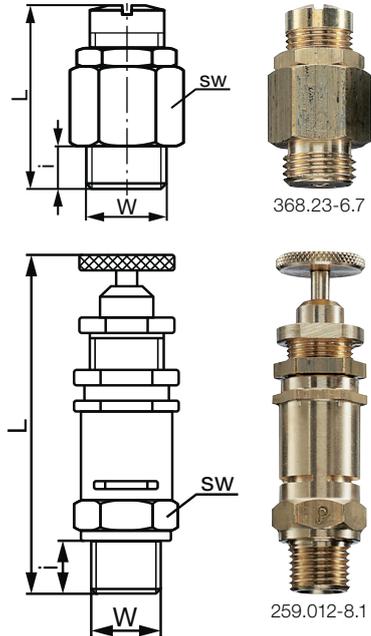


# Blow-off valves



## Non-component tested blow-off valves DN 3, DN 6

Non-toxic and non-flammable gases can be blown off into the atmosphere via the valve in order to ensure that pressure vessels are protected against excess pressure. The setting pressure can be specified in 0.1 bar steps when ordering. Adjustment and sealing are charged separately. The setting pressure must be specified when ordering! \*Example: Order no. with individual setting pressure 6.7 bar **368.23-6.7**.



### Mini blow-off valves DN 3

Standard version with indication of individual setting pressure\*. Adjustment protection is available on request.

Thread W	Seal type	Dimensions (mm)			Setting pressure (bar)	Order No.
		L	i	SW(AF)		
G 1/8	NBR	27	7	16	0.2–1	<b>368.10-*</b>
G 1/8	NBR	27	7	16	1.1–3	<b>368.11-*</b>
G 1/8	NBR	27	7	16	3.1–6	<b>368.12-*</b>
G 1/8	NBR	27	7	16	6.1–12	<b>368.13-*</b>
G 1/8	NBR	27	7	16	12.1–18	<b>368.14-*</b>
G 1/8	NBR	27	7	16	18.1–32	<b>368.15-*</b>
G 1/8	NBR	27	7	16	32.1–60	<b>368.16-*</b>
G 1/4	NBR	27	7	16	0.2–1	<b>368.20-*</b>
G 1/4	NBR	27	7	16	1.1–3	<b>368.21-*</b>
G 1/4	NBR	27	7	16	3.1–6	<b>368.22-*</b>
G 1/4	NBR	27	7	16	6.1–12	<b>368.23-*</b>
G 1/4	NBR	27	7	16	12.1–18	<b>368.24-*</b>
G 1/4	NBR	27	7	16	18.1–32	<b>368.25-*</b>
G 1/4	NBR	27	7	16	32.1–60	<b>368.26-*</b>

### Classic blow-off valves DN 6

Standard version with indication of individual setting pressure\*. Setted valves are sealed with lead sealing. Metal-sealing valves may have a slight leakage.

Thread W	Seal type	Dimensions (mm)			Setting pressure (bar)	Order No.
		L	i	SW(AF)		
G 1/4	metal	78	10	17	1.5–4	<b>259.007-*</b>
G 1/4	metal	78	10	17	4–8	<b>259.008-*</b>
G 1/4	metal	78	10	17	8–12	<b>259.009-*</b>
G 1/4	NBR	78	10	17	1.5–4	<b>259.010-*</b>
G 1/4	NBR	78	10	17	4–8	<b>259.011-*</b>
G 1/4	NBR	78	10	17	8–12	<b>259.012-*</b>

### Blow-off rates air

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

Setting pressure (bar)**	Air blow-off rate (normal condition)	
	m <sup>3</sup> /h	l/min
<b>Classic blow-off valve DN 6</b>		
1.5	10	165
2	13	215
4	26	430
6	42	700
8	58	970
10	74	1,230
12	90	1,500
<b>Mini blow-off valve DN 3</b>		
1	3	50
4	12	200
6	18	300
10	30	500
20	60	1,000
30	90	1,500
40	120	2,000
50	150	2,500
60	180	3,000

