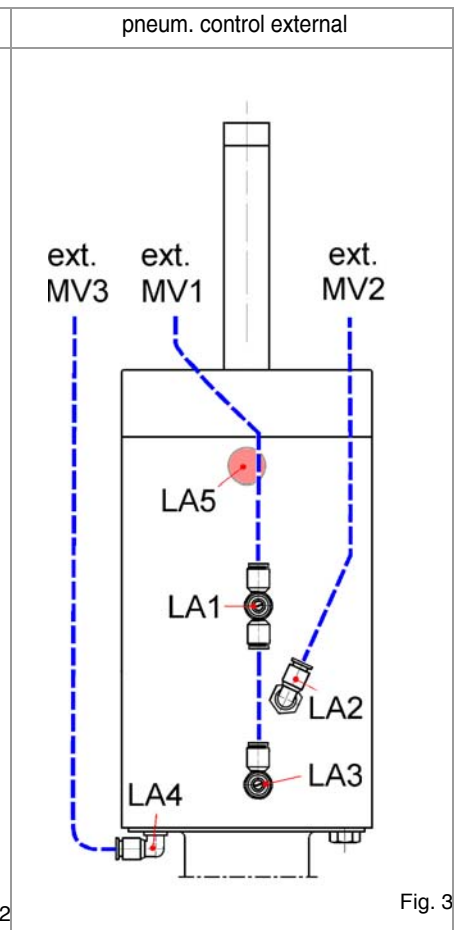
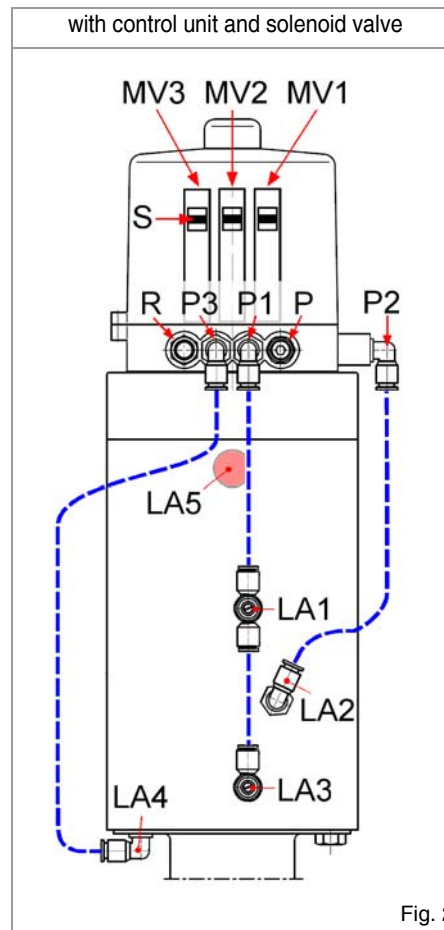
8.2 Sensor mounting set -optional-

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

9. Pneumatic valve actuation

Valve function	Pneum. control → with integrated (MV) in control unit (fig. 2 /page 6)	Pneum. control → with external (MV) (fig. 3 /page 6)
Valve stroke valve "OPEN"	control air feed P → MV1 → P1/LA1 & LA3	control air feed ext.MV1 → LA1 & LA3
Valve stroke valve "CLOSED"	de-aeration P1/LA1 & LA3 → MV1 → R valve is closing by spring	de-aeration LA1 & LA3 → ext.MV1 valve is closing by spring
Lower seat lift	AUF = control air feed P → MV2 → P2/LA2	AUF = control air feed ext.MV2 → LA2
	ZU = de-aeration P2/LA2 → MV2 → R valve is closing by spring	ZU = de-aeration LA2 → ext.MV2 valve is closing by spring
Upper seat lift	AUF = control air feed P → MV3 → P3/LA4	AUF = control air feed ext.MV3 → LA4
	ZU = de-aeration P3/LA4 → MV3 → R valve is closing by spring	ZU = de-aeration LA4 → ext.MV3 valve is closing by spring

MV = solenoid valve
 MV1 = valve stroke
 MV2 = lower seat lift
 MV3 = upper seat lift
 R = de-aeration, sound absorber
 P = compressed-air inlet (control unit)
 LA = compressed-air inlet (actuation)
 S = slide switch - manual control (solenoid valves)



10. Technical data

Model:
Valve size:
Connection:
Temperature range:
Operations pressure:
Pressure resistance:
Vacuum:
Control air pressure:
Quality of control air:

Material:
Stainless steel:
Surfaces:
Seals:

Tightening moment (Nm)
Retaining clamp

Valve lift (mm):
Valve stroke
Free cross section
Upper seat lift
Lower seat lift
Steam/drain valve stroke
Free cross section

aseptic Tank outlet-double seat valve

DN40 - DN80

Welding end DIN11850 serie 2

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

DN40 - 65 = max. 10 bar

DN80 = max. 8 bar

30 bar

1,5 - 10⁻⁶ mbar x L/s (test pressure
0,5mbar)

5,5 - 8,0 bar

ISO 8573-1 : 2001 quality class 3

in product contact

1.4404 / AISI316L

RA ≤ 0,8 µm e-pol.

k-flex

EPDM

PTFE

VITON FKM/FEP

not in product contact

1.4301 / AISI304

metallic bright, e-pol.

EPDM

NBR

Dimension nominal			
DN 40	DN 50	DN 65	DN 80
15	15	25	20

Dimension nominal			
DN 40	DN 50	DN 65	DN 80
26	26	28	35
12	12	12,5	15
2	2	2	2
8	8	8	8
4,5	4,5	4,5	4,5
12	12	12,5	15

11. Disassembly and assembly

11.1 Disassembly - sealing



NOTE

Dismount control air, steam, condensate pipelines and electric lines, complete sensor mounting or control heads.

Assembling tools



Allen key



Round bar



Needle



Set of open-ended wrenches



Soft-head hammer



Eccentric ring

DN40: 5620 051 025-020

DN50: 5620 051 025-020

DN65: 5620 065 025-020

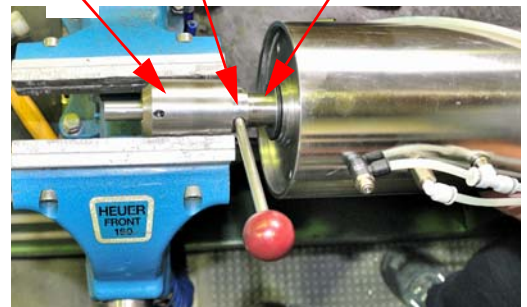
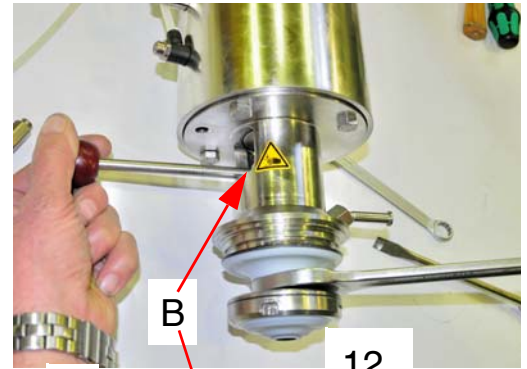
DN80: 5620 080 025-020



Diaphragm wrench

5820 000 000-000

- ⚠ ATTENTION spring prestressed valve insert!
- Before unscrew retaining clamp (9) connect control air to LA4 - the piston plate upper (5) is clocked.
- Screw off retaining clamp (9).
- Carefully pull out valve insert from valve housing (VG) without rotary movement.
- Disconnect the compressed air from LA4.
- Unscrew the air supply LA4.
- Screw off piston plate (1) (SW1) while holding against at width across flats (SW2).
- Remove seal (D1).
- Screw off piston (2) at width across flats (SW2) while holding against with round rod 8mm at drilling (B), see figure on the right.
- Unscrew the upper piston plate (5) while holding against with round rod 8mm at drilling (B).
- Carefully put over diaphragm (D5) from lantern (8).
- Unscrew set screw (10) and hexagon screw (11).
- Dismount lantern (8) and O-ring (D9).
- Stretch the valve insert at the piston (7) in a bench vice with protection braces.
- Position a round bar in the bore (B) and release the threaded connection between piston (7) and piston rod (12).
- Open the vice and place the valve insert on the workbench. Unscrew the piston (7) from the piston rod (12).
- Remove O-rings (D11) and (D12).
- Pierce the seal (D7) and the guide bush (D6) with a pointed tool and carefully remove them from the slot.
- Unscrew with the diaphragm wrench the thrust collar (4) from the piston plate (5).
- Remove the diaphragm (D2), O-ring (D3) and back-up ring (3).

