



**Stainless steel bellow sealed Safety Valves, angle type, PN40, type tested TÜV-SV. 1105. S/G/L orifice  $d_0=12,5\text{mm}$  TÜV-SV. 1105. S/G**

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

**Part No. 06800.X.0000**

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

**Part No. 06800.X.5000**

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

**Part No. 06800.X.6000**

Inlet: female 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	1.4308	A 351 CF 8
7a Bonnet from GW 1	1.4305	A 314 Grade 303
8 Spring	1.4571	A 276 Grade 316Ti
9 Cap	1.4301	A 276 Grade 304

**Important:**

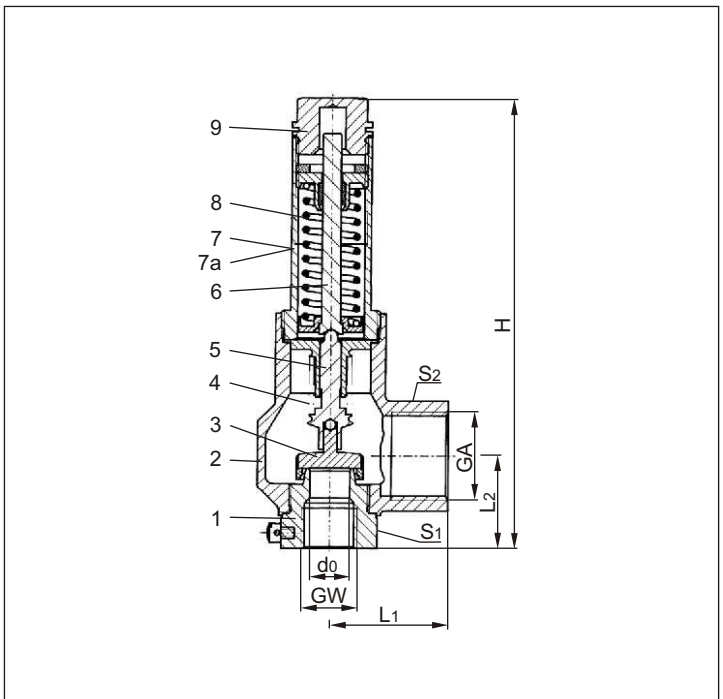
For nominal size GW 1/2,  $d_0=15,0\text{mm}$  the back pressure reduce the blow off performance of the Safety Valve (see diagram 06800-1/2,  $d_0=15,0$ ).

**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).



Marking acc. to Directive 99/36/EG (TPED) will only be carried out by written notice on purchase order.



Type 06800	Technical data				
Nominal size	GW	1/2	1/2	3/4	1
Orifice	$d_0$	12.5	15	20	23
Dimension code	.X.	1204	1504	2006	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	170	170	198	245
Length	$L_1$	44	44	51	56
Length	$L_2$	35	35	48	58
Wrench size across flats	$S_1$	36	36	41	50
Wrench size across flats	$S_2$	41	41	50	55
Weight	ca. kg	1.0	0.97	1.65	2.50
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.

# Safety Valves

## Type 06800 with bellow seal

**HEROSE**



### Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

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 1/2, d<sub>0</sub>=15,0mm the back pressure reduce the blow off performance of the Safety Valve (see diagram 06800-1/2, d<sub>0</sub>=15,0).

d<sub>0</sub> - orifice

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

Set pressure in bar (ü)	GW	1/2	1/2	3/4	1	1/2	1/2	3/4	1
	d <sub>0</sub> (mm)	12.5	15.0	20.0	23.0	-	15.0	20.0	23.0
A <sub>0</sub> (mm <sup>2</sup> )		122.7	176.7	314.2	415.5	-	176.7	314.2	415.5
Medium		Air				Water			
<b>3.0</b>		216	259	554	805	-	6369	13067	18431
<b>4.0</b>		271	326	695	1011	-	7354	15088	21283
<b>5.0</b>		327	392	836	1216	-	8222	16869	23795
<b>6.0</b>		382	458	977	1422	-	9007	18479	26066
<b>7.0</b>		437	524	1119	1627	-	9728	19960	28155
<b>8.0</b>		492	590	1260	1833	-	10400	21338	30098
<b>9.0</b>		547	657	1401	2038	-	11031	22632	31924
<b>10.0</b>		602	723	1542	2243	-	11628	23856	33651
<b>12.0</b>		713	855	1825	2654	-	12737	26133	36863
<b>14.0</b>		823	988	2107	3065	-	13758	28227	39817
<b>16.0</b>		933	1120	2390	3476	-	14708	30176	42566
<b>18.0</b>		1043	1252	2672	3887	-	15600	32007	45148
<b>20.0</b>		1154	1385	2954	4298	-	16444	33738	47590
<b>22.0</b>		1264	1517	3237	4709	-	17246	35385	49913
<b>25.0</b>		1430	1716	3661	5325	-	18385	37720	53207

Diagram 06800-1/2, d<sub>0</sub>=15,0

