

Operating instruction

- Translation of the original -

GEMBRA
Aseptic Two-way-valve
Type:584x



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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.
<u> </u>	ATTENTION	Dangerous situation which may cause slight personal injury or material damages.
i	NOTE	Marks application hints and other information which is particularly useful.



4. Safety instructions

4.1 Field of application

The valve is utilised as a pneumatically controlled shut-off valve for liquid and gas flows in food, beverage, pharmaceutical and chemical industry.

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 leakage drain (L) (Fig. 8
 /Page 9).
 - The splash protection fixtures must always be attached to the leakage drain (L).
- 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

- When dismantling the retaining clamp, the spring prestressed valve insert can cause injury due to a lifting movement in the direction "X" (Fig. 8 /Page 9).
- First open the valve pneumatically, then unscrew the retaining clamp.
- 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

The valve is utilised as a pneumatically controlled shut-off valve. Leakage detection takes place via the leakage outlet (L) at the lantern.

5.1.1 Actuator: air open - spring close (Lö-Fs)

The valve opens with control air and closes with spring power by means of a lift drive.

5.1.2 Actuator: spring open - air close (Fö-Ls)

The valve opens with spring power and closes with control air by means of a lift drive.

5.1.3 Actuator: air open - air close (Lö-Ls)

Fig. 1 The valve opens and closes with control air by means of a lift drive.

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 guidlines

- 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

Lubricant recommendation

EPDM; Viton; K-flex; NBR; HNBR
⇒ Klüber Paraliq GTE703*
Silicone
⇒ Klüber Sintheso pro AA2*
Thread
⇒ Interflon Food*

7.2 Cleaning

The upper and lower process housing is cleaned via pipeline cleaning.



^{*)}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.

8. Technical data

Model: Aseptic Two-way-valve

Valve size: DN 40 - 80

Connection: Welding end DIN11850 serie 2

Temperature range: Ambient temperature: +4° to +45°C

Product temperature: +0° to +95°C depending on the medium

Sterilization temperature: +140°C short time (30min)

Operatins pressure: DN40 - 80 = 6 bar

Cleaning pressure: 3 bar

Pressure resistance: 30 bar

Material:

Vacuum: 1,5 - 10^{-6} mbar x $^{\perp}/_{S}$ (test pressure 0,5mbar)

Control air pressure: 5,5 - 8,0 bar

Quality of control air: ISO 8573-1: 2001 quality class 3

in product contact not in product contact

Stainless steel:1.4404 / AISI316L1.4301 / AISI304Surfaces:RA $\leq 0.8 \mu m$ e-pol.metallic bright, e-pol.

Seals: k-flex (FDA) 150°C EPDM

EPDM (FDA) 140°C

PTFE

Tightening moment: Retaining clamp: Dimension nominal

DN 40 DN 50 DN 65 DN 80

Torque in Nm 15 15 25 20

 Valve lift (mm)
 DN 40
 DN 50
 DN 65
 DN 80

 Valve stroke
 16
 16
 19
 25

9. Control system - and interrogation system

9.1 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.

9.2 Proximity switch receiver 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.



10. Pneumatic valve actuation

10.1 Actuator: air open - spring close (Lö - Fs)

Valve function	pneumatic Control with MV in Control unit (Fig. 2 /Page 8)	pneumatic Control with external solenoid valve (MV) (Fig. 2 /Page 8)		
Valve "OPEN"	control air feed P → MV1 → P1/LA2 Valve is opening by control air	control air feed ext. MV ➡ LA2 Valve is opening by control air		
Valve "CLOSED"	de-aeration LA2/P1 [→] MV1 [→] R Valve is closing by spring	de-aeration LA2 ext. MV Valve is closing by spring		

