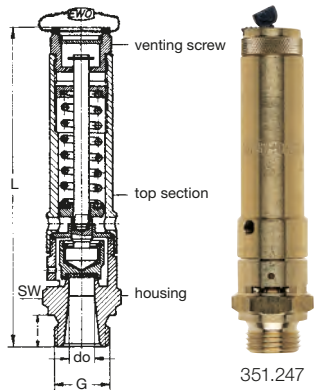




Component-tested safety valves DN 8

Safety valves are used to blow non-toxic and non-flammable gases into the atmosphere to protect pressure vessels against excess pressure. DIN EN ISO 4126-1 **Notice:** only factory-set and sealed safety valves are supplied with component markings. It is therefore essential that the setting pressure is indicated in bar/psi when ordering. For functional testing, the safety valves can be vented by turning the knurled screw to the left. Bearing surfaces and sealing cones can be cleaned of dirt by screwing off the entire upper part—without changing the pressure setting. Repairs may only be done by the manufacturer. Applied standards and regulations: DIN EN ISO 4126-1, AD 2000-Handout A2, DGR 2014/68/EU



351.247

Notice

! The supply line to the safety valve should not be < DN 8, the pressure drop in the supply line may not be > 3%. The set pressure must be specified when ordering!

Blow-off rates air

The specified blow-off quantities are reached at a pressure increase of 10 % over the set pressure.

Set pressure (bar)*	Air blow-off rate (normal condition)	
	m³/h	l/min
1	23.5	394
2	35.5	592
4	59	985
6	63	1,380
8	106	1,773
10	130	2,168
12	154	2,562
14	177	2,957
16	201	3,350
18	225	3,745
20	248	4,138
22	272	4,533
25	307	5,124
30	367	6,110
35	426	7,095
40	485	8,080

* intermediate values can be interpolated

Thread G	Dimensions (mm)				Set pressure (bar)	Order No.
	L	i	SW(AF)	do		
G ¼	85	10	20	8	1–1.5	351.221
G ¼	85	10	20	8	1.5–2	351.222
G ¼	85	10	20	8	2–3	351.223
G ¼	85	10	20	8	3–5	351.224
G ¼	85	10	20	8	5–7	351.225
G ¼	85	10	20	8	7–9	351.226
G ¼	85	10	20	8	9–15	351.227
G ¼	90	10	20	8	15–20	351.421
G ¼	90	10	20	8	20–27	351.422
G ¼	90	10	20	8	27–40	351.423
G ¾	85	10	20	8	1–1.5	351.241
G ¾	85	10	20	8	1.5–2	351.242
G ¾	85	10	20	8	2–3	351.243
G ¾	85	10	20	8	3–5	351.244
G ¾	85	10	20	8	5–7	351.245
G ¾	85	10	20	8	7–9	351.246
G ¾	85	10	20	8	9–15	351.247
G ¾	90	10	20	8	15–20	351.441
G ¾	90	10	20	8	20–27	351.442
G ¾	90	10	20	8	27–40	351.443
G ½	87	12	24	8	1–1.5	351.251
G ½	87	12	24	8	1.5–2	351.252
G ½	87	12	24	8	2–3	351.253
G ½	87	12	24	8	3–5	351.254
G ½	87	12	24	8	5–7	351.255
G ½	87	12	24	8	7–9	351.256
G ½	87	12	24	8	9–15	351.257
G ½	92	12	24	8	15–20	351.451
G ½	92	12	24	8	20–27	351.452
G ½	92	12	24	8	27–40	351.453

Technical data

Thread	G ¼	G ¾	G ½
Operating temperature	-10 °C up to +180 °C		
Adjustment range	1–40 bar (10 Levels)		
Opening pressure difference	< 10 %		
Closing pressure difference	< 10 % (under 3 bar ≤0.3 bar)		
Mounting position	vertically		
Material housing	brass		
Material seal	FKM (Viton)		
Material spring	stainless steel		
Lead seal	aluminium		
Max. tightening torque (valve installation)	15 Nm	25 Nm	35 Nm