\*\* intermediate values can be interpolated

### Definition of terms

#### Setting 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

### Order key for all variants

**368.(X)XX-\*(X)X.X X(X)**

**T** without test certificate (standard, without addition)  
**E** certificate of inspection 3.2 acc. to EN 10204:2004  
**ET** production certificate 2.2 acc. to EN 10204:2004  
 production certificate and certificate of inspect. acc. to EN 10204:2004

**0.2–60.0** specific setting pressure (0.2–60.0 bar)

#### Setting pressure range

**259.XXX-\*(X)X.X X(X)**

**T** without test certificate (standard, without addition)  
**E** certificate of inspection 3.2 acc. to EN 10204:2004  
**ET** production certificate 2.2 acc. to EN 10204:2004  
 production certificate and certificate of inspect. acc. to EN 10204:2004

**1.5–12.0** specific setting pressure (1.5–12.0 bar)

#### Setting pressure range

### Technical data

Size	DN 3		DN 6
	G 1/8	G 1/4	G 1/4
Thread	G 1/8	G 1/4	G 1/4
Operating temperature	-10 °C up to +90 °C (NBR) / -10 °C up to +180 °C (metal) other temperature ranges available on request		
Adjustment range	1–60 bar		1.5–12 bar
Opening pressure difference	~ 20 %		10 %–15 %
Closing pressure difference	~ 20 %		15 %–25 %
Mounting position	vertically		
Material housing/spring	brass/spring steel		
Material seal	NBR		metal, NBR

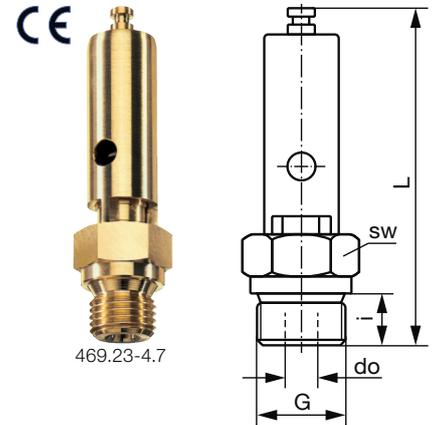


## Component-tested safety valves DN 6

Safety valves are used to vent non-toxic and non-flammable gases into the atmosphere and to protect pressure vessels against excess pressure. **Notice:** Factory-set and secured safety valves are supplied with component identification. It is therefore essential that the setting pressure is indicated in bar/psi when ordering. The pressure can be specified in 0.1 bar steps. For functional testing, the safety valves can be released/vented by pulling the trigger bolt (safety valve DN 6) or by turning the knurled screw to the left (safety valves DN 8 and DN 10). On safety valves DN 8 and DN 10, the bearing surfaces and sealing cones can be cleaned 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.

### Standard version: with indication of the specific setting pressure\*

Thread G	Dimensions (mm)				Setting pressure range (bar)	Order No.
	L	i	SW(AF)	do		
G 1/4	60	10	17	6	4.5–7	469.23-*
G 1/4	60	10	17	6	7.1–10	469.24-*
G 1/4	60	10	17	6	10.1–13	469.25-*
G 1/4	60	10	17	6	13.1–18	469.26-*
G 1/4	60	10	17	6	18.1–24	469.27-*
G 3/8	60	10	19	6	4.5–7	469.33-*
G 3/8	60	10	19	6	7.1–10	469.34-*
G 3/8	60	10	19	6	10.1–13	469.35-*
G 3/8	60	10	19	6	13.1–18	469.36-*
G 3/8	60	10	19	6	18.1–24	469.37-*



### Order key for all variants

469.XX-\*(X)X.X X(X)

- T** without test certificate (standard, without addition)
- E** certificate of inspection 3.2 acc. to EN 10204:2004
- ET** production certificate 2.2 acc. to EN 10204:2004

4.5–24.0 specific setting pressure (4.5–24.0 bar)

Setting pressure range

### Notice

The supply line to the safety valve should not be < DN 6, the pressure drop in the supply line may not be > 3%. The setting pressure must be specified when ordering!