10.2 Actuator: spring open - air close (Fö - Ls)

Valve function	pneumatic Control with MV in Control unit (Fig. 2 /Page 8)	pneumatic Control with external solenoid valve (MV) (Fig. 2 /Page 8)		
Valve "CLOSED" control air feed P → MV1 → P1/LA1 Valve is closing by control air		control air feed ext. MV ➡ LA1 Valve is closing by control air		
Valve "OPEN"	de-aeration P1/LA1 [→] MV1 [→] R Valve is opening by spring	de-aeration LA1 [→] ext. MV Valve is opening by spring		

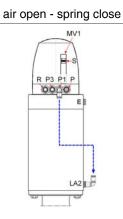
10.3 Actuator: air open - air close (Lö - Ls)

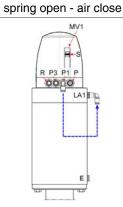
Valve function	pneumatic Control with MV in Control unit (Fig. 2 /Page 8)	pneumatic Control with external solenoid valve (MV) (Fig. 2 /Page 8)		
Valve "OPEN"	control air feed P → MV1 → P1/LA2	control air feed ext. MV ➡ LA2		
Valve "CLOSED"	Valve is opening by control air de-aeration P MV3 P3/LA1 Valve is closing by control air	Valve is opening by control air de-aeration ext. MV → LA1 Valve is closing by control air		

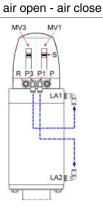
Control unit with Solenoid valve

MV = Solenoid valve

R = de-aeration, sound absorber
P = compressed-air inlet (control unit)
LA = compressed air inlet (actuation)
S = slide switch - manual control
(solenoid valves)

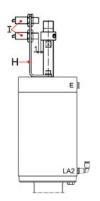


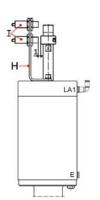




Control head with Initiatoren

I = Initiatoren
H = Angle bracket
E = de-aeration
LA = Air connection





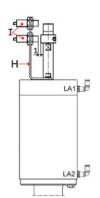


Fig. 2



11. Disassembly and assembly

(see Fig. 9 /Page 10) 11.1 Disassembly valve insert VE



NOTE

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

Wrench size∢

SW1 SW2 SW3

25

30 24 17

30 36

DN40

DN50

DN65

DN80

Dismount valve insert with actuator lö-fs

- Connect the compressed air (P) to the air connection (LA2) thereby the piston moves toward X.
- Remove retaining clamp (5) and pull out carefully and without rotary movement the valve insert (VE) from the valve housing (VG).
 - Disconnect the compressed air (P) from the air connection (LA2) thereby the piston moves against toward X.

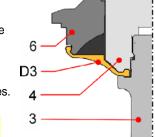
Dismount valve insert (VE) with actuator Is-fö and lö-Is

Remove retaining clamp (5) and pull out carefully and without rotary movement the valve insert (VE) from the
valve housing (VG).

11.2 Exchanging seals

(see Fig. 9 /Page 10) • Screw off piston plate (1) while holding against at the wrench size (SW2).

- Dismount sealing (D1).
- Develop the pistons (2) and seals (D1a), (D1b) and (D2).
- Screw off the piston (3) at the wrench size (SW2), while holding against with a round rod 8mm at drilling (B).
- Take off carefully the diaphragm (D3) from the upper piston (4) and the lantern (6).
- Screw off the locking screw (8).
- Screw off the screws (10) and remove the lantern (6).
- Remove the sliding bearing (D4) and the O-Ring (D5).
- Unscrew the piston rod (9) and hold against at the wrench size (SW3) (see Fig. 8 /Page 9). Remove the O-Ring (D6).