Definition of terms

Set pressure:
= Response pressure: start of audible blow-off

Opening pressure:
Valve fully open, max. blow-off volume

Closing pressure:
Valve closed and sealed

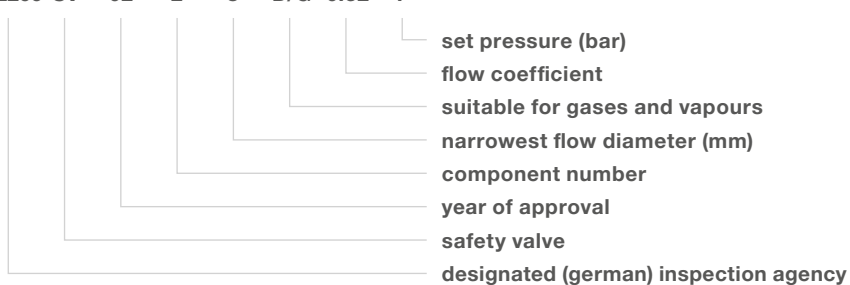
Opening pressure difference:
Difference between set pressure and opening pressure

Closing pressure difference:
Difference between set pressure and closing pressure

Example:
Set pressure 12 bar
Opening pressure (+10 %) 13.2 bar
Closing pressure (-10 %) 10.8 bar

Component symbols

CE2266 SV 02 2 8 D/G 0.32 P



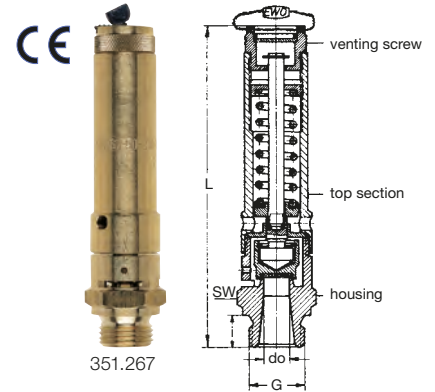


Component-tested safety valves DN 10

Safety valves are used to blow non-toxic and non-flammable gases into the atmosphere to protect pressure vessels against excess pressure.

Notice: only factory-set and sealed safety valves are supplied with component markings. It is therefore essential that the setting pressure is indicated in bar/psi when ordering. For functional testing, the safety valves can be vented by turning the knurled screw to the left. Bearing surfaces and sealing cones can be cleaned of dirt by screwing off the entire upper part—without changing the pressure setting. Repairs may only be done by the manufacturer. Applied standards and regulations: DIN EN ISO 4126-1, AD 2000-Handout A2, DGR 2014/68/EU

Thread G	Dimensions (mm)				Set pressure (bar)	Order No.
	L	i	SW (AF)	do		
G 1/2	120	12	27	10	2–3.6	351.261
G 1/2	120	12	27	10	3.6–5	351.262
G 1/2	120	12	27	10	5–7	351.263
G 1/2	120	12	27	10	7–8.5	351.264
G 1/2	120	12	27	10	8.5–11.5	351.265
G 1/2	120	12	27	10	11.5–16	351.266
G 1/2	120	12	27	10	16–22	351.267
G 3/4	120	12	30	10	2–3.6	351.271
G 3/4	120	12	30	10	3.6–5	351.272
G 3/4	120	12	30	10	5–7	351.273
G 3/4	120	12	30	10	7–8.5	351.274
G 3/4	120	12	30	10	8.5–11.5	351.275
G 3/4	120	12	30	10	11.5–16	351.276
G 3/4	120	12	30	10	16–22	351.277



Technical data

Thread	G 1/2	G 3/4
Operating temperature	-10 °C up to +180 °C	
Adjustment range	2 up to 22 bar (7 Levels)	
Opening pressure difference	< 10 %	
Closing pressure difference	< 10 % (under 3 bar ≤0.3 bar)	
Mounting position	vertically	
Material housing	brass	
Material seal	FKM (Viton)	
Material spring	stainless steel	
Lead seal	aluminium	
Max. tightening torque (valve installation)	35 Nm	50 Nm

Notice

! The supply line to the safety valve should not be < DN 10, the pressure drop in the supply line may not be > 3%. The set pressure must be specified when ordering!

Component symbols

CE2266 SV 02 1 10 D/G 0.43 P

- set pressure (bar)
- flow coefficient
- suitable for gases and vapours
- narrowest flow diameter (mm)
- component number
- year of approval
- safety valve
- designated (german) inspection agency

Blow-off rates air

The specified blow-off quantities are reached at a pressure increase of 10 % over the set pressure.