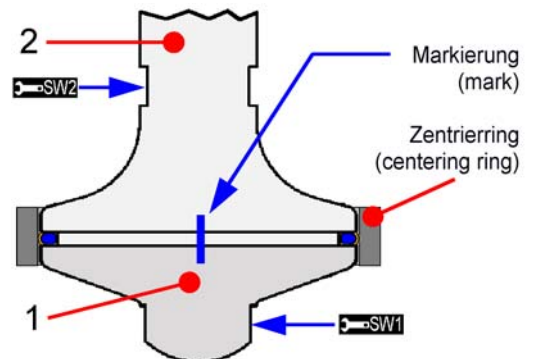


11.2 Assembly

Assemble in reverse order. Thoroughly clean and slightly lubricate mounting areas and running surfaces.

11.3 Assemble Seal (D1)

- Screw together piston plate (1) and piston (2) manually to metallic stop position without sealing ring and carry out colour marking.
- Once again screw off piston plate (1) from piston (2).
- Push sealing (D1) on piston (2) and manually screw the piston plates (1) into the pistons (2).
- For centring sealing (D1) on piston (2), the centring ring has to be placed as shown in figure on the right.
- Stretch construction group at spanner flat (SW1) with soft braces in bench vice and screw in piston (2) over spanner flat (SW2) until marking.



11.4 Assemble diaphragm (D2)

- Screw together manually thrust collar (4) and piston plate upper (5) without O Ring (D3) and diaphragm (D2) until metallic stop position and carry out colour marking.
- Once again screw off thrust collar (4) from piston plate upper (5).
- Insert O Ring (D3) into thrust collar (4).
- Install plain bearing (D4) in piston plate upper (5).
- Insert back-up ring in piston plate upper (5).
- Put diaphragm (D2) on piston plate upper (5).
- Screw on thrust collar (4) with the diaphragm wrench until marking.



NOTE

The thrust collar (4) deforms in case of a too high radial tension force.

11.5 Assemble diaphragm (D5)

- Stretch piston upper (7) in bench vice with protection braces.
- Mount plain bearing (D4) in piston upper (7).
- Put diaphragm on piston plate (5) and screw in into piston upper (7) until metallic stop position (see figure on the right).
- Built in sealings (D7), (D8), (D9), (D11), (D12) and piston guide bush (D6).
- Screw in piston rod (12) until metallic stop position in actuator (12).
- Build in lantern.



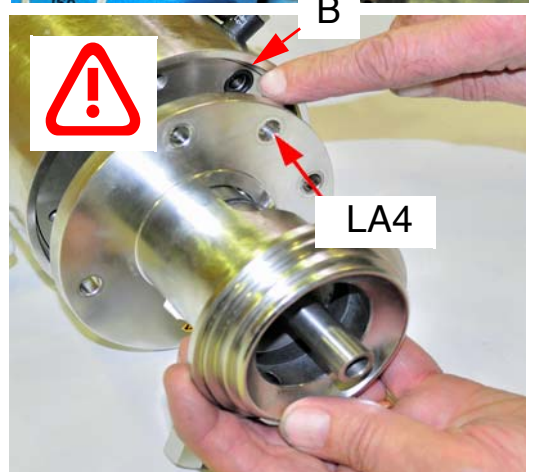
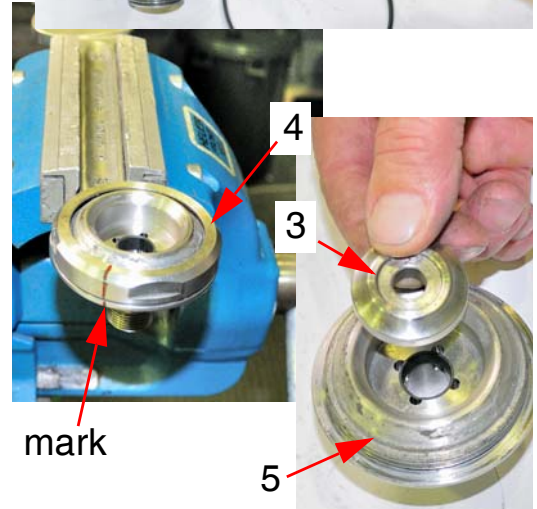
NOTE

When mounting the lantern on the actuator, please note that the through hole (B1) for compressed air complies with the drilling for air connection LA4. (see figure right)

- Apply hexagon screws (11) only in order to avoid tensions while piston (7) is built in.
- Screw in piston (7) in piston rod (12) until metallic stop position while holding against drilling (B2) by means of a round bar steel.
- Screw in lower piston (2) in spindle (6).
- Screw threaded connection (G1) with screw locking device so that it can be unlocked (e.g. Loctite 243).
- Centre spindle (6), piston rod (12) and lantern (8) so that the groove in the spindle (6) and the thread in the piston rod (12) are on top of each other. (fig. 6 /page 12)
- Now, screw in set screw (10).
- Pull tight hexagon screws (11).
- Connect control air to (LA4), piston plate upper (5) is clocked.
- Put diaphragm (D5) on lantern (8).

