

Overflow and Backpressure Valves

RIEGER

RIEGER Overflow valves type ÜS open when the set pressure is reached and so prevent undue over pressures in pipes. They are NO safety valves. For this purpose, we recommend our TÜV approved safety valves type SH.
Overflow valves type ÜS are available with weld-on ends and with fittings and clamps. An additional lever allows lifting by hand. They are suitable for liquids, steam and gas.
The available set range of 0,5 up to 6 bar is achieved by means of different pressure springs, which **each of them covers the lower or upper pressure range area.**

Your benefits

Design	housing made from solid bar no dead space completely drainable many built-in positions possible	
Absolute product safety	high-grade inner surfaces no dome, no sump	
Safety	clamp union between housing and actuator optimum cleanability	
Efficiency	standard seals	

Technical Data

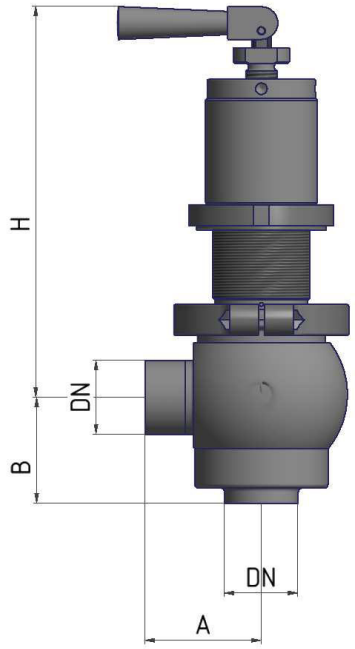
Material	product contact optional non product contact	1.4404/AISI316L 1.4435/AISI316L 1.4301/AISI304
Seals	O-rings/seals	EPDM Viton and other materials upon request
Temperatures maximum	operating temperature sterilization temperature	up to 130 °C* up to 150 °C* short-time (approx. 20 min)
Set range	0,5 up to 6 bar In order set pressure point is requested, pressure spring is chosen accordingly.	higher set pressures upon request
Set pressure range of pressure spring	according to customer's request in lower or upper pressure range	
Surfaces	product contact optional non product contact	Ra <= 0,8 µm electro polished Ra <=1,6 µm
Connections	DIN 11850-R2 (DIN 11866 A) O.D. tube (DIN 11866 C) clamp ferrules in DIN and Inch	



*dependent on operating conditions

Overflow Valve ÜS4.01.100

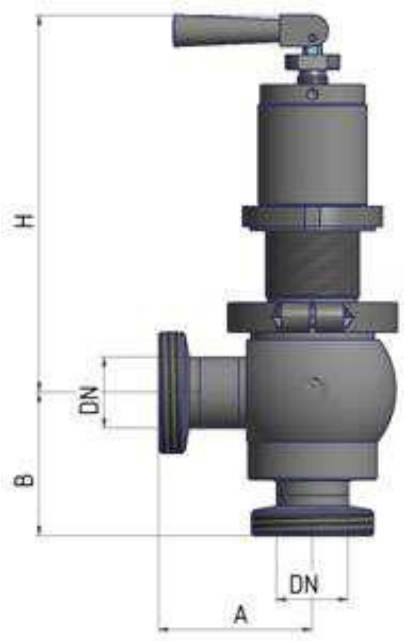
adjustable by hand, with lever for cleaning – with weld ends



DIN	Pipe	A	B	H	kg
10	13 x 1,5	35	35	153	1,4
15	19 x 1,5	40	40	158	1,5
20	23 x 1,5	45	45	160	2,0
25	29 x 1,5	50	50	195	2,9
40	41 x 1,5	60	60	205	4,0
50	53 x 1,5	80	70	255	5,0
65	70 x 2	100	80	310	9,5
80	85 x 2	125	90	340	13,2
100	104 x 2	150	100	350	16,5

Overflow Valve ÜS4.01.122

adjustable by hand, with lever for cleaning – with male ends



DIN	A	B	H	kg
10	56	56	160	1,5
15	61	61	170	1,6
20	69	69	180	2,1
25	79	79	205	3,1
40	93	93	210	4,3
50	115	105	270	5,3
65	140	120	325	10,0
80	170	135	360	13,8
100	204	154	370	17,6

