

Safety relief valve, spring-loaded

33501/33601

Description

Safety relief valves are used in the beverage and food processing industries, as well as in the chemical-pharmaceutical industry.

Safety relief valves:

- protection of pressurized systems against overpressure
- subject to the Pressure Equipment Directive 2014/68/EU
- may be used for the intensified purpose only
- fulfil the requirements of AD 2000/ A2 and DIN EN ISO 4126-1

CE 0062

Valve types

Type	Fluids	Lifting manual	Liftung pneumatic	Seals EPDM / FKM	Proximity switch	Heating cartridge
33501	F/G/D	X		X / ⊗	(⊗)	⊗
33601	F/G/D		X	X / ⊗	⊗	⊗

Liquids (F), Air/Gases (G), Steam (D)

⊗ optional

Valve data

Type	Safety relief valve
Type of functioning	Opens with pressure/closes with spring force
Order code	335xx/336xx

Product range

Materials	Stainless steel 1.4404
Seals	EPDM, optionally FKM/FPM (all FDA proof)
Surface	≤ 0.8 µm

Other parts

Materials	Stainless steel 1.4301, 1.4307
Seals	EPDM
Surface	Precision-turned, matte

Production / CIP

Applications	Free exit
Fluids (nontoxic)	Fluids/gases/steam (Group II, PED 2014/68/EU) Readily commercially-available CIP cleaning media with 2-4 % lye/acid
Performance data	Performance data within 10 % pressure increase
Operating pressure	PS min/max 0/10 bar-g
Temperature	TS min/max -20/160 °C
Control air pressure	5 – 7 bar, compressed air connection Ø 6/4 mm



