

Safety Valves, angle type, bronze, type tested TÜV-SV.749. L

Standard safety valve
with soft valve seal for fluids, open bonnet,
with diaphragm for protection of the spring, with lifting device
In- and outlet: female thread type G (BSPP) acc. to ISO 228/1

Pressure range in bar:	NBR	FPM		NBR	FPM
Nom. size 1/2":	1.0 - 11.0	1.0 - 16.0	Nom. size 3/4":	1.0 - 10.5	1.0 - 16.0
Nom. size 1":	1.0 - 10.0	1.0 - 16.0	Nom. size 1-1/4":	1.0 - 9.0	1.0 - 16.0
Nom. size 1-1/2":	1.0 - 8.5	1.0 - 16.0	Nom. size 2":	1.0 - 9.0	1.0 - 16.0

Available options - on request only:

- stainless steel spring - material 1.4571
- external parts nickel plated

Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels.

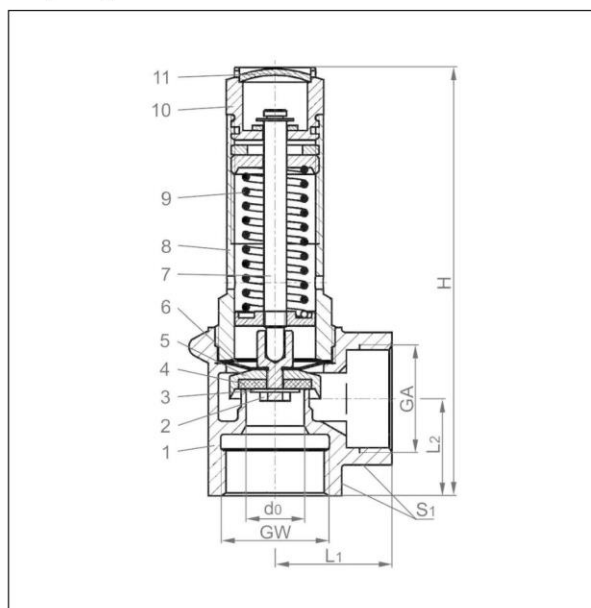
Approved for non-adhesive fluids, which are not vaporized during blow off.

Working temperature: -10°C / +14°F (263K) up to +110°C / +230°F (383K), suitable for horizontal installation

Materials	DIN EN	ASME/ASTM
1 Body	CC491K	B 62 UNS C83600
2 Disc nut	CW614N	B 249 UNS C38500
3 Plate	CW507L	B 36 UNS C26800
4 Valve seal	NBR or FPM	
5 Disc	CW614N	B 249 UNS C38500
6 Diaphragm	NBR	
7 Stem	CW614N	B 249 UNS C38500
8 Bonnet	CW614N	B 249 UNS C38500
9 Spring	1.1200	A 227
10 Lifting device	CW614N	B 249 UNS C38500
11 Closing cap	CW507L	B 36 UNS C26800

Essential: Valves are delivered at a set pressure, therefore when ordering please confirm set pressure, medium and temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Technical data							
Nominal size	GW	1/2	3/4	1	1-1/4	1-1/2	2
Orifice	d ₀	12	15	18	20	24	28
Set pressure range	bar	1.0-16	1.0-16	1.0-16	1.0-16	1.0-16	1.0-16
Outlet	GA	1/2	3/4	1	1-1/4	1-1/2	2
Height	H	92	111	132	152	175	200
Length	L ₁	25	30	36	40	48	56
Length	L ₂	20	25	30	35	40	48
Wrench size across flats	S ₁	27	32	41	50	58	70
Weight	ca. kg	0.24	0.40	0.70	1.07	1.65	2.65
Coeff. of discharge	α _w	0.20	0.25	0.31	0.39	0.42	0.38

Dimensions in mm.

Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

Water in kg/h at 20°C

The capacity indicated below is for a fully opened valve.

d_0 - orifice

A_0 - flow area

Set pressure in bar (g)	GW d_0 (mm) A_0 (mm ²) Medium	1/2	3/4	1	1-1/4	1-1/2	2
		12.0	15.0	18.0	20.0	24.0	28.0
		113.1	176.7	254.5	314.2	452.4	615.8
		Water					
1.0		1207	2359	4212	6542	10146	12494
2.0		1708	3336	5957	9252	14348	17670
3.0		2092	4086	7296	11332	17573	21641
4.0		2415	4718	8424	13085	20292	24989
5.0		2700	5275	9419	14629	22687	27938
6.0		2958	5778	10318	16025	24852	30605
7.0		3195	6241	11145	17310	26843	33057
8.0		3416	6672	11914	18505	28697	35340
9.0		3623	7077	12637	19627	30438	37483
10.0		3819	7460	13320	20689	32084	39511
12.0		4184	8172	14592	22664	35146	43282
14.0		4519	8826	15761	24480	37962	46750
16.0		4831	9436	16849	26170	40584	49978