Overflow Valve ÜS4.01.100

adjustable by hand, with lever for cleaning – with weld ends - EPDM

DIN	Reference number	Price
10	40914.1000.01.0001.32	290 €
15	40914.1000.01.0002.32	292 €
20	40914.1000.01.0003.32	297 €
25	40914.1000.01.0004.32	378 €
40	40914.1000.01.0006.32	407 €
50	40914.1000.01.0007.32	475 €
65	40914.1000.01.0008.32	618 €
80	40914.1000.01.0009.32	802 €
100	40914.1000.01.0010.32	1135 €

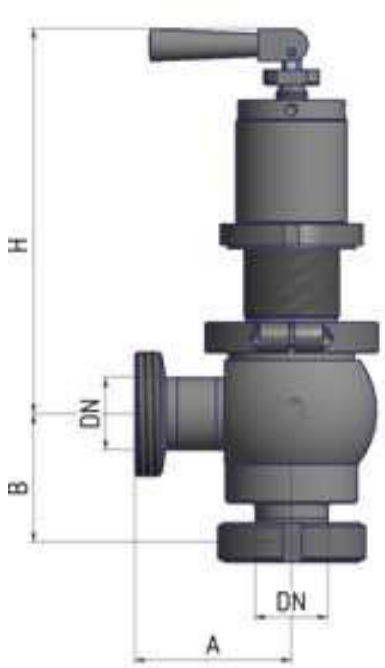
Overflow Valve ÜS4.01.122

adjustable by hand, with lever for cleaning – with male ends – EPDM

DIN	Reference number	Price
10	40914.1220.01.0001.32	324 €
15	40914.1220.01.0002.32	327 €
20	40914.1220.01.0003.32	331 €
25	40914.1220.01.0004.32	407 €
40	40914.1220.01.0006.32	440 €
50	40914.1220.01.0007.32	510 €
65	40914.1220.01.0008.32	686 €
80	40914.1220.01.0009.32	914 €
100	40914.1220.01.0010.32	1281 €

Overflow Valve ÜS4.01.132

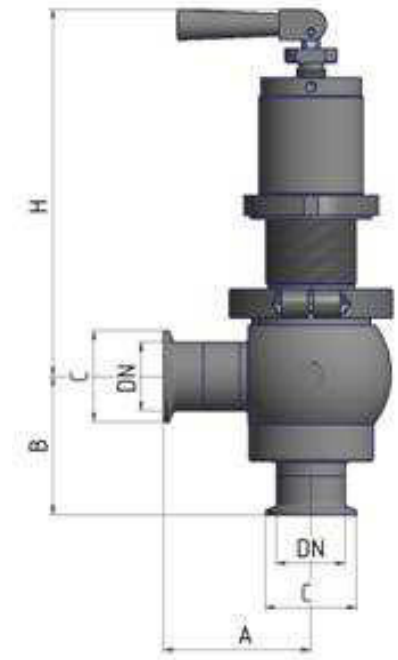
adjustable by hand, with lever for cleaning – inlet liner/nut – outlet male end



DIN	A	B	H	kg
10	52	52	160	1,6
15	57	57	170	1,7
20	64	63	180	2,2
25	72	72	205	3,2
40	83	86	210	4,5
50	103	98	270	5,6
65	125	112	325	10,5
80	150	127	360	14,6
100	180	144	370	18,5

Overflow Valve ÜS4.01.144

adjustable by hand, with lever for cleaning – with clamp ferrules DIN 32676



DIN	Pipe	C	A	B	H	kg
10	13x1,5	34	52,5	52,5	160	1,5
15	19x1,5	34	57,5	57,5	170	1,6
20	23x1,5	34	62,5	62,5	180	2,1
25	29x1,5	50,5	70,5	70,5	205	2,8
40	41,x1,5	50,5	81	81	210	4,2
50	53x1,5	64	101	91	270	5,2
65	70x2	91	107,5	127,5	325	10,2
80	85x2	106	117,5	152,5	360	13,6
100	104x2	119	177,5	127,5	370	17,0

Overflow Valve ÜS4.01.132

adjustable by hand, with lever for cleaning – inlet liner/nut – outlet male end - EPDM

DIN	Reference number	Price
10	40914.1320.01.0001.32	328 €
15	40914.1320.01.0002.32	331 €
20	40914.1320.01.0003.32	336 €
25	40914.1320.01.0004.32	412 €
40	40914.1320.01.0006.32	448 €
50	40914.1320.01.0007.32	518 €
65	40914.1320.01.0008.32	697 €
80	40914.1320.01.0009.32	920 €
100	40914.1320.01.0010.32	1289 €