11.3 Assembly

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



NOTE

During assembly, tie diaphragm (D3) carefully on lantern (6) and on the upper piston (4). Fig. 3 /Page 7

Centering ring∢

DN	Order number
DN40	5620 051 025-020
DN50	5620 051 025-020
DN65	5620 065 025-020
DN80	5620 080 025-020
DN100	

11.4 Assembly K-Flex - seal (D2)

- Fit the O-Ring into the k-flex seal.
- Assemble the ring shells as in the Fig. 4 /Page 7 in the order A, B, C, D

11.5 Assembly sealing ring (D1) (D2)

- Screw together piston plate (1) and piston (2) and (3) manually to metallic stop position without sealing ring and carry out colour marking (Fig. 5 /Page 7).
- Once again screw off the piston plate (1) and the piston (2) from the piston (3).
- Push the seal (D1a), (D1b) on the piston (2) and push the seal (D2) on the piston (3).
- Screw manually the piston plates (1) and the piston (2) into the piston (3).
- For centring the seal (D2) on the piston (3), the centring ring has to be placed as shown in Fig. 5 /Page 7.
- Screw the piston (1) (SW1) till to the marking into the piston (3). Hold against at the wrench size (SW2)

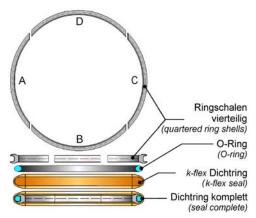


Fig. 4

Fig. 3

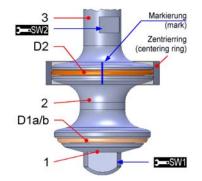


Fig. 5



GEMBRA Aseptic Two-way-valve Type: 584x

11.6 Assemble the valve insert (VE) into the valve housing (VG)

➤ Adjust the installation position of the piston with the mounting tool (MW)

MW

12

VE

D3

M2

x

Fig. 6

M3

0

Actuator: lö-fs



Mounting tool MW for GEMBRA Single seat valves				
DN40 - DN65	ArtNo.: 5836 000 065-000			
DN80	ArtNo.: 5836 000 080-000			

Kind of actuator: air open - spring close

- Connect the compressed air (P) to the air connection (LA2) thereby the piston moves toward X.
- Unsrew the cap (15).
- Screw in the mounting tool (MW) as far as possible into the spindle (12).
- Disconnect the compressed air (P) from the air connection (LA2) thereby the valve drives into installation position.

Kind of actuator: air close - spring open air close - air open

- Unsrew the cap (15).
- Screw in the mounting tool (MW) as far as possible into the spindle (12).
- Connect the compressed air (P) to the air connection (LA1 air close-spring open) and (LA2 air open-air close) respectively. Fig. 2 /Page 6
- The valve drives into installation position.



NOTE

In this valve position the diaphragm (D3) is in its basic position and is optimally compressed between lantern and housing.

Adjust the installation position of the piston without the mounting tool (MW)

- Connect compressed air (P) to the trottle valve (LA1 Is-fö) and (LA2 lö-Is / lö-fs) respectively.
- · According to kind of the actuator the piston drives out or in.
- Close the throttle valve at (LA1 or LA2) with a screwdriver.
- Disconnect the compressed air at the throttle valve (LA1 or LA2).
- The piston stops in the position. Position a calliper on the adjustment dimension M1 or M2.
- Slowly open the throttle valve at (LA1 or LA2), so that the piston drives out or in.
- Close the throttle at the position M1 respectively M2. (If an control head is assembled, the adjustment dimension M1 is measured between the actuator and the pin (8).

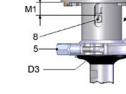
	Bore	adjustment dimension for the installation position			
	В	M1	M2 ^a	M3 ^b	
DN40	ø7	18,5	107	96	
DN50	ø7	18,5	107	96	
DN65	ø8	29	104	93	
DN80	ø8	35	98	87	
	DN50 DN65	B DN40 Ø7 DN50 Ø7 DN65 Ø8	Bore for the B M1 DN40 Ø7 18,5 DN50 Ø7 18,5 DN65 Ø8 29	Bore for the installation point B M1 M2 ^a DN40 Ø7 18,5 107 DN50 Ø7 18,5 107 DN65 Ø8 29 104	

a. old versionb. new version



NOTE

In this valve position the diaphragm (D3) is in its basic position and is optimally compressed between lantern and housing.