11.6 Assemble valve insert in the housing (VG)

- Before mounting the valve insert into the housing (VG), connect control air to (LA4), piston plate upper (5) is clocked.
- Build in complete valve insert in housing (VG).
- Mount and pull tight retaining clamp (9). Note turning moment (See technical data)
- Dismantle control air from (LA4).



12. Drawing

LA1= Air supply - valve stroke

LA2= Air supply - lower seat lift

LA3= Air supply - valve stroke

LA4= Air supply - upper seat lift

LA5= Deaeration optional connection for pressure locking

AE = Sensor mounting

FI1 = Flange

FI2 = Flange

L = Leakage tell tale

VE = Valve insert

VG = Valve housing

PT =Temperature sensor

9 = Retaining clamp

14 = Hexagon socket screw

15 = Drain valve

16 = Steam valve

17 = Circlip

18 = Hexagon screw

D14= K-flex seal

D15= O-ring

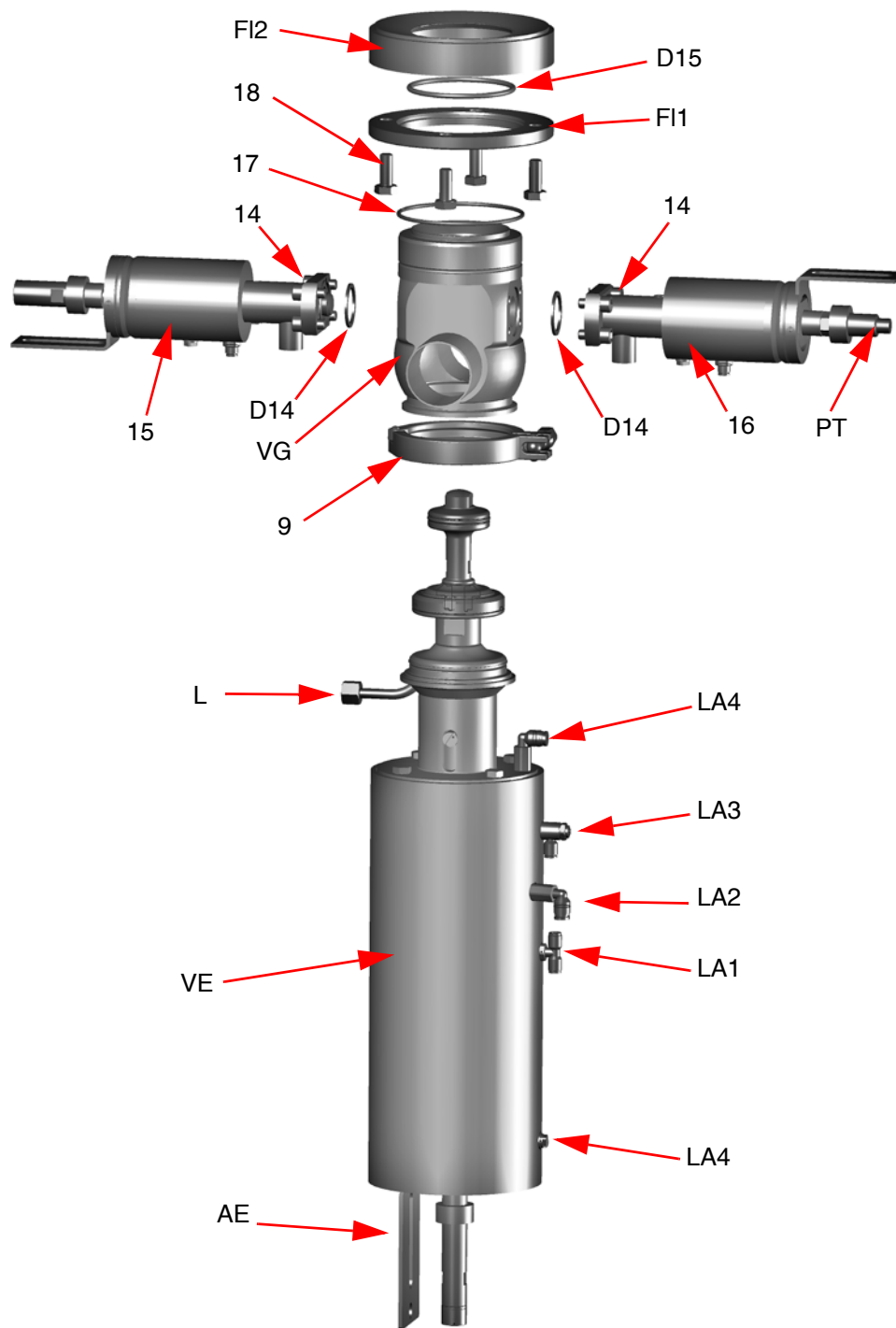


Fig. 4

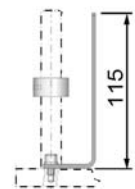
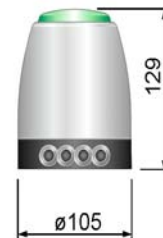
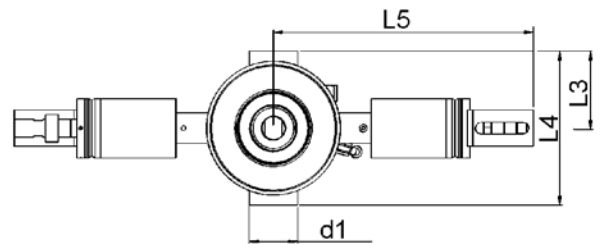
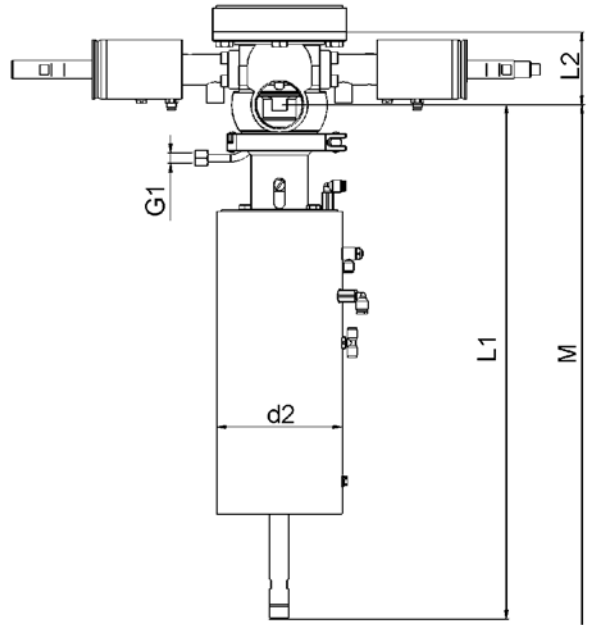