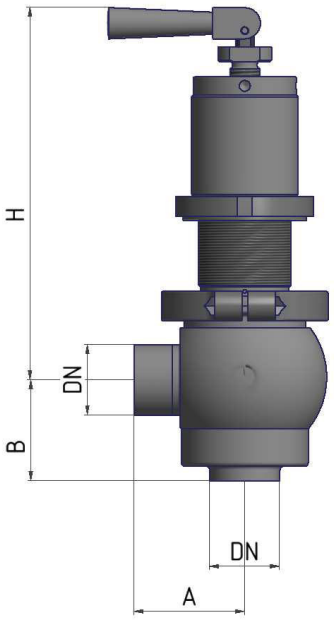
Overflow Valve ÜS4.01.144

adjustable by hand, with lever for cleaning – with clamp ferrules DIN 32676 - EPDM

DIN	Reference number	Price
10	40914.1440.01.0001.32	335 €
15	40914.1440.01.0002.32	338 €
20	40914.1440.01.0003.32	342 €
25	40914.1440.01.0004.32	418 €
40	40914.1440.01.0006.32	451 €
50	40914.1440.01.0007.32	521 €
65	40914.1440.01.0008.32	697 €
80	40914.1440.01.0009.32	925 €
100	40914.1440.01.0010.32	1292 €

Overflow Valve ÜS4.01.100

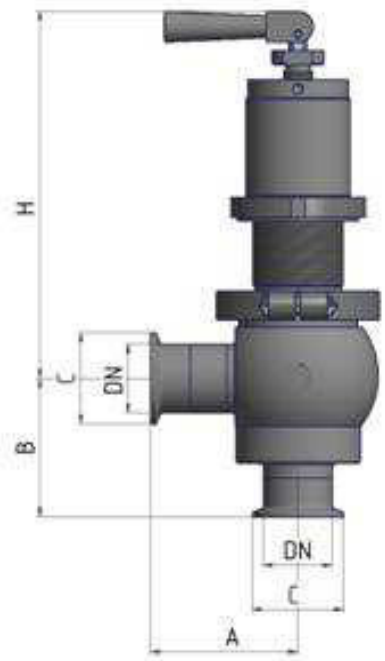
adjustable by hand, with lever for cleaning – with weld ends



Inch	Pipe	A	B	H	kg
½“	12,7 x 1,65	40	40	158	1,5
¾“	19,05 x 1,65	45	45	160	2,0
1“	25,4 x1 ,65	50	50	195	2,9
1 ½“	38,1 x 1,65	60	60	205	4,0
2“	50,8 x 1,65	80	70	255	5,0
2 ½“	63,5 x 1,65	100	80	310	9,5
3“	76,2 x 1,65	125	90	340	13,2
4“	101,6 x 2,11	150	100	350	16,5

Overflow Valve ÜS4.01.144

adjustable by hand, with lever for cleaning – with clamp ferrules



Inch	Pipe	A	B	H	C	kg
1“	25,4x1,65	70,5	70,5	205	50,5	2,8
1 ½“	38,1x1,65	81	81	210	50,5	4,2
2“	50,8x1,65	101	91	270	64	5,2
2 ½“	63,5x1,65	107,5	127,5	325	77,5	10,2
3“	76,2x1,65	117,5	152,5	360	91	13,6
4“	101,6x2,11	177,5	127,5	370	119	17,0

Overflow Valve ÜS4.01.100

adjustable by hand, with lever for cleaning – with weld ends - EPDM

Inch	Reference number	Price
½“	40914.1000.01.0022.32	365 €
¾“	40914.1000.01.0023.32	371 €
1“	40914.1000.01.0024.32	476 €
1 ½“	40914.1000.01.0026.32	514 €
2“	40914.1000.01.0027.32	603 €
2 ½“	40914.1000.01.0028.32	785 €
3“	40914.1000.01.0029.32	1025 €
4“	40914.1000.01.0030.32	1455 €

Overflow Valve ÜS4.01.144

adjustable by hand, with lever for cleaning – with clamp ferrules - EPDM

Inch	Reference number	Price
1“	40914.1440.01.0024.32	528 €
1 ½“	40914.1440.01.0026.32	567 €
2“	40914.1440.01.0027.32	662 €
2 ½“	40914.1440.01.0028.32	888 €
3“	40914.1440.01.0029.32	1185 €
4“	40914.1400.01.0030.32	1659 €

