

# Safety Valves

## Type 06C01



**Safety Valves, brass (A001),  
type tested TÜV-SV.948 Liquid/ Granular/ Powder**

Standard safety valve  
with FPM valve seal, closed bonnet,  
with diaphragm for protection of the spring, with lifting device,  
discharge holes with protection cap  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

**Part No. 06C01.A001.X - Material brass**

**Part No. 06C01.A002.X - Material stainless steel**

Available options:

- short version (height 160 mm)  $d_0$  25 up to 3 bar made of stainless steel



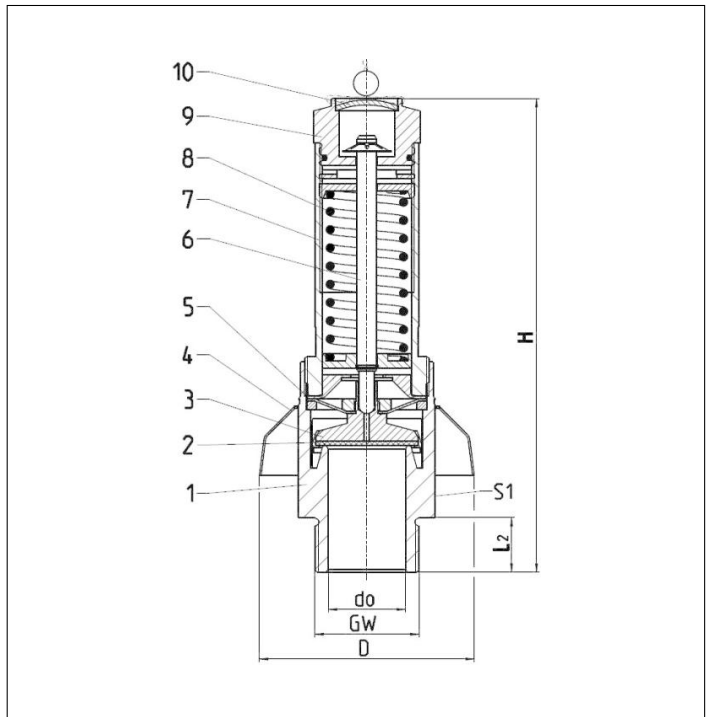
### Applications:

Provided as safety device for protection against excessive pressure in the gas phase  
in vehicle containers and pressure vessels. Approved for liquid, granular and powdery goods.

Working temperature:  $-40^{\circ}\text{C}$  /  $-40^{\circ}\text{F}$  (233K) up to  $+200^{\circ}\text{C}$  /  $+392^{\circ}\text{F}$  (473K), suitable for horizontal installation ( $d_0$  25 up to  $d_0$  48)

Materials	DIN EN	ASME/ASTM
1 Body	CW614N	B 249 UNS C38500
1 Body	CW617N	B 283 UNS C37700
2 Valve seal	FPM (Viton-GLT)	
3 Disc	CW614N	B 249 UNS C38500
4 Protection cap	1.4301	A 240 Grade 304
5 Diaphragm	Silicon	
6 Stem	1.4301	A 240 Grade 304
7 Bonnet	CW614N	B 249 UNS C38500
8 Spring	1.4571	A 313 Grade 316Ti
9 Lifting device	CW614N	B 249 UNS C38500
10 Closing cap	CW507L	B 36 UNS C26800

Materials	DIN EN	ASME/ASTM
1 Body	1.4408	A 351 CF8M
2 Valve seal	FPM (Viton-GLT)	
3 Disc	1.4401	A 479 Grade 316
4 Protection cap	1.4301	A 479 Grade 304
5 Diaphragm	Silicon	
6 Stem	1.4401	B 479 Grade 316
7 Bonnet	1.4401	B 479 Grade 316
8 Spring	1.4571	A 313 Grade 316Ti
9 Lifting device	1.4401	B 479 Grade 316
10 Closing cap	1.4401	B 479 Grade 316



Type 06C01	Technical data				
Nominal size	GW	1	1-1/4	1-1/2	2
Orifice	$d_0$	25	31	31	48
Set pressure range	bar	0.5-6.0	0.5-6.0	0.5-6.0	0.5-3.5
Height	H	186	191	191	232
Length	$L_2$	18	22	22	25
Protection cap diameter	D	86	86	86	114
Wrench size across flats	$S_1$	55	55	55	85
Weight	ca. kg	1.65	1.58	1.58	4.6
Coeff. of discharge from 3.0 bar	$\alpha_w$	0.68	0.68	0.68	0.55
Series A001: Material brass		x	x	x	x
Series A002: Material stainless steel		x	x	x	-

Dimensions in mm.

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### Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

Air in m<sup>3</sup>/h at 0°C and 1013.25 mbar

**The capacity indicated below is for a fully opened valve.**

d<sub>0</sub> - orifice

A<sub>0</sub> - flow area

Set pressure in bar (g)	max α <sub>w</sub> (Kdr)	0.68	0.68	0.55
	GW	1	1-1/4 & 1-1/2	2
	d <sub>0</sub> (mm)	25.0	31.0	48.0
	A <sub>0</sub> (mm <sup>2</sup> )	491	755	1810
0.5		294	436	987
0.6		325	482	946
0.7		355	536	1032
0.8		383	579	1116
0.9		411	631	1196
1.0		438	674	1277
1.2		493	760	1432
1.4		550	849	1593
1.6		605	941	1761
1.8		657	1031	1937
2.0		709	1124	2106
2.2		762	1200	2264
2.4		816	1277	2424
2.6		870	1354	2588
2.8		925	1431	2755
3.0		983	1511	2931
3.2		1033	1588	3080
3.4		1083	1665	3230
3.5		1108	1629	3304
3.6		1133	1666	3379
3.8		1183	1739	3528
4.0		1234	1813	3678
4.2		1284	1887	-
4.4		1334	1960	-
4.5		1359	1997	-
4.6		1384	2034	-
4.8		1434	2108	-
5.0		1487	2186	-
5.2		1538	2260	-
5.4		1588	2334	-
5.6		1638	2408	-
5.8		1688	2481	-
6.0		1739	2555	-