Set pressure (bar)*	Air blow-off rate (normal condition)	
	m³/h	l/min
2	74,5	1,242
4	124	2,068
6	174	2,895
8	223	3,722
10	273	4,548
12	323	5,377
14	372	6,203
16	422	7,032
18	471	7,858
20	521	8,685
22	571	9,513

*intermediate values can be interpolated

Definition of terms

Set pressure:
= Response pressure: start of audible blow-off

Opening pressure:
Valve fully open, max. blow-off volume

Closing pressure:
Valve closed and sealed

Opening pressure difference:
Difference between set pressure and opening pressure

Closing pressure difference:
Difference between set pressure and closing pressure

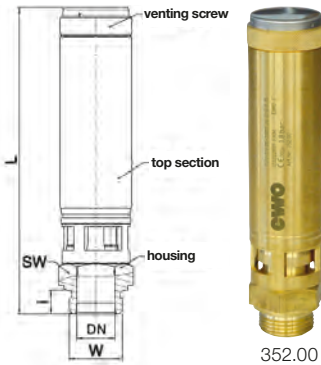
Example:

Set pressure	12 bar
Opening pressure (+10%)	13.2 bar
Closing pressure (-10%)	10.8 bar



Component-tested high-performance safety valve G 1–G 2

Safety valves are used to blow non-toxic and non-flammable gases into the atmosphere to protect pressure vessels. The valves can only be supplied adjusted, therefore the set pressure must be specified when ordering. After adjustment, the valves are marked and sealed with a sealing cap. For functional testing, the safety valves can be vented by turning the knurled screw to the left. Bearing surfaces and sealing cones can be cleaned of dirt by screwing off the entire upper part (using a strap wrench)–without changing the pressure setting. Repairs may only be carried out by the manufacturer.



Safety valve D/G

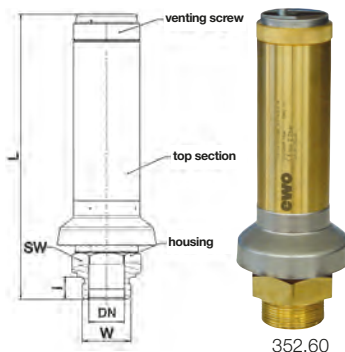
These spring-loaded safety valves with very high blow-off capacity are used to protect pressure vessels and pressure systems for air and other neutral, non-toxic and non-flammable gases.

Thread W	Dimensions (mm)				Set pressure (bar)	Order No.
	L	i	SW(AF)	DN		
G 1	177	15	41	24	0.2–50	352.00
G 1¼	215	22.5	55	31	0.2–30	352.10
G 1½	215	22.5	55	31	0.2–30	352.20
G 2	282	26	80	48	0.2–30	352.30

352.00

Safety valve F/K/S

These valves have a stainless steel protective cover. The spring chamber is separated from the medium. This design enables the protection of stationary pressure vessels for granular and powdery goods as well as for vehicle containers with liquid, granular and powdery goods.



352.60

Thread W	Dimensions (mm)				Set pressure (bar)	Order No.
	L	i	SW(AF)	DN		
G 1	177	15	41	24	0.2–6	352.40
G 1¼	215	22.5	60	32	0.2–6	352.50
G 1½	215	22.5	60	32	0.2–6	352.60
G 2	282	26	80	48	0.2–6	352.70

Technical data

Thread	G 1	G 1¼	G 1½	G 2
Operating temperature	-10 °C up to +200 °C			
Adjustment range model D/G	0.2 up to 30 (50) bar			
Adjustment range model F/K/S	0.2 up to 6 bar			
Opening pressure difference	< 10 %			
Closing pressure difference	< 10 %			
Mounting position	vertically, upright			
Material housing, top section, inner parts	brass (stainless steel on request)			
Material seal	FKM (Viton) (NBR or PTFE on request)			
Material pressure spring, protective cover	stainless steel			
Max. tightening torque (valve installation)	60 Nm	80 Nm	80 Nm	80 Nm

Notice



Stainless steel versions or NBR or PTFE seals are also available on Request. The set pressure must be specified when ordering!