12.1 Dimensions

Dimension nominal	DN 40	DN 50	DN 65	DN 80
d1	ø 41x1,5	ø 53x1,5	ø 70x2	ø 85x2
d2	ø 134	ø 134	ø 170	ø 170
d3	ø 125	ø 138	ø 165	ø 176
d4	ø 133	ø 146	ø 173	ø 186
L1	554	559	638,5	673
L2	---	80	95	---
L3	84	84	110	115
L4	168	168	220	230
L5	---	291,5	---	---
L6	3	3	3	3
L7	29	29	29	33
G1	1/4	1/4	1/4	1/4
M*	731	749	858	938
Valve stroke	26	26	28	35

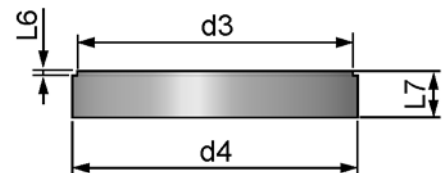
Measures in mm

*) Size when completed M with control head

---) this measures was not available at the time of going to press



► Flange (FI) Art.-No.: 5727 DN 001-040



12.2 Valve insert

- 1) Piston plate lower
- 2) Piston
- 3) Back-up ring
- 4) Thrust collar
- 5) Piston plate upper
- 6) Spindle
- 7) Piston upper
- 8) Lantern
- 9) Retaining clamp
- 10) Set screw
- 11) Hexagon screw
- 12) Piston rod
- 13) Actuator



Wear parts

- D1) Seal
- D2) Diaphragm
- D3) O-ring
- D4) Plain bearing
- D5) Diaphragm
- D6) Piston guide bush
- D7) O-ring
- D8) O-ring
- D9) O-ring
- D10) O-ring
- D11) O-ring
- D12) O-ring
- D13) Plain bearing