Spare parts

gasket kit product side for type ÜS

	EPDM		Viton	
DIN	Reference number	Price	Reference number	Price
10	5005246	12 €	5005323	31 €
15	5005246	12 €	5005323	31 €
20	5005246	12 €	5005323	31 €
25	5004754	15 €	5005081	42 €
40	5004876	17 €	5005279	62 €
50	5004657	19 €	5004728	69 €
65	5005245	21 €	5006438	76 €
80	5005244	25 €	5006620	85 €
100	5004895	28 €	5006322	89 €



Overflow and Backpressure Valves

RIEGER

RIEGER Overflow valves E8 are a combination of right angle and overflow valves. The desired pressure is adjustable, with a valve stroke as high as possible. Unlike an overflow valve, this valve can be opened up to 100 % - like a right angle valve.
The overflow valve can be sealed.
For reasons of safety, we use clamp unions between valve body and actuator, starting from size DN 25 – only to be opened with a tool.
The overflow valve type E8 is suitable for liquid media. It is NO safety valve. For this purpose, we recommend out TÜV-approved safety valve type SH.

Your benefits

Design	solid valve body no dead spaces completely draining many built-in positions possible
Absolute product safety	high-grade inner surfaces no sump, no dome
Safety	Clamp union between valve body and actuator Optimum cleanablity
Efficiency	building block system – easy change between hygienic and aseptic version



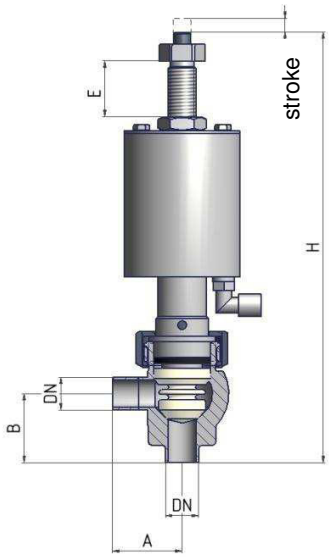
Technical Data

Material	product contact optional non product contact		1.4404/AISI316L 1.4435/AISI316L 1.4301/AISI304
Seals	Teflon bellows O-rings/seals		PTFE EPDM (other upon request)
Temperatures	maximum operating temperature sterilization temperature	EPDM 130 °C* 150 °C*	PTFE 121 °C* 135 °C* short-time (ca. 20 min)
Operating pressure	possible set pressure for O-ring version PTFE bellows version set pressure range dependent on installed pressure spring control air pressure		 0,5 to 6 bar 2,0 to 6 bar Requested set pressure required in purchase order. min. 6 bar - max. 10 bar
Surfaces	product contact non product contact		Ra <= 0,8 µm electro polished Ra <=1,6 µm
Connections	DIN 11850-R2 (DIN 11866 A)		

*dependent on operating conditions

Overflow Valve E8.02

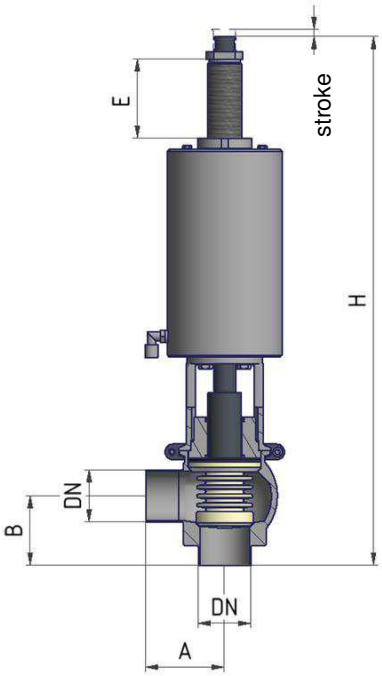
Aseptic Type



DIN	Pipe	E	A	B	H	Stroke	kg
10	13 x 1,5	33	35	35	254	5	2,2
15	19 x 1,5	33	40	40	254	5	2,3
20	23 x 1,5	33	45	45	261	5	2,5

Overflow Valve E8.02

Aseptic Type



DIN	Pipe	E	A	B	H	Stroke	kg
25	29 x 1,5	38	50	50	381	7	6,0
40	41 x 1,5	50	60	50	429	9	7,2
50	53 x 1,5	78	80	70	546	12	8,2
65	70 x 2	92	100	80	633	16	15,9
80	85 x 2	92	125	90	670	19	19,5

Overflow Valve E8.02

Aseptic Type - PTFE

DIN	Reference number	Price	Reference number Gasket Kit Product Side	Price
10	40201.2000.05.0001.32	860 €	5006364	116 €
15	40201.2000.05.0002.32	860 €	5006364	116 €
20	40201.2000.05.0003.32	865 €	5006365	118 €