\* Sample order no. with specific setting pressure 4.7 bar 469.23-4.7 (see order key), with production certificate 469.23-4.7E, with certificate of inspection 469.23-4.7T

### Technical data

Thread	G 1/4	G 3/8
Operating temperature	-10 °C up to +150 °C	
Adjustment range	4.5 up to 24 bar (5 Levels)	
Opening pressure difference	< 10 %	
Closing pressure difference	< 10 %	
Mounting position	vertically	
Material housing	brass	
Material seal	FKM (Viton)	
Material spring	spring steel	
Max. tightening torque (valve installation)	15 Nm	25 Nm

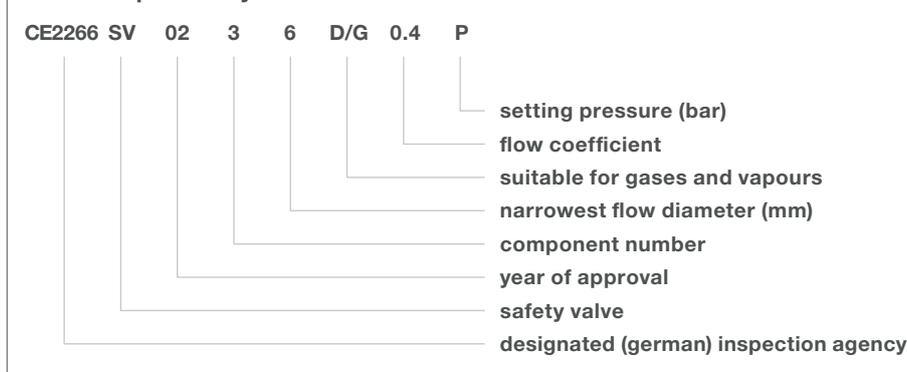
### Blow-off rates air

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

Setting pressure (bar)**	Air blow-off rate (normal condition)	
	m³/h	l/min
6	45.5	763
10	92	1,540
11	100	1,681
14	126	2,104
16	143	2,387
18	160	2,696
20	177	2,951
22	194	3,234
24	211	3,516

\*\*intermediate values can be interpolated

### Component symbols



### Definition of terms

- Setting 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

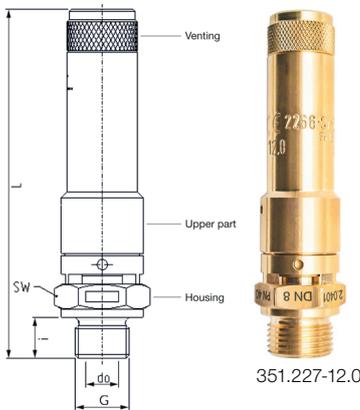
**Example:**  
 Setting pressure 12 bar  
 Opening pressure (+10%) 13.2 bar  
 Closing pressure (-10%) 10.8 bar

# Safety valves



## Component-tested safety valves DN 8

Factory-set and secured safety valves are supplied with component identification. The pressure can be specified in 0.1 bar steps. Applied standards and regulations: DIN EN ISO 4126-1, AD 2000-Handout A2, DGR 2014/68/EU.



Standard version: with indication of the specific setting pressure\*

Thread G	Dimensions (mm)				Setting pressure range (bar)	Order No.
	L	i	SW (AF)	do		
G 1/4	85	10	20	8	1-1.5	351.221-*
G 1/4	85	10	20	8	1.6-2	351.222-*
G 1/4	85	10	20	8	2.1-3	351.223-*
G 1/4	85	10	20	8	3.1-5	351.224-*
G 1/4	85	10	20	8	5.1-7	351.225-*
G 1/4	85	10	20	8	7.1-9	351.226-*
G 1/4	85	10	20	8	9.1-15	351.227-*
G 1/4	90	10	20	8	15.1-20	351.421-*
G 1/4	90	10	20	8	20.1-27	351.422-*
G 1/4	90	10	20	8	27.1-40	351.423-*
G 3/8	85	10	20	8	1-1.5	351.241-*
G 3/8	85	10	20	8	1.6-2	351.242-*
G 3/8	85	10	20	8	2.1-3	351.243-*
G 3/8	85	10	20	8	3.1-5	351.244-*
G 3/8	85	10	20	8	5.1-7	351.245-*
G 3/8	85	10	20	8	7.1-9	351.246-*
G 3/8	85	10	20	8	9.1-15	351.247-*
G 3/8	90	10	20	8	15.1-20	351.441-*
G 3/8	90	10	20	8	20.1-27	351.442-*
G 3/8	90	10	20	8	27.1-40	351.443-*
G 1/2	87	12	24	8	1-1.5	351.251-*
G 1/2	87	12	24	8	1.6-2	351.252-*
G 1/2	87	12	24	8	2.1-3	351.253-*
G 1/2	87	12	24	8	3.1-5	351.254-*
G 1/2	87	12	24	8	5.1-7	351.255-*
G 1/2	87	12	24	8	7.1-9	351.256-*
G 1/2	87	12	24	8	9.1-15	351.257-*
G 1/2	92	12	24	8	15.1-20	351.451-*
G 1/2	92	12	24	8	20.1-27	351.452-*
G 1/2	92	12	24	8	27.1-40	351.453-*