B = Bore hole

G1 = Lock nut lösbar
(e.g. Loctite 243)

G2 = Lock nut lösbar
(e.g. Loctite 243)

LA1 + LA3 = Air supply - valve stroke

LA2 = Air supply - lower seat lift

LA4 = Air supply - upper seat lift

LA5 = Deaeration optional connection for pressure locking

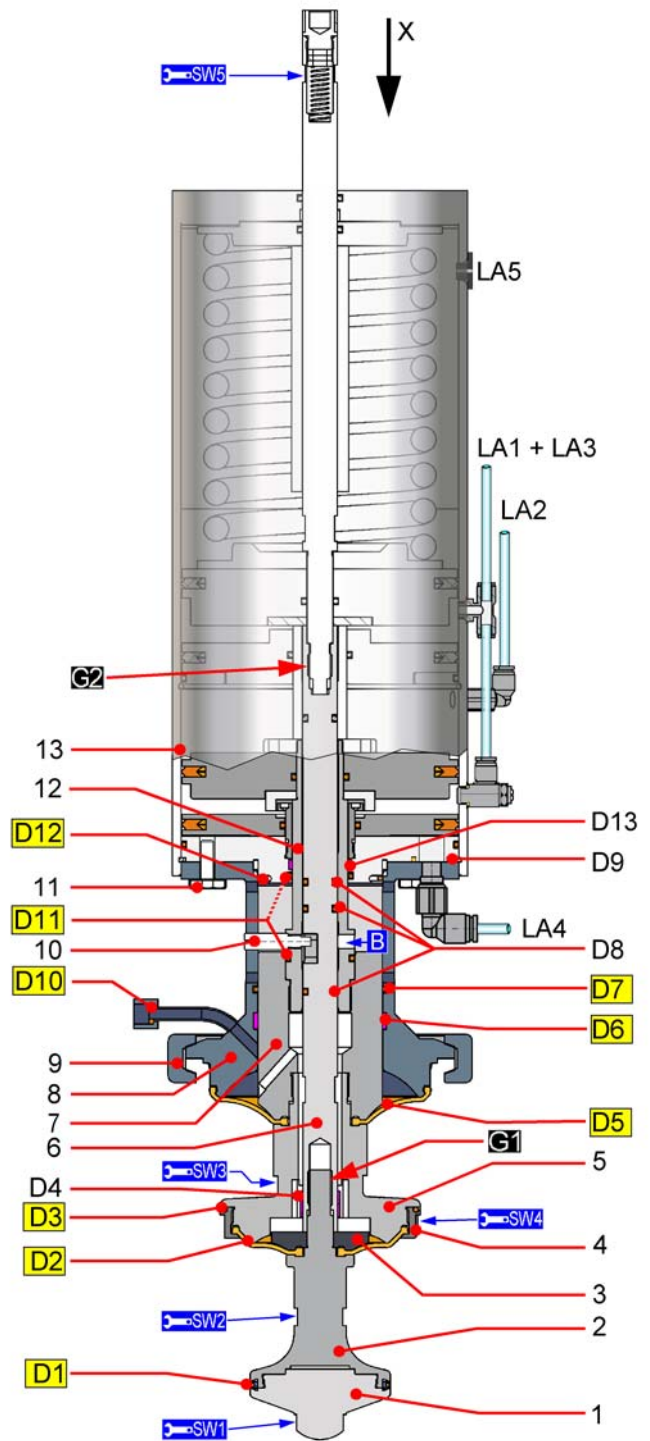


Fig. 6

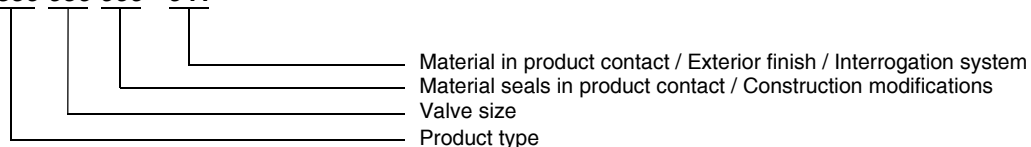
➤ wrench size

	SW1	SW2	SW3	SW4	SW5
DN40	19	17	32	70	17
DN50	19	17	32	70	17
DN65	19	27	42	90	17
DN80	27	27	46	110	17

13. Manufacturing

13.1 Structure of Article number

5859 050 000 - 041



➤ Product type

5859 = GEMBRA-Aseptic tank outlet-double seat valve

➤ Valve type

DN = Nominal diameter

DIN	025 = DN25	040 = DN40	050 = DN50	065 = DN65	080 = DN80	100 = DN100	125 = DN125	150 = DN150
INCH	026 = DN1	038 = DN1½	051 = DN2	064 = DN2½	076 = DN3	101 = DN4	-	-