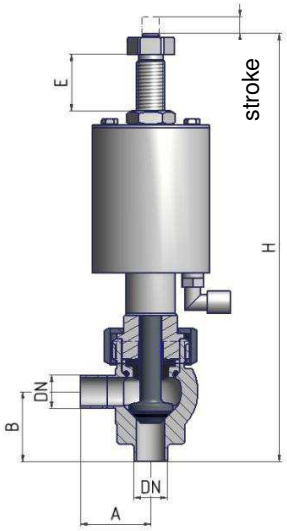
Overflow Valve E8.02

Aseptic Type - PTFE

DIN	Reference number	Price	Reference number Gasket Kit Product Side	Price
25	40210.2000.05.0004.32	1197 €	5006371	125 €
40	40210.2000.05.0006.32	1350 €	5006372	139 €
50	40210.2000.05.0007.32	1466 €	5006373	219 €
65	40210.2000.05.0008.32	2085 €	5006374	281 €
80	40210.2000.05.0009.32	2791 €	5006375	396 €

Overflow Valve E8.01

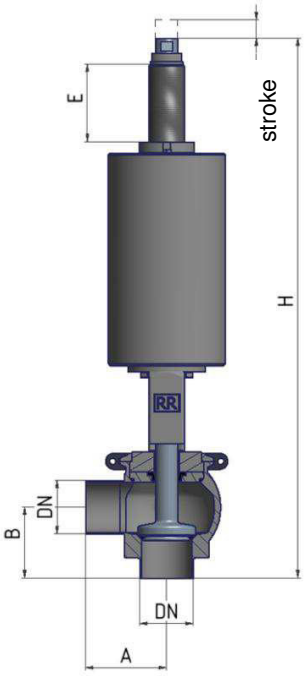
Hygienic Type



DIN	Pipe	E	A	B	H	Stroke	kg
10	13 x 1,5	33	35	35	254	10	2,2
15	19 x 1,5	33	40	40	254	10	2,3
20	23 x 1,5	33	45	45	261	10	2,5

Overflow Valve E8.01

Hygienic Type



DIN	Pipe	E	A	B	H	Stroke	kg
25	29 x 1,5	38	50	50	381	18	6,0
40	41 x 1,5	50	60	50	429	18	7,2
50	53 x 1,5	78	80	70	546	22	8,2
65	70 x 2	92	100	80	633	25	15,9
80	85 x 2	92	125	90	670	27	19,5

Overflow Valve E8.01

Hygienic Type - EPDM

DIN	Reference number	Price	Reference number Gasket Kit Product Side	Price
10	40201.1000.01.0001.32	860 €	5006363	45 €
15	40201.1000.01.0002.32	860 €	5006363	45 €
20	40201.1000.01.0003.32	865 €	5006363	45 €

Overflow Valve E8.01

Hygienic Type - EPDM

DIN	Reference number	Price	Reference number Gasket Kit Product Side	Price
25	40210.1000.01.0004.32	1197 €	5006366	54 €
40	40210.1000.01.0006.32	1350 €	5006367	55 €
50	40210.1000.01.0007.32	1466 €	5006368	64 €
65	40210.1000.01.0008.32	2085 €	5006369	68 €
80	40210.1000.01.0009.32	2791 €	5006370	70 €

The **RIEGER Backpressure valve DH2** fulfills the task to maintain a defined pressure on the valve's inlet side. This may be i.e. the pressure (PP) in a pipe after a filter or heat exchanger. If the pressure drops after the filter, the valve automatically adjusts to the requested set pressure.
This is achieved by means of a maintenance unit (PL), whose pressure gauge is adjusted to the desired pressure of the pressure-holding valve.
The product space is protected by the PTFE-bellows against contamination from ambient, i.e. the "lift effect" is avoided.

Your benefits

Design	solid valve body no dead spaces
Design	high-grade inner surfaces
Serviceable maintenance	exchange of gaskets without special tools optimum cleanablity
Efficiency	orbital welding standard O-rings

