



**Stainless steel bellow sealed Safety Valves, angle type, type tested TÜV-SV. 1105. D/G/F orifice  $d_0=12,5\text{mm}$  TÜV-SV. 1105. D/G**

Standard safety valve,  
Metal to metal seated, closed bonnet  
“ cleaned and degreased for oxygen service ”

**Part No. 06801.X.0000**

Inlet: male thread type G (BSPP) acc. to ISO 228/1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06801.X.2000**

Inlet: male thread type R (BSPT) acc. to ISO 7/1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06801.X.5000**

Inlet: male thread NPT acc. to ANSI B 1.20.1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

**Part No. 06801.X.6000**

Inlet: male thread NPT acc. to ANSI B 1.20.1, Outlet: female thread NPT acc. to ANSI B 1.20.1



**Applications:**

Provided as safety device for protection against excessive pressure in stationary and moveable gas cylinders. Approved for non-inflammable and inflammable vapours, gases and fluids.  
Working temperature:  $-270^{\circ}\text{C} / -454^{\circ}\text{F}$  (3K) up to  $+225^{\circ}\text{C} / +437^{\circ}\text{F}$  (498K)  
Maximum allowed back pressure: 15% of set pressure.

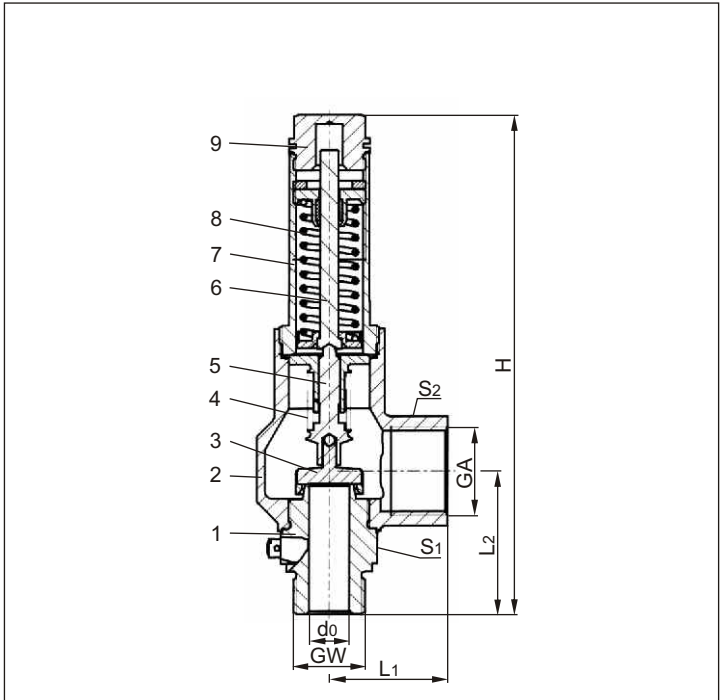
Materials	DIN EN	ASTM
1 Inlet body	1.4571	A 276 Grade 316Ti
2 Outlet body	1.4308	A 351 CF8
3 Disc	1.4541	A 276 Grade 321
4 Bellow	1.4571	A 276 Grade 316Ti
5 Bellow stem	1.4571	A 276 Grade 316Ti
6 Stem	CW453K	B 103 UNS C52100
7 Bonnet	1.4305	A 314 Grade 303
8 Spring	1.4571	A 276 Grade 316Ti
9 Cap	1.4301	A 276 Grade 304

**Important:**

For nominal size GW 3/4 the back pressure reduce the blow off performance of the Safety Valve (see diagram 06801-3/4).

**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 97/23/EC (PED).



Type 06801	Technical data (1-1/4 in preparation)					
	Nominal size	GW	1/2	3/4	1	1-1/4
Orifice	$d_0$		12.5	15	20	23
Dimension code	.X.		1204	1506	2010	2310
Set pressure range	bar		3.0-25.0	3.0-25.0	3.0-25.0	3.0-25.0
Outlet	GA		G 1	G 1	G 1-1/4	G 1-1/2
Height	H		186	190	205	255
Length	$L_1$		44	44	51	56
Length	$L_2$		52	54	63	65
Wrench size across flats	$S_1$		36	36	41	50
Wrench size across flats	$S_2$		41	41	50	55
Weight	ca. kg		1.03	1.05	1.70	2.45
Coeff. of disch. vapours, gases	$\alpha_w$		0.60	0.50	0.60	0.66
Coeff. of disch. fluids	$\alpha_w$		-	0.39	0.45	0.48

Dimensions in mm.



### Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium:

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

**Water** in kg/h

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

Maximum allowed back pressure: 15% of set pressure.

For nominal size GW 3/4 the back pressure reduce the blow off performance of the Safety Valve (see diagram 06801-3/4).

$d_0$  - orifice

$A_0$  - flow area

Set pressure in bar ( $\bar{u}$ )	GW	1/2	3/4	1	1	1-1/4	1/2	3/4	1	1	1-1/4
	$d_0$ (mm)	12.5	15.0	20.0	23.0		-	15.0	20.0	23.0	
	$A_0$ (mm <sup>2</sup> )	122.7	176.7	314.2	415.5		-	176.7	314.2	415.5	
Medium		Air					Water				
3.0		216	259	554	805		-	6369	13067	18431	
4.0		271	326	695	1011		-	7354	15088	21283	
5.0		327	392	836	1216		-	8222	16869	23795	
6.0		382	458	977	1422		-	9007	18479	26066	
7.0		437	524	1119	1627		-	9728	19960	28155	
8.0		492	590	1260	1833		-	10400	21338	30098	
9.0		547	657	1401	2038		-	11031	22632	31924	
10.0		602	723	1542	2243		-	11628	23856	33651	
12.0		713	855	1825	2654		-	12737	26133	36863	
14.0		823	988	2107	3065		-	13758	28227	39817	
16.0		933	1120	2390	3476		-	14708	30176	42566	
18.0		1043	1252	2672	3887		-	15600	32007	45148	
20.0		1154	1385	2954	4298		-	16444	33738	47590	
22.0		1264	1517	3237	4709		-	17246	35385	49913	
25.0		1430	1716	3661	5325		-	18385	37720	53207	

Diagram 06801-3/4