➤ Material seal / Construction modifications

Material seals in product contact: k-flex, PTFE
EPDM, PTFE

Construction modifications: Kind of actuation - air open - spring close

➤ Material in product contact / Exterior finish

020 - 1.4301/1.4307 AISI304/307 - bright turned	040 - 1.4301/1.4307 AISI304/307 - bright turned
021 - 1.4301/1.4307 AISI304/307 - E-polished	041 - 1.4301/1.4307 AISI304/307 - E-polished
022 - 1.4301/1.4307 AISI304/307 - unpolished, glass-bead blasted	042 - 1.4301/1.4307 AISI304/307 - unpolished, glass-bead blasted

➤ Interrogation system

Article number	Control System or Interrogation System (A1, A2)
58xx DN xxx -041	Valve without Control- or Interrogation System
58xx DN xxx -750	Valve with Sensor mounting set (5630 005 000-020)
58xx DN xxx -6xx	Control head ASi-Bus for GEMBRA-Double seat valve
58xx DN xxx -K6xx	Control head KI-Top ASi-Bus for GEMBRA-Double seat valve
58xx DN xxx -5xx	Control head SPS for GEMBRA-Double seat valve
58xx DN xxx -K5xx	Control head KI-Top SPS for GEMBRA-Double seat valve

DN - nominal diameter e.g. 58xx 050 000-041

14. Spare parts list

14.1 GEMBRA Aseptic tank outlet-double seat valve air open - spring close (AISI316L)

Seal	Article-No.	Temperature sensor PT100	Valve insert VE	Housing VG	Wear part set
<i>k-flex/PTFE</i>	-	-	-	-	-
	-	-			
<i>EPDM/PTFE</i>	5859 DN 732-xxx	-	5820 DN 030-041	5859 DN 011-041	5859 DN 139-000
	5859 DN 410-xxx	6213 500 003-040			

DN = Dimension nominal e.g. 5859 050 000-041 = DN50
xxx = Control- or Interrogationssystem

Item.	Designation	Material	DN40	DN50	DN65	DN80
15	Drain valve	AISI304	5822 050 025-021	5822 050 025-021	5822 050 025-021	5822 050 025-021
16	Steam valve without PT Steam valve with PT	AISI304	5822 050 020-021 5822 050 012-021	5822 050 020-021 5822 050 012-021	5822 050 020-021 5822 050 012-021	5822 050 020-021 5822 050 012-021
17	Circlip	AISI301	5727 040 003-031	5727 050 003-031	5727 065 003-031	5727 080 003-031
18	Screws (4x)	AISI304	8106 010 025-020	8106 010 025-020	8106 012 025-020	8106 012 035-020
F11	Flange	AISI316L	5727 040 004-041	5727 050 004-041	5727 065 004-041	5727 080 004-041
F12	Flange ^{a)}	AISI316L	5727 040 001-040	5727 050 001-040	5727 065 001-040	5727 080 001-040