Safety relief valve, spring-loaded

33501/33601

Valve construction

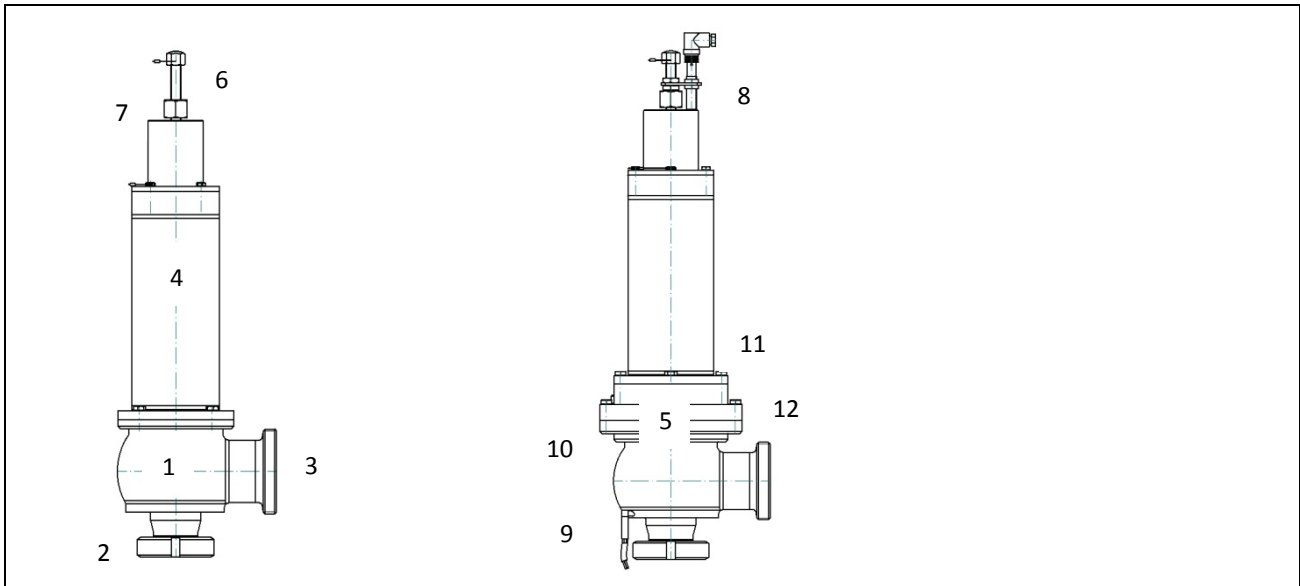


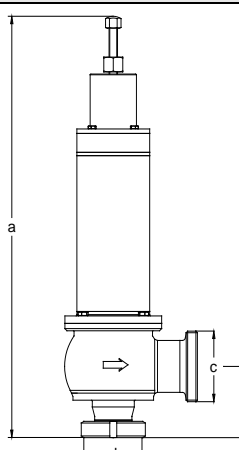
Fig. 1: Type 33501 und 33601

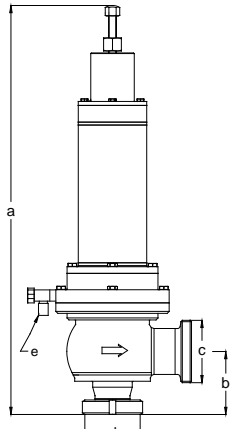
1	valve housing	7	lifting nut
2	valve inlet [E] – supply pipe	8	proximity switch
3	valve outlet [A] – discharge pipe	9	heating cartridge
4	upper valve body	10	compressed air connection
5	pneumatic actuator	11	screws, upper body
6	valve rod	12	screws, actuator

Safety relief valve, spring-loaded

33501/33601

Dimensions

AH-SV-33501	DN [E]	DN [A]	a [mm]	b [mm]	c [Rd.Gew]	d [Gew]	weight [kg]
	15	20	324	40	44 x1/6"	34 x1/8"	2,3
	25	40	393	58	65 x1/6"	52 x1/6"	3,6
	40	50	472	79	78 x1/6"	65 x1/6"	8,9
	50	65	562	88	95 x1/6"	78 x1/6"	13,0
	65	80	578	96	110 x1/4"	95 x1/6"	14,6
	80	100	605	115	130 x1/4"	110 x1/4"	21,2
	80	100	660	115	130 x1/4"	110 x1/4"	21,2
valve lift: max. 25 mm							

AH-SV-33601	DN [E]	DN [A]	a [mm]	b [mm]	c [Rd.Gew]	d [Gew]	weight [kg]
	15	20	372	40	44 x1/6"	34 x1/8"	4,8
	25	40	443	58	65 x1/6"	52 x1/6"	6,9
	40	50	533	79	78 x1/6"	65 x1/6"	14,9
	50	65	617	88	95 x1/6"	78 x1/6"	20,8
	65	80	635	96	110 x1/4"	95 x1/6"	22,5
	80	100	665	115	130 x1/4"	110 x1/4"	27,9
	80	100	695	115	130 x1/4"	110 x1/4"	27,9
valve lift: max. 25 mm							
e: compressed air connection Ø: 6/4 mm							

Safety relief valve, spring-loaded

33501/33601

Performance data

Fluid: water						
33501/33601						
pressure [bar-g]	throughput [kg/h]					
	DN 15	DN 25	DN 40	DN 50	DN 65	DN 80
1	3.970	10.760	26.460	42.930	65.670	107.240
2	5.610	15.210	37.420	60.720	92.910	151.670
3	6.870	18.630	45.830	74.360	113.790	167.180
4	7.940	21.520	52.920	85.870	131.400	193.040
5	8.870	24.060	59.170	96.000	146.900	215.830
6	9.720	26.350	64.800	105.170	160.930	236.430
7	10.500	28.460	70.000	113.590	173.820	255.370
8	11.220	30.430	74.840	121.440	185.820	273.000
9	11.900	32.270	79.380	128.800	197.100	289.570
10	12.540	34.020	83.670	135.770	207.760	305.230

Fluid: air						
33501/33601						
pressure [bar-g]	throughput [Nm ³ /h]					
	DN 15	DN 25	DN 40	DN 50	DN 65	DN 80
1	137	369	736	1.067	1.911	3.035
2	208	560	1.119	1.622	2.906	4.615
3	279	752	1.502	2.178	3.900	6.195
4	210	944	1.885	2.733	4.895	7.775
5	253	1.136	2.268	3.288	5.890	9.355
6	295	1.328	2.651	3.844	4.094	10.935
7	338	1.520	3.034	4.399	4.685	7.196
8	380	1.711	3.417	4.954	5.276	8.105
9	423	1.903	3.800	5.510	5.868	9.013
10	466	2.095	4.183	6.065	6.459	9.922

Fluid: steam						
33501/33601						
pressure [bar-g]	throughput [kg/h]					
	DN 15	DN 25	DN 40	DN 50	DN 65	DN 80
1	56	248	496	719	1.287	2.045
2	85	377	753	1.093	1.958	3.109
3	114	507	1.012	1.467	2.627	4.173
4	141	636	1.270	1.841	3.298	5.237