### 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!

\* Sample order no. with specific setting pressure 4.7 bar 351.224-4.7 (see order key), with production certificate 351.224-4.7E, with certificate of inspection 351.224-4.7T

### Blow-off rates air

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

Setting pressure (bar)**	Air blow-off rate (normal condition)	
	m <sup>3</sup> /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

### Order key for all variants

351.XXX-\*(X)X.X X(X)

without test certificate (standard, without addition)  
 T certificate of inspection 3.2 acc. to EN 10204:2004  
 E production certificate 2.2 acc. to EN 10204:2004  
 ET production certificate and certificate of inspect. acc. to EN 10204:2004

1.0-40.0 specific setting pressure (1.0-40.0 bar)

Setting pressure range

### Technical data

Thread	G 1/4	G 3/8	G 1/2
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/ seal/ spring	brass/FKM (Viton)/stainless steel		
Max. tightening torque (valve installation)	15 Nm	25 Nm	35 Nm

### Definition of terms

#### Setting 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:

Setting 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

setting pressure (bar)

flow coefficient

suitable for gases and vapours

narrowest flow diameter (mm)

component number

year of approval

safety valve

designated (german) inspection agency

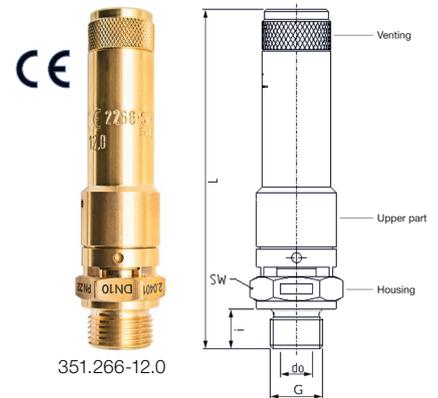


## Component-tested safety valves DN 10

Factory-set and secured safety valves are supplied with component identification. The pressure can be specified in 0.1 bar steps. Applied standards and regulations: DIN EN ISO 4126-1, AD 2000-Handout A2, DGR 2014/68/EU.

### Standard version: with indication of the specific setting pressure\*

Thread G	Dimensions (mm)				Setting pressure range (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	3.7-5	351.262-*
G 1/2	120	12	27	10	5.1-7	351.263-*
G 1/2	120	12	27	10	7.1-8.5	351.264-*
G 1/2	120	12	27	10	8.6-11.5	351.265-*
G 1/2	120	12	27	10	11.6-16	351.266-*
G 1/2	120	12	27	10	16.1-22	351.267-*
G 3/4	120	12	30	10	2-3.6	351.271-*
G 3/4	120	12	30	10	3.7-5	351.272-*
G 3/4	120	12	30	10	5.1-7	351.273-*
G 3/4	120	12	30	10	7.1-8.5	351.274-*
G 3/4	120	12	30	10	8.6-11.5	351.275-*
G 3/4	120	12	30	10	11.6-16	351.276-*
G 3/4	120	12	30	10	16.1-22	351.277-*



### Order key for all variants

351.XXX-(X)X.X X(X)