a. not included in delivery
PT = Temperature sensor

14.2 Valve insert

Item.	Designation	Material	DN40	DN50	DN65	DN80
VE	Valve insert Valve insert	PTFE/K-flex PTFE/EPDM	- 5820 040 030-040	- 5820 050 030-040	- 5820 065 030-040	- 5820 080 030-040
1	Piston plate	AISI316L	5821 050 004-040	5821 050 004-040	5821 065 004-040	5821 080 004-040
2	Piston	AISI316L	5821 040 005-040	5821 050 005-040	5821 065 005-040	5821 080 005-040
3	Back-up ring	AISI303	5821 040 009-220	5821 050 009-220	5821 065 009-220	5821 080 009-220
4	Thrust collar	AISI316L	5821 050 010-040	5821 050 010-040	5821 065 010-040	5821 080 010-040
5	Piston plate upper	AISI316L	5821 040 006-040	5821 050 006-040	5821 065 006-040	5821 080 006-040
6	Spindle	AISI303	5821 040 011-220	5821 040 011-220	5821 065 011-220	5821 080 011-220
7	Piston upper	AISI316L	5821 050 007-040	5821 050 007-040	5821 065 007-040	5821 080 007-040
8	Lantern	AISI304	5821 050 014-021	5821 050 014-021	5821 065 014-021	5821 080 014-021
9	Retaining clamp	AISI304	2122 065 100-020	2122 065 100-020	2122 115 100-020	2122 125 100-020
10	Set screw	AISI304	5821 050 022-020	5821 050 022-020	5821 065 022-020	5821 080 022-020
11	Hexagon screw	AISI304	8106 008 016-020	8106 008 016-020	8106 008 016-020	8106 008 016-020
12	Piston rod	AISI303	5821 050 008-220	5821 050 008-220	5821 065 008-220	5821 080 008-220
13	Actuation	----	5820 040 001-021	5820 050 001-021	5820 065 001-021	5820 080 001-021
14	Hexagon socket screw	AISI304	8095 080 020-020	8095 080 020-020	8095 080 020-020	8095 080 020-020
LA1	T-air connector G1/8	----	8217 000 008-000	8217 000 008-000	8217 000 008-000	8217 000 008-000
LA2	Air supply - elbow screw fitting R1/8	----	8217 000 004-000	8217 000 004-000	8217 000 004-000	8217 000 004-000
LA3	One-way restrictor	----	8218 001 020-000	8218 001 020-000	8218 001 020-000	8218 001 020-000
LA4	Air supply - elbow screw fitting R1/8	----	8217 000 004-000	8217 000 004-000	8217 000 004-000	8217 000 004-000

14.3 Wear parts set

Item.	Designation	Material	DN40	DN50	DN65	DN80
	Wear parts set PTFE/k-flex D1a, D2, D3, D5, D6, D7, D10, D11(1x), D12	PTFE/k-flex	-	-	-	-
	Wear parts set PTFE/EPDM D1b, D2, D3, D5, D6, D7, D10, D11(1x), D12	PTFE/EPDM	5859 050 139-000	5859 050 139-000	5859 065 139-000	5859 080 139-000
D1a	Seal k-flex	k-flex	5621 050 020-114	5621 050 020-114	5621 065 010-114	5621 080 010-114
D1b	Seal EPDM	EPDM	5621 050 020-084	5621 050 020-084	5621 065 010-084	5621 080 010-084
D2	Diaphragm	PTFE	5821 050 021-053	5821 050 021-053	5821 065 021-053	5821 080 021-053
D3	O-ring	FEP / VITON	2304 067 025-184	2304 067 025-184	2304 085 035-184	2304 107 035-184
D4	Plain bearing	XSM	8050 015 007-156	8050 015 007-156	8050 020 015-156	8050 020 015-156
D5	Diaphragm	PTFE	5821 050 020-053	5821 050 020-053	5821 065 020-053	5821 080 020-053
D6	Piston guide bush (hxbxL)	PTFE	8051 250 010-081 9,5x2,5x155,9	8051 250 010-081 9,5x2,5x155,9	8051 190 010-081 9,5x2,5x190	8051 220 010-081 9,5x2,5x230
D7	O-ring	EPDM 85°Sh	2304 049 035-170	2304 049 035-170	2304 063 035-170	2304 072 035-170
D8	O-ring	EPDM 70°Sh	2304 011 025-159	2304 011 025-159	2304 013 035-159	2304 013 035-159
D9	O-ring	EPDM 70°Sh	2304 010 025-055	2304 010 025-055	2304 010 025-055	2304 010 025-055
D10	Seal	EPDM 70°Sh	2354 012 006-054	2354 012 006-054	2354 012 006-054	2354 012 006-054
D11	O-ring (2x)	EPDM 70°Sh	2304 028 035-159	2304 028 035-159	2304 032 035-159	2304 032 035-159
D12	O-ring	EPDM 85°Sh	2304 041 035-159	2304 041 035-159	2304 054 035-159	2304 062 035-159
D13	Plain bearing	XSM	8050 027 005-156	8050 027 005-156	8050 032 005-156	8050 032 005-156
D14	Seal	k-flex	5822 050 070-114	5822 050 070-114	5822 050 070-114	5822 050 070-114
D15	O-ring	EPDM 70°Sh	2304 062 035-159	2304 075 040-054	2304 090 040-170	2304 102 050-159



KIESELMANN
FLUID PROCESS GROUP



Declaration of incorporation

Translation of the original

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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, 04. 07. 2012

Klaus Dohle
General Director