Definition of terms

Set pressure:

= Response pressure: start of audible blow-off

Opening pressure:

Valve fully open, max. blow-off volume

Closing pressure:

Valve closed and sealed

Opening pressure difference:

Difference between set pressure and opening pressure

Closing pressure difference:

Difference between set pressure and closing pressure

Example:

Set pressure	12 bar
Opening pressure (+10 %)	13.2 bar
Closing pressure (-10 %)	10.8 bar

Component symbols

TÜV SV 05 2003 DN D/G 0.xx P
F/K/S



- set pressure (bar)
- flow coefficient (0.01–0.99)
- suitable for*
- narrowest flow diameter (mm)
- component number
- year of approval
- safety valve
- designated (german) inspection agency

*D/G for gases and vapours, F/K/S for blowing off air from containers for liquid, granular or dusty media
TÜV–Component certification:2003



Component-tested high-performance safety valve G 1 – G 2

Blow-off rates air

The specified blow-off quantities are reached at a pressure increase of 10 % over the set pressure.

Model F/K/S

Setting pressure for blow-off rates air (m³/h)

Applied standards and regulations:

DIN EN ISO 4126-1

AD 2000-Handout A2

TRB 801 No. 22 and No. 23

DGR 2014/68/EU

Model D/G

Setting pressure for blow-off rates air (m³/h)

Applied standards and regulations:

DIN EN ISO 4126-1

AD 2000-Handout A2

DGR 2014/68/EU

Set pressure (bar)	Blow-off rates air (m ³ /h)			
	G 1	G 1¼	G 1½	G 2
Thread				
0.2	225	376	376	721
0.3	258	430	430	786
0.4	284	473	473	851
0.5	310	517	517	916
0.6	342	571	571	981
0.7	371	618	618	1,046
0.8	399	666	666	1,111
0.9	429	715	715	1,176
1	459	766	766	1,370
1.2	514	858	858	1,514
1.4	571	952	952	1,658
1.6	629	1,049	1,049	1,903
1.8	688	1,148	1,148	2,055
2	749	1,249	1,249	2,325
2.5	889	1,483	1,483	2,724
3	1,032	1,723	1,723	3,177
3.5	1,165	1,943	1,943	3,583
4	1,330	2,219	2,219	4,056
4.5	1,465	2,445	2,445	4,469
5	1,601	2,671	2,671	4,962
5.5	1,736	2,897	2,897	5,382
6	1,872	3,123	3,123	5,802

Set pressure (bar)	Blow-off rates air (m ³ /h)			
	G 1	G 1¼	G 1½	G 2
Thread				
0.2	225	376	376	721
0.3	258	430	430	786
0.4	284	473	473	851
0.5	310	517	517	916
0.6	337	563	563	981
0.7	371	618	618	1,046
0.8	399	666	666	1,111
0.9	429	715	715	1,175
1	459	766	766	1,370
1.5	604	1,007	1,007	1,827
2	749	1,249	1,249	2,325
3	1,032	1,723	1,723	3,177
4	1,330	2,219	2,219	4,056
5	1,601	2,671	2,671	4,962
6	1,872	3,123	3,123	5,802
7	2,143	3,575	3,575	6,642
8	2,413	4,027	4,027	6,034
9	2,684	4,478	4,478	6,711
10	2,955	4,930	4,930	7,388
11	3,226	5,382	5,382	8,066
12	3,497	5,834	5,834	8,742
13	3,768	6,286	6,286	9,420
14	4,039	6,738	6,738	10,097
15	4,310	7,190	7,190	10,774
16	4,581	7,642	7,642	11,451
17	4,851	8,094	8,094	12,128
18	5,122	8,546	8,546	12,806
19	5,393	8,998	8,998	13,483
20	5,664	9,450	9,450	14,160
21	5,935	9,902	9,902	14,838
22	6,206	10,354	10,354	15,515
23	6,477	10,806	10,806	16,192
24	6,748	11,258	11,258	16,869
25	7,019	11,710	11,710	17,546
26	7,289	12,162	12,162	18,224
27	7,560	12,614	12,614	18,901
28	7,831	13,066	13,066	19,578
29	8,102	13,518	13,518	20,255
30	8,373	13,970	13,970	20,933
31	8,644	–	–	–
32	8,915	–	–	–
33	9,186	–	–	–
34	9,457	–	–	–
35	9,727	–	–	–