Technical Data

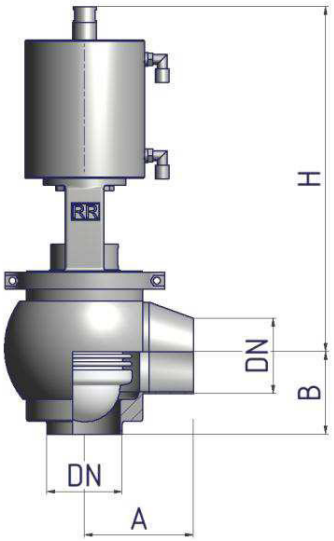
Material	product contact	1.4404/AISI316L
	optional contact	1.4435/AISI316L
	non product contact	1.4301/AISI304
Seals	bellows	PTFE
Temperatures maximum	operating temperature*	max. 121 °C*
	sterilization temperature*	max. 135 °C* short-time (approx. 20 min)
Set pressure ranges	possible from 2 up to 6 bar	
Surfaces	product contact	Ra <= 0,8 µm
	optional	electro polished
	non product contact	Ra <=1,6 µm
Connections	DIN 11850-R2 (DIN 11866 A)	
Design	sterilizable control cone = no lift effect by chambered valve spindle	
Maintenance unit	Consists of air pressure control valve and manometer e.g. from Festo, Bürkert with optional accessories like oil filter, silencer a.s.o. – is to be provided by the customer	



*dependent on operating conditions

Aseptic Backpressure Valve

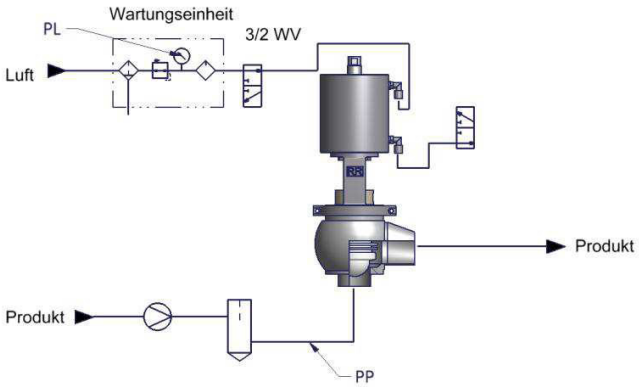
with PTFE bellows



DIN	Pipe	A	B	H	Stroke	VF	kg
20	23 x 1,5	50,5	42	176	10	0,18	
25	29 x 1,5	73	44,5	261	14	0,14	
40	41 x 1,5	80	54	310	16	0,19	
50	53 x 1,5	98	62	326	20,5	0,31	
65	70 x 2	101	65	337	24,5	0,5	
80	85 x 2	121	80,5	400	31	0,5	

ER(bar): +/- 0,1

Calculation formula for to be adjusted air pressure P_L:
P_L = (PP x VF) +/- 0,1 bar



First, the 3/2-way-solenoid valve is positioned on passage in direction of the pressure retaining valve. In case of cleaning the solenoid valve is turned, the regulating cone opens and the air is vented through the solenoid valve. The pressure remains constant to the adjusted pressure in bar, even if the pressure after the pressure retaining valve changes.
Example for DN 25 with P_P (product pressure) of 3 bar between filter and pressure retaining valve:

P_L = (3 bar x factor VF 0,14) +/- 0,1 bar = 0,42 +/- 0,1 bar,
i.e.: P_L: approx. 0,32 to 0,52 bar (dependent on the plant)
The shown values are reference points. The to be adjusted pressure depends on weight of regulating cone, friction, product, temperature a.s.o. As a consequence the pressure has to comply with the

circumstances in place. Mentioned values are only approximate values.

Aseptic Backpressure Valve

with PTFE bellows

DIN	Reference number	Price	Reference number Gasket Kit Product Side	Price
20	41130.2000.05.0003.32	1789 €	5006059	344 €
25	41130.2000.05.0004.32	1824 €	5006060	351 €
40	41130.2000.05.0006.32	1884 €	5005513	362 €
50	41130.2000.05.0007.32	1956 €	5005134	434 €
65	41130.2000.05.0008.32	2966 €	5006061	658 €
80	41130.2000.05.0009.32	3128 €	5006062	694 €

Aseptic Backpressure Valve 3-A Standard 53-06

with PTFE bellows

DIN	Reference number	Price	Reference number Gasket Kit Product Side	Price
20	40060.2000.05.0003.32	1789 €	5006059	344 €
25	40060.2000.05.0004.32	1824 €	5006060	351 €
40	40060.2000.05.0006.32	1884 €	5005513	362 €
50	40060.2000.05.0007.32	1956 €	5005134	434 €
65	40060.2000.05.0008.32	2966 €	5006061	658 €
80	40060.2000.05.0009.32	3128 €	5006062	694 €

Control Tops

page

2 Control top 8681 for process and mix proof valves

4 Control top 8692 and 8694 for regulating/control valves