- T without test certificate (standard, without addition)
- E certificate of inspection 3.2 acc. to EN 10204:2004
- ET production certificate 2.2 acc. to EN 10204:2004
- ET production certificate and certificate of inspect. acc. to EN 10204:2004

2.0-22.0 specific setting pressure (2.0-22.0 bar)

Setting pressure range

### 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!

\*Sample order no. with specific setting pressure 2.7 bar 351.261-2.7 (see order key), with production certificate 351.261-2.7E, with certificate of inspection 351.261-2.7T

### 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/seal/spring	brass/FKM (Viton)/stainless steel	
Max. tightening torque (valve installation)	35 Nm	50 Nm

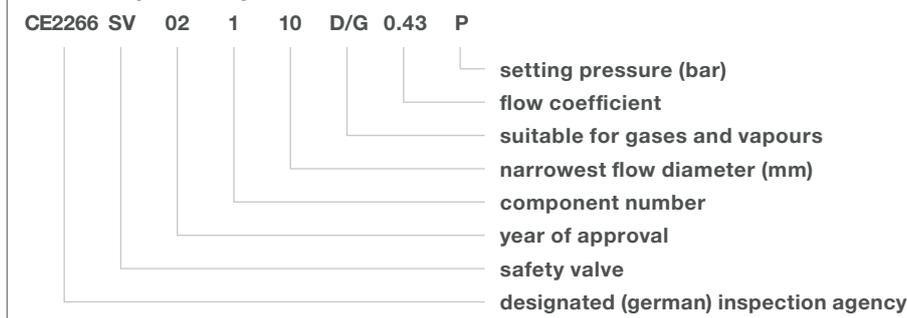
### Blow-off rates air

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

Setting 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

### Component symbols



### Definition of terms

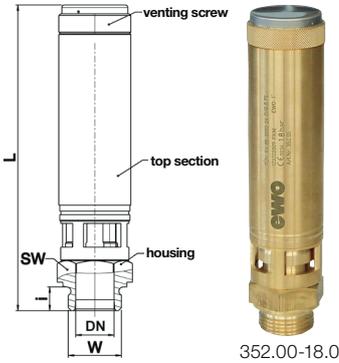
- Setting pressure:**  
= Response pressure: start of audible blow-off
- Opening pressure:**  
Valve fully open, max. blow-off volume
- Closing pressure:**  
Valve closed and sealed
- Opening pressure difference:**  
Difference between set pressure and opening pressure
- Closing pressure difference:**  
Difference between set pressure and closing pressure
- Example:**  
Setting pressure 12 bar  
Opening pressure (+10 %) 13.2 bar  
Closing pressure (-10 %) 10.8 bar

# Safety valves



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

Safety valves are used to vent 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 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.



352.00-18.0



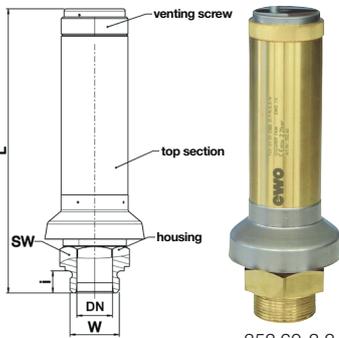
### Safety valve D/G

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

Thread W	Dimensions (mm)				Setting pressure range (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-*

### Safety valve F/K/S

The 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.



352.60-2.2



Thread W	Dimensions (mm)				Setting pressure range (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-*

### Order key for all variants

352.XX\*(X)X.X X(X)

without test certificate (standard, without addition)  
 T certificate of inspection 3.2 acc. to EN 10204:2004  
 E production certificate 2.2 acc. to EN 10204:2004  
 ET production certificate and certificate of inspect. acc. to EN 10204:2004

0.2–50.0 specific setting pressure (0.2–50.0 bar)

### Setting pressure range

### Notice

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

\*Sample order no. with specific setting pressure 22.5 bar 352.10-22.5 (see order key), with production certificate 352.10-22.5E, with certificate of inspection 352.10-22.5T

### 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

### Definition of terms

**Setting 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:**  
 Setting 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

setting 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