Actuator: lö-fs Fig. 7

Assemble the valve insert into the valve housing

· Carefully install the valve insert in the housing.

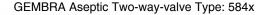


NOTE

When installing the valve seat, do not damage the sealing surfaces on the piston and the housing as well as the seals.

- Assemble the retaining clamp (5) (Please note the torque data! See the tightening moment in technical data).
- Slowly open the throttle valve again. The piston drives into its basic position.
- Check the valve functions.





12. Drawing

➤ Aseptic Two way valve GEMBRA Type 5844 und Type 5846

P = Central air supply

P1 = Control air - Valve stroke

LA1= Lö-Fs - De-aeration

= Fö-Ls - Valve stroke

= Lö-Ls - Valve stroke

LA2= Lö-Fs - Valve stroke = Fö-Ls - De-aeration

- 1 0 20 20 40 40 410 11

= Lö-Ls - Valve stroke

A1 = Control head

A2 = Proximity switch mounting

L = Leakage tell taue G1/4

VE = Valve insert

VG = Valve housing

5 = Retaining clamp

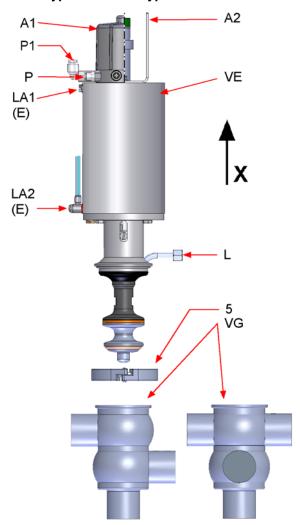
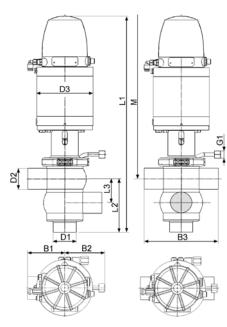


Fig. 8

12.1 Dimensions

Z.I Dillicitololio					
Dimension nom	inal	DN40	DN 50	DN 65	DN 80
	D1	ø 41x1,5	ø 53x1,5	ø 70x2	ø 85x2
	D2	ø 41x1,5	ø 53x1,5	ø 70x2	ø 85x2
	D3	ø 129	ø 129	ø 167	ø 167
	В1	85	85	110	121
	B2	92	92	103	107
	ВЗ	170	170	220	242
	L1	570	603	718	772
	L2	133	145	181	206
	L3	48	60	76	91
	G1	1/4	1/4	1/4	1/4
size when completed with Control head	М	565	620	740	800





FLUID PROCESS GROUP

GEMBRA Aseptic Two-way-valve Type: 584x

Valve insert

- 1) Piston plate
- 2) Piston
- 3) Piston
- 4) Piston upper
- 5) Retaining clamp
- 6) Lantern
- 7) Screw retention
- 8) Locking screw
- 9) Piston rod
- Hexagon screw 10)
- Actuator 11)
- 12) Spindle
- O-Ring 13)
- 14) Position indication
- 15) Сар
- a) O-Ring D1) b) Seal
- D2)
- D3) Diaphragm
- D4) Plain bearing
- D5) O-Ring
- O-Ring D6)
- VE = Valve insert
- G1 = Thread connection secured with lock nut removable (e.g. Loctite 243)
- G2 = Thread connection secured with lock nut high-strength (e.g. Loctite 2701)
- B = Bore
- LA2= Throttle valve

Wrench size

	SW1	SW2	SW3	B1	
DN40	19	30	17	ø7	
DN50	25	24	17	ø7	
DN65	30	24	17	ø7	
DN80	30	<i>3</i> 6	17	ø8	

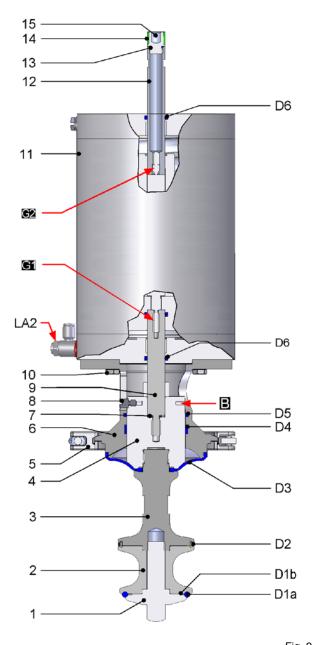


Fig. 9



13. Manufacturing

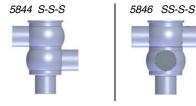
13.1 Structure of Article number



> Product type

584x = GEMBRA Aseptic Two-way-valve

> Housing types



> Valve size

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 seals / Construction modifications

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

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

- spring open - air 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-Single seat valves			
58xx DN xxx -K6xx	Control head KI-Top ASi-Bus for GEMBRA-Single seat valves			
58xx DN xxx -5xx	Control head SPS for GEMBRA-Single seat valves			
58xx DN xxx -K5xx	Control head KI-Top SPS for GEMBRA-Single seat valves			

- Nominal diameter e.g. 58xx 050 000-041



14. Spare parts list

14.1 Aseptic Two-way-valve GEMBRA (1.4404 / AISI316L)

Variants	Seal	Actuator	Article-Nr.	Valve insert VE	Housing VG	Seal kit
Housing styl	le S-S-S				AISI316L	
	PTFE / k-flex	Lö - Fs	5844 DN 000-xxx	5844 DN 020-041		
		Fö - Ls	5844 DN 100-xxx	5844 DN 120-041	5844 DN 031-041	5844 DN 990-000
		Lö - Ls	5844 DN 300-xxx	5844 DN 320-041		
	PTFE / EPDM	Lö - Fs	5844 DN 030-xxx	5844 DN 023-041		
		Fö - Ls	5844 DN 130-xxx	5844 DN 123-041	5844 DN 031-041	5844 DN 993-000
		Lö - Ls	5844 DN 330-xxx	5844 DN 323-041		
Housing styl	e SS-S-S					
	PTFE / k-flex	Lö - Fs	5846 DN 000-xxx	5844 DN 020-041		
		Fö - Ls	5846 DN 100-xxx	5844 DN 120-041	5846 DN 031-041	5844 DN 990-000
		Lö - Ls	5846 DN 300-xxx	5844 DN 320-041		
	PTFE / EPDM	Lö - Fs	5846 DN 030-xxx	5844 DN 023-041		
		Fö - Ls	5846 DN 130-xxx	5844 DN 123-041	5846 DN 031-041	5844 DN 993-000
		Lö - Ls	5846 DN 330-xxx	5844 DN 323-041		

DN = Dimension nominal e.g. 5844 050 000-041 xxx = Control- or interrogation system MV = Solenoid valve Lö = air open Ls = air close Fö = spring open Fs = spring close



14.2 Valve inserts Aseptic Two-way-valve GEMBRA (1.4404 / AISI316L)

No.	Designation	Material	DN40	DN50	DN65	DN80
VE	Valve insert Lö - Fs Valve insert Fö - Ls Valve insert Lö - Ls	PTFE / k-flex PTFE / k-flex PTFE / k-flex	5844 040 020-041 5844 040 120-041 5844 040 320-041	5844 050 020-041 5844 050 120-041 5844 050 320-041	5844 065 020-041 5844 065 120-041 5844 065 320-041	5844 080 020-041 5844 080 120-041 5844 080 320-041
VE	Valve insert Lö - Fs Valve insert Fö - Ls Valve insert Lö - Ls	PTFE / EPDM PTFE / EPDM PTFE / EPDM	5844 040 023-041 5844 040 123-041 5844 040 323-041	5844 050 023-041 5844 050 123-041 5844 050 323-041	5844 065 023-041 5844 065 123-041 5844 065 323-041	5844 080 023-041 5844 080 123-041 5844 080 323-041
1	Piston plate	AISI316L	5844 040 009-040	5844 050 009-040	5844 065 009-040	5844 080 009-040
2	Piston	AISI316L	5844 040 008-040	5844 050 008-040	5844 065 008-040	5844 080 008-040
3	Piston	AISI316L	5844 040 007-040	5844 050 007-040	5844 065 007-040	5844 080 007-040
4	Piston upper	AISI316L	5836 040 007-041	5836 040 007-041	5836 065 007-041	5836 080 007-041
5	Retaining clamp	AISI304	2122 065 100-020	2122 065 100-020	2122 115 100-020	2122 125 100-020
6	Lantern	AISI304	5821 050 014-021	5821 050 014-021	5821 065 014-021	5821 080 014-021
7	Washer screw retention	AISI316L	8135 012 195-040	8135 012 195-040	8135 012 195-040	8135 012 195-040
8	Locking screw	AISI304	5836 040 008-020	5836 040 008-020	5836 040 008-020	5836 080 008-020
9	Piston rod	AISI303	5836 040 006-221	5836 040 006-221	5836 080 006-220	5836 080 006-220
10	Hexagon screw	AISI304	8106 008 020-020	8106 008 020-020	8106 008 020-020	8106 008 020-020
11	Actuator Lö - Fs Actuator Fö - Ls Actuator Lö - Ls	AISI304 AISI304 AISI304	5200 129 151-032 5400 129 151-032 5300 129 151-032	5200 129 151-032 5400 129 151-032 5300 129 151-032	5200 167 151-032 5400 167 151-032 5300 167 151-032	5200 167 151-032 5400 167 151-032 5300 167 151-032
12	Spindle	AISI303	5622 100 070-220	5622 100 070-220	5622 100 070-220	5622 100 070-220
13	O-Ring	EPDM	2304 012 020-170	2304 012 020-170	2304 012 020-170	2304 012 020-170
14	Position indication	ABS gn	5622 100 058-152	5622 100 058-152	5622 100 058-152	5622 100 058-152
15	Сар	AISI303	5622 100 071-220	5622 100 071-220	5622 100 071-220	5622 100 071-220
	Seal kit - PTFE/EPDM Seal kit - PTFE/k-flex	PTFE/EPDM PTFE/k-flex	5844 050 993-000 5844 050 990-000	5844 050 993-000 5844 050 990-000	5844 065 993-000 5844 065 990-000	5844 080 993-000 5844 080 990-000
D1a D1b	O-Ring Seal	k-flex PTFE	2304 045 060-114 2352 044 037-053	2304 045 060-114 2352 044 037-053	2304 060 060-114 2352 059 052-053	2304 079 060-114 2354 078 071-053
D2	Type: PTFE/EPDM	EPDM	5621 065 010-084	5621 065 010-084	5621 080 010-084	5621 100 010-084
	Type: PTFE/k-flex - Ring quartered - O-Ring - k-flex seal	k-flex AISI304 EPDM k-flex	5621 065 010-114 5621 065 011-020 2304 060 026-159 5621 065 012-114	5621 065 010-114 5621 065 011-020 2304 060 026-159 5621 065 012-114	5621 080 010-114 5621 080 011-020 2304 076 026-159 5621 080 012-114	5621 100 010-114 5621 100 011-020 2304 095 026-150 5621 100 012-114
D3	Diaphragm	PTFE	5821 050 020-053	5821 050 020-053	5821 065 020-053	5821 080 020-05
D4	Piston guide bush	PTFE	8051 250 010-081	8051 250 010-081	8051 190 010-081	8051 220 010-08
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D5	O-Ring	EPDM	2304 049 035-170	2304 049 035-170	2304 062 035-159	2304 072 035-17





Declaration of incorporation

Translation of the original

KIESELMANN GmbH Manufacturer / authorised representative:

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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, 09. 08. 2013

Klaus